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Meeting in the Council for Development Policy on 11 May 2023

Agenda Item No. 9

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|---|--|
| 1. Overall purpose: | <i>For discussion and recommendation to the Minister</i> |
| 2. Title: | Support to the International Renewable Energy Agency (IRENA) 2023-2027 |
| 3. Amount: | DKK 153 million |
| 4. Presentation for Programme Committee: | 25 October 2022 |
| 5. Previous Danish support presented to UPR: | 30 October 2018 (IRENA Long Term Planning 2018-2022) and 1 October 2019 (IRENA SIDS LHI) |

Danish Support to IRENA 2023 – 2027

<div>Key results:</div> <ul style="list-style-type: none">Deployment of renewable energy (RE) to accelerate access and just energy transition.Data, analysis, and policy design on a just, inclusive, and equitable energy transition with focus on job opportunities and socio-economic co-benefits at country, regional and global levels.Capacity of country partner institutions strengthened for informed decision making in the energy transition with improved data and information, technical assistance, capacity development.Strengthened high-level collaboration on energy transition diplomacy. <div>Justification for support:</div> <ul style="list-style-type: none">According to IRENA, an average of 1,000 GW RE must be added annually to keep the Paris Agreement 1.5°C target.The world is still lagging behind on meeting SDG 7 and other SDGs and the Paris agreement targets. RE is the most readily available and cost-effective way to provide 90 % of all decarbonization by 2050, but this requires tripling of currently installed RE capacity by 2030.Contributes to Denmark’s priorities in Development Policy Strategy “The World We Share”.IRENA is a globally recognized expert on RE and its Medium-term Strategy (MTS) is focused on a just, inclusive, and equitable energy transition.The Denmark-IRENA strategic partnership enables synergies with bilateral and multilateral programmes supported by Denmark. <div>Major risks and challenges:</div> <ul style="list-style-type: none">Vested interests in fossil energy, the impact of COVID-19 and the geopolitical situation can affect a level playing field for RE-based transition.Lack of data and inadequate data quality.Coordination with other stakeholders and initiatives in a highly dynamic context.	File No.	F2: 2022 – 6339					
	Country	Africa, ASEAN-region, India, Indonesia, Small Island Developing States (SIDS)					
	Responsible Unit	Green Diplomacy and Climate (GDK)					
	Sector	Energy					
	Partner	International Renewable Energy Agency (IRENA)					
	DKK million	2023	2024	2025	2026	2027	Total
	Commitment	153					153
	Projected disbursement	36	44	31	24	18	153
	Duration	2023-2027					
	Previous grants	IRENA Long Term Planning (LTP, December 2018-December 2022, DKK 40 million) / IRENA SIDS Lighthouses Initiative 2.0 (LHI, December 2019-December 2023, DKK 50 million)					
	Finance Act code	06.34.01.70					
	Head of unit	Asser Berling (MCEU)/ Adam Sparre Spliid (MFA GDK)					
	Desk officer	Merete Villum Pedersen, GDK					
	Reviewed by CFO	Rasmus Tvorup Ewald, GDK					
	Relevant SDGs						
<div> No Poverty</div>	<div> No Hunger</div>	<div> Good Health, Wellbeing</div>	<div> Quality Education</div>	<div> Gender Equality</div>	<div> Clean Water, Sanitation</div>		
<div> Affordable Clean Energy</div>	<div> Decent Jobs, Econ. Growth</div>	<div> Industry, Innovation, Infrastructure</div>	<div> Reduced Inequalities</div>	<div> Sustainable Cities, Communities</div>	<div> Responsible Consumption & Production</div>		
<div> Climate Action</div>	<div> Life below Water</div>	<div> Life on Land</div>	<div> Peace & Justice, strong Inst.</div>	<div> Partnerships for Goals</div>			

Objective:

Facilitate the rapid deployment of renewables in ODA eligible countries in support of a just energy transition to enable the achievement of the Sustainable Development Goal on Energy (SDG7) and to make necessary emission reductions by 2030 to keep 1.5°C within reach.

Environment and climate targeting - Principal objective (100%); Significant objective (50%)

	Climate adaptation	Climate mitigation	Biodiversity	Other green/environment
Indicate 0, 50% or 100%	0%	100%	0%	0%
Total green budget (DKK)	0	153 million	0	0

Justification for choice of partner:

IRENA is the principal agency on renewable energy in the international energy and climate architecture with a global mandate and membership to support a sustainable, just and inclusive energy transition. The Agency is collaborating with bi- and multilateral actors to strengthen synergy and has developed a strategic partnership with Denmark on promoting international and bilateral energy transition.

Summary:

The project provides earmarked support to IRENA for: Danish priority areas i) an African-focused coalition for raising RE ambition in Africa; ii) SIDS energy transition efforts from fossil fuel dependence to RE, iii) Delivering on energy requests of the NDC-Partnership thus improving energy parts of NDCs; iv) accelerating offshore wind energy development under the Global Offshore Wind Alliance (GOWA); iv) addressing socio-economic aspects of the energy transition in relation to Danish strategic energy sector cooperation; v) other earmarked support decided by the Steering Committee based on a set of eligibility criteria.

Budget (engagement as defined in FMI):

Allocations for: Africa Coalition initiative (18.0); Offshore wind support (GOWA) (8.0); IRENA response on energy via the NDC partnership (13.0); SIDS Lighthouses Initiative (7.0); IRENA Socio-economic work (17.0); IRENA MTS according to eligibility criteria (79.3)	DKK 142.35 million
Inception Review and Mid-term Review (administered by the MFA)	DKK 0.65 million
IRENA support costs (7% of direct costs, i.e. the total budget minus MTR and IRENA support costs)	DKK 10.0 million
Total	DKK 153.0 million

Ministry of Foreign Affairs of Denmark (MFA)
International Renewable Energy Agency (IRENA)

Danish Support to IRENA 2023 – 2027
Project Document

21 April 2023

MFA file number Ref: F2 2022-6339

Abbreviations and acronyms	
AIS	Atlantic, Indian Ocean and South China Seas
AMG	Danida Aid Management Guidelines
AMS	IRENA Administration and Management Services
AOSIS	Alliance of Small Island States
ASEAN	The Association of Southeast Asian Nations
AUDA-NEPAD	African Union Development Agency
BECCS	Bioenergy combined with carbon capture and storage
C	Celsius
C40	C40 Cities Climate Leadership Group
CEFIM	OECD Clean Energy Finance & Investment Mobilisation
CEM	Clean Energy Ministerial
CEP	IRENA Country Engagement and Partnerships Centre
CFOR	IRENA Collaborative Framework Offshore Renewables
CIF	Climate Investment Funds
CIP	Climate Investment Platform
CMP	Continental Master Plan
COP	Conference of the parties (under the UNFCCC)
CO ₂	Carbon dioxide
DAC	Development Assistance Committee (OECD)
Danida	Brand name for Danish international development assistance, under the MFA
DEA	Danish Energy Agency
DKK	Danish Kroner
DRE	Distributed renewable energy
EE	Energy efficiency
ESMAP	World Bank Energy Sector Management Assistance Program
ETAF	Energy Transition Accelerator Financing Platform
F2	MCEU and MFA electronic archive system
G7	The Group of Seven, an inter-governmental political forum consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
G20	Group of Twenty, an intergovernmental forum comprising 19 countries and the European Union (EU)
GCF	Green Climate Fund
GDK	MFA Department for Green Diplomacy and Climate
GEF	Global Environment Facility
GGGI	Global Green Growth Institute
GHG	Greenhouse gas
GOWA	Global Offshore Wind Alliance
GtG	Government-to-Government
GW	Gigawatt
GWEC	Global Wind Energy Council
H	Hydrogen
HR	Human resources
IAEA	International Atomic Energy Agency
IEA	International Energy Agency
ILO	International Labour Organization
IRENA	The International Renewable Energy Agency
IISD GSI	International Institute for Sustainable Development Global Subsidies Initiative
IITC	IRENA Innovation and Technology Centre
JET-P	Just Energy Transition Partnership
KPFC	IRENA Knowledge, Policy, and Finance Centre
LCOE	Levelized cost of electricity

LHI	Lighthouses Initiative
LDC	Least Developed Country
LTES	Long-term Energy Scenarios
LTP	Long-term planning
MDB	Multilateral development bank
MCEU	Danish Ministry of Climate Energy and Utilities
MFA	Ministry of Foreign Affairs of Denmark
MOU	Memorandum of Understanding
MTS	Mid Term Strategy
NDC	Nationally Determined Contribution
NDC-P	NDC Partnership
NGO	Non-Governmental Organization
ODA	Official development assistance, as defined by OECD DAC
OECD	Organisation for Economic Co-operation and Development
PC	Programme Committee
PFS	IRENA Project Facilitation and Support Centre
PPS	IRENA Planning and Programme Support unit
PSC	Programme support cost
PV	Photovoltaic
RBM	Results-based management
RE	Renewable energy, also referred to in this PD as renewables
RETO	Regional Energy Transitions Outlook
SC	Steering Committee
SDG	Sustainable Development Goal
SEFA	African Development Bank Sustainable Energy Fund for Africa
SEforALL	Sustainable Energy for All
SIDS	Small island developing states
SCCF	Special Climate Change Fund (under GEF)
SMART	Specific, Measurable, Achievable, Relevant, and Time-Bound
SPLAT	System Planning Test
SSC	Strategic sector cooperation
TAF	Technical assistance facility
TFEC	Total final energy consumption (the sum of final energy consumption in the transport, industry, and other sectors, equivalent to total final consumption minus non-energy use).
ToC	Theory of Change
UAE	United Arab Emirates
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-CCC	UNEP Copenhagen Climate Centre
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
UNSD	United Nations Statistics Division
UNSDG	United Nations Sustainable Development Group
UPR	The Danish Council for Development Policy, in English also known as CDC
USD	United States Dollar
VC	Voluntary contribution (in this document generally referred to as the “Contribution”)
WB	World Bank
WEF	World Economic Forum
WETO	World Energy Transitions Outlook
WPB	IRENA Work Programme and Budget
WRI	World Resources Institute

1 USD = 6.79 DKK; 1 DKK=0.15 USD¹

¹ Danish National Bank official exchange rate as of 17 April 2023:

https://www.nationalbanken.dk/en/statistics/exchange_rates/pages/default.aspx

Contents

Abbreviations and acronyms	i
1 Introduction.....	1
2 Context, strategic considerations, rationale, and justification.....	1
2.1 Context.....	1
2.2 Strategic alignment with Danish policy priorities	4
2.3 Choice of implementing partner and cooperation modalities.....	5
2.3.1 IRENA's role and key strengths	5
2.3.2 Independent Evaluation of IRENA's MTS 2018-2022.....	6
Box 2.1: Key observations from the Mid-term Evaluation of the IRENA MTS 2018-2022	7
2.3.3 Results and lessons learned from previous Danish support to IRENA	7
Box 2.2: Key lessons learned from previous Danish support to IRENA.....	7
2.3.4 Denmark-IRENA Strategic Partnership.....	8
Box 2.3: Denmark-IRENA Strategic Partnership.....	9
2.4 IRENA's Medium Term Strategy 2023-2027, Theory of Change, and Results Framework	9
Figure 2.1. Illustration of IRENA MTS 2023-2027 pillars.....	10
Figure 2.2: IRENA Theory of Change	12
Figure 2.3: Illustration of IRENA's translation of its ToC into a results-based management approach.....	13
2.5 Strategic priorities for the Danish Contribution to IRENA 2023-2027	13
2.6 Target groups and alignment with Danish cross-cutting priorities.....	13
2.7 Justification in relation to OECD DAC Criteria.....	14
Table 2.1 Justification in relation to OECD DAC Criteria	15
2.8 Development effectiveness.....	16
2.9 Danish commercial interests	16
3 Project Objective and brief summary description of the Project.....	17
3.1 Project objective.....	17
3.2 Brief summary description of the Project	17
4 Theory of Change and key Assumptions	20
5 Summary of the Results Framework at Outcome Level	21
Table 5.1: Results framework at outcome level	22
6 Budget and Financial Management	23

	Table 6.1: Danish voluntary contribution budget at outcome level	25
7	Institutional and Management Arrangement	25
8	Work Planning	26
9	Monitoring, Reporting, and Communicating Results	28
	Table 9.1: IRENA monitoring and reporting	28
10	Risk Management	30
11	Closure	31
	Annex 1: Context Analysis	32
	1. Overall Development Challenges, Opportunities and Risks	32
	2. Political Economy and Stakeholder Analysis	38
	3. Fragility, Conflict, Resilience, Migration	41
	4. Inequality, Gender, Youth and applying a Human Rights Based Approach	41
	5. Inclusive sustainable growth, climate change and environment.....	43
	6. Capacity of public sector, public financial management and corruption	43
	7. Matching with Danish strengths and interests, engaging Danish actors and seeking synergies.....	43
	Table A1.1 - Overview of selected country information for SIDS, ASEAN, and selected emerging economies.	45
	Table A1.2: IRENA and other international organizations in energy transition and climate change mitigation	48
	Annex 2: Partner Assessment	49
	Table A2.1.: Key features of IRENA	49
	Figure A2.1: IRENA organigram and staffing	51
	Annex 3: Theory of Change and key assumption and enablers	53
	Box A3.1: Brief ToC narrative for the Contribution to IRENA as per Danida AMG standard questions	53
	Box A3.2: Key assumptions for Danish support to IRENA, enablers, and drivers .	55
	Annex 4: Risk Management	57
	Annex 5: Key results and lessons learned from the Danish voluntary contributions for SIDS LHI and LTP	62
	Box A5.1: Key results and lessons learned from the Danish Contribution for SIDS LHI 2.0:	62
	Box A5.2: Key results and lessons learned from the Danish Contribution for LTP.	63
	Annex 6: List of Supplementary Materials	65
	Annex 7: Plan for Communication of Results	67

Annex 8: Process Action Plan (PAP)	69
Annex 9: IRENA Collaboration and Linkages with other International Development Institutions	71
Annex 10: Draft TOR for the Steering Committee (SC)	79

1 Introduction

The present Project Document (PD) outlines from Denmark's perspective the background, rationale and justification, objectives and management arrangements for development cooperation concerning Danish support in the form of a Voluntary Contribution (VC, hereinafter referred to as the Contribution) to the International Renewable Energy Agency (IRENA) 2023-2027 as agreed between the parties: IRENA and the Department for Green Diplomacy and Climate (GDK) of the Ministry of Foreign Affairs of Denmark (MFA). The PD is an annex to the legal Contribution Agreement between the MFA and IRENA and constitutes an integral part hereof. IRENA is an intergovernmental organisation with a global mandate on renewable energy (RE). The Agency provides data, analysis, and support to countries across the world for their transition to a sustainable energy future. The Danish support is aligned with IRENA's Medium-term Strategy (MTS) 2023–2027 that was approved by the IRENA Assembly in January 2023, and the Project builds upon the Strategic Partnership Agreement² signed between Denmark and IRENA in 2020 and on the results and lessons from the two previous Danish Voluntary Contributions to IRENA for Long-term Planning (LTP, 2018-2022) and SIDS Lighthouses Initiative (SIDS LHI 2.0, 2019-2023), respectively.

This project will facilitate the rapid deployment of renewable energy (RE) in developing countries eligible for official development assistance (ODA³). Access to RE is central to energy transition and an important driver for achieving the Sustainable Development Goals (SDGs), notably SDG7 on energy, and for reducing greenhouse gas emissions by 2030, and to stay on the 1.5°C pathway in line with the Paris Agreement on climate change. The proposed financial contribution amounts to DKK 153 million for 2023 – 2027. This represents a slight increase compared to the DKK 90 million during 2018-2022 reflecting the development of the Strategic Partnership between Denmark and IRENA from 2020 that has broadened collaboration including with an increased focus on Africa.

The support directly contributes to delivering on the priorities of the Danish Development Strategy “*The World We Share*” as well as the priorities of the agreement of the coalition government (“Ansvar for Danmark”, section 4.2) which has a strong focus on international climate action, energy transition, and Africa. Furthermore, IRENA's data driven analysis will contribute to bilateral Danish strategic energy sector partnership programmes and provide valuable input to Danish climate diplomacy and international processes supporting energy transition such as the Just Energy Transition Partnerships (JET-P).

The new Contribution for 2023-2027 was identified and formulated from mid-2022 in close collaboration between IRENA, GDK and the Danish Ministry of Climate, Energy and Utilities (MCEU). The formulation process included presentation of a concept note to the Danida Programme Committee on 25 October 2022, an appraisal undertaken by the MFA Department for Evaluation, Learning and Quality (ELK) in January/February 2023, and finalisation of the present PD in March/April. Key conclusions and recommendations from an independent evaluation in 2020 of IRENA's 2018-2022 MTS and from the MFA/ELK Mid-term Review of the Voluntary Contribution to IRENA on long-term planning (hereinafter referred to as the “LTP Project”) in 2021 have been considered in the formulation process.

2 Context, strategic considerations, rationale, and justification

2.1 Context

Renewable energy-based energy transition is central to sustainable development and to addressing climate change

Energy production accounts for about 70% of worldwide greenhouse gas emissions. The Intergovernmental Panel on Climate Change (IPCC's) on the publication of its Sixth Assessment Report states that “*More than a century of burning fossil fuels as well as unequal and unsustainable energy and land use has led to global warming of 1.1°C above pre-industrial levels.... The solution lies in climate resilient development. This involves integrating measures to adapt to climate change with actions to reduce or avoid greenhouse gas emissions in ways that provide*

² See further information in Chapter 2, box 2.1.

³ According to the latest DAC list of ODA recipients: [link](#)

wider benefits. For example: access to clean energy and technologies improves health, especially for women and children; low-carbon electrification, walking, cycling and public transport enhance air quality, improve health, employment opportunities and deliver equity. The economic benefits for people's health from air quality improvements alone would be roughly the same, or possibly even larger than the costs of reducing or avoiding emissions. Climate resilient development becomes progressively more challenging with every increment of warming. This is why the choices made in the next few years will play a critical role in deciding our future and that of generations to come". The UN Secretary General's message welcoming the report, highlighted the need to set net-zero targets in developed countries at 2030 and in emerging economies as early as 2050. He amongst others also called for no new coal and phase out of existing coal by 2030 and 2040, depending on the country; ceasing all licensing or funding of new oil and gas and stopping any expansion of existing oil and gas reserves; shifting subsidies from fossil fuels to a just energy transition; and aligning shipping, aviation, steel, cement, aluminium, agriculture with net zero by 2050 with clear plans including interim targets to get there.

According to IRENA, renewable energy (RE), energy efficiency (EE) and electrification combined may deliver around 90% of the necessary greenhouse-gas emission reductions in the energy sector towards 2050. Accordingly, the transition from black to green energy and a systematic pursuit of EE (lowering the demand for energy) take centre stage in efforts to reach the Paris Agreement's 1.5-degree target and are at the heart of SDG 7. RE is the most important enabler to make the necessary emission reductions by 2030. In addition, in most countries RE is also the least cost option to expand energy supply and increase energy access.

Renewable based energy transition supports adaptation and resilience while expanding access and boosting socio-economic development

Access to RE is a key driver of sustainable development both at household and national levels. It contributes to reducing multiple dimensions of poverty, i.a. by improving livelihoods. At national level it is a requirement for decarbonisation across sectors - particularly in industry, heavy transport, and construction - and contributes to avoiding locking-in investments into fossil fuel infrastructure that can turn into stranded assets. Least Developed Countries (LDCs) and small island developing states (SIDS) bear a disproportionate cost of climate change-related impacts, despite contributing less than a 7% of global GHG emissions. More than 69% of deaths related to climate-related disasters globally were in these two groups of countries, which have also witnessed the displacement of millions of people, loss and damage of physical and natural resources, and worsening inequality. These countries are increasingly capitalising on RE sources to mitigate their climate-induced vulnerabilities whilst ensuring energy security and sustainable socio-economic growth. By 2030, a 1.5°C aligned energy transition promises the creation of additional energy transition-related jobs and support a boost in gross domestic product.

The geopolitical implications of energy transition, and energy policy as security policy

Worldwide, the impact of COVID-19 and geopolitical situation including the war in Ukraine have caused turmoil in the energy system. This has transformed energy policy into security policy with a focus on energy security and supply. It has demonstrated the vulnerabilities, and costs of dependency on fossil fuels. The poor and most vulnerable are hit the hardest. More than ever, the geopolitical situation highlights the need for accelerated energy transition. Efficient grid-based and decentralised RE technologies can create a system less prone to market shocks and improve resilience and energy security through the diversity of supply options and suppliers. For example, the evolving global hydrogen market creates opportunities - also in ODA-eligible countries. The transformation of energy systems will have complex geopolitical implications across regions and countries. Phasing out fossil fuels poses challenges to countries producing and exporting fossil fuels whereas the dramatic increase in demand for RE and carbon neutral fuels provide new opportunities for countries with vast renewable resources such as solar and wind.

Just Energy Transition

In countries producing coal, oil and gas, the fossil sector is important to the economy and to employment and rooted in strong vested interests. To garner support for the energy transition and avoid social unrest there is an increased focus on ensuring that transitions must be "just and equitable". While there is no international agreement on the definition of "a just and equitable transition" there are a number of

different definitions⁴. At the 26th Conference of the Parties under the UN Framework Convention on Climate Change (COP26), the G7 agreed to form a Just Energy Transition Partnership, JET-P, with South Africa allocating USD 8.5 billion to the country for phasing out coal. Since then, JET-Ps have been developed between G7 and Indonesia, and Vietnam. Denmark, as one of the only non-G7 countries, has been invited to join the JET-Ps. This is amongst others based upon the stronghold and expertise stemming from the bilateral strategic energy sector cooperation. Ensuring access is also at the centre of a just inclusive and equitable energy transition. The clean energy transition has environmental and socio-economic benefits, notably a bigger job creation potential than the fossil fuel sectors, to be seized through skills development and re-skilling of part of the work force.

Africa

The rapidly developing African countries are a particular priority, both because of the energy access deficit and because of the demographic and development trends that require timely action to avoid unsustainable energy transition pathways. About half the population in Sub-Saharan Africa have no access to electricity or clean energy for cooking. The same countries receive as little as 4% of the world's total energy investments. Universal access to energy is a cornerstone of a fair and green energy transition in those countries. Access to RE will also boost resilience to climate change. The African continent has great RE potential and RE solutions are the cheapest way to expand energy supply, also providing benefits including increased job market and socio-economic development. It is important to provide African countries without fossil fuel reserves or infrastructure with the life-cycle cost analysis of options for expanded RE supply, to avoid investments in fossil-based infrastructure that can become stranded assets.

SIDS

SIDS bear the consequences of a disproportionate cost of climate change related impacts. Key problems afflicting SIDS include the economic devastation resulting from the COVID-19 pandemic and the intensification of climate disasters and phenomena. Vital economic sectors such as tourism were hard-hit by the collapse of international travel. Fuel supply chains were subject to sudden constraints, which proved to be particularly damaging for fossil-fuels and import-dependent nations such as SIDS. RE financing increases in RE capacity have slowed after achieving record growth during the previous decade. SIDS view climate resilience as an urgent focus of action as well as the role of the energy-climate nexus and how it can foster resilience and decentralised RE solutions to “build back different” after climate disasters.

ASEAN region and key emerging economies in Asia

Working with major emerging economies is critical, as 30% of the increase in energy demand will come from these countries. Because of their rapid economic growth, countries in the Association of Southeast Asian Nations (ASEAN) face a 50% rise in regional energy demand within the decade. Such growth will have implications for energy supply, affordably, and security – and climate impact. The ASEAN region is thus looking to accelerate RE deployment in support of increased regional climate ambitions. The 2022 IRENA ASEAN Renewable Energy Outlook makes concrete recommendations in this regard. The Outlook also reflects that coal contributes to about two-thirds of the emissions from the power sector across ASEAN. As regards the Asian emerging economies, in India the share of RE as % of total final energy consumption (TFEC) is 33% and the same number in Indonesia is 19%. Both countries are on a

⁴ ILO's [definition](#) is “A Just Transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.”. A World Bank [definition](#) is: “A “Just Transition for All” initiative puts people and communities at the center of the transition. The initiative works with stakeholders to create the plans, policies, and reforms needed to mitigate environmental impacts, support impacted people, and build a new clean energy future.”. An IISD [definition](#) is: “Energy transitions are about people: the ones who make the decisions and the ones affected by those decisions. A “just transition” approach ensures that the affected people are considered by those making decisions”. IISD's [policy brief](#) in November 2022 defined: “Just Energy Transition Partnerships (JETPs) are a new funding model created to help South Africa, Indonesia, India, Vietnam, and Senegal transition away from fossil energy and toward clean energy in a way that also addresses social issues associated with such an energy transition”.

an important just energy transition path and both are Danish priority countries for energy partnership programmes.

Engaging with key actors and stakeholders

The international institutional architecture related to the clean energy transition and climate action is highly complex and dynamic. IRENA engages with a wide range of actors and stakeholders at country, regional, and global levels. The Coalition for Action⁵ is an example of a mechanism for engagement with a wide range of stakeholder groups, currently comprising over 130 members including civil society, private sector companies, industry associations, research institutes, and intergovernmental organisations. IRENA acts as the Secretariat of the Coalition. At all levels, and depending on context, IRENA collaborates closely with global/international partners including those supported by Denmark, such as the International Energy Agency (IEA), the [NDC Partnership](#) (NDC-P), Sustainable Energy for ALL (SEforAll), the United Nations Environment Programme (UNEP), the United Nations Development Programme (UNDP), and the World Bank. An illustration of IRENA and selected key institutions areas/sphere of work (and possible division of labour) in the international energy and climate architecture is found in Annex 1 Table A.1.2 and in Annex 9, where Denmark's support to these institutions is also reflected.

IRENA has been monitoring closely the [socio-economic impacts](#) of the energy transition through its analytical work, including through country specific analyses and IRENA's socio-economic footprint analysis sets out the critical factors that determine how countries can take advantage of transition opportunities. [IRENA's analysis](#) on decentralised RE solutions linked to livelihoods places people's needs and livelihoods at the heart of the energy access approach and sets out how policies and programme design, training and capacity building, access to finance, technology, innovation and market access can support rural communities and drive their socio-economic development. Facilitating dialogue and strengthening international cooperation will enable more countries to harness the socio-economic opportunities of the energy transition and the [Collaborative Framework on a Just & Inclusive Transition](#) is a platform to enable this. A recent example of IRENA's work on socio-economic impacts is that undertaken for Indonesia in the [Indonesia Energy Transition Outlook](#)⁶ supported by Denmark under the LTP Project. Reference is also made to the context analysis in Annex 1 for further details on the context for this proposed support to IRENA.

2.2 Strategic alignment with Danish policy priorities

Alignment with Danish policy priorities

The proposed Contribution to IRENA is intended to accelerate access to renewable energy and energy transition that will deliver directly on Priority 2 in “*The World We Share*” regarding Danish international leadership on emission reductions, green transition, and access to clean energy:

- Strengthen the Danish SDG7 leadership and energy cooperation on green transition in developing countries, including promoting renewable energy and energy efficiency. This applies particularly to growth economies with high emission levels.
- Ensure access to clean and renewable energy for more people in Africa to facilitate social and economic development as well as job creation.

The proposed Danish Contribution is consistent with Danish development priorities expressed in the “how-to-note” concerning: green and inclusive just and equitable energy transition, including phase-out of coal and other fossil fuels; promotion of renewable energy, energy efficiency and electrification; access to clean and sustainable energy at the national and household level (including clean cooking) so as to contribute to economic and social development, including job creation; ambitious national climate goals and action plans, as well as favourable framework conditions; cross-sectoral decarbonisation; integration

⁵ <https://coalition.irena.org/#AboutUs>

⁶ This work formed part of Danida's support to IRENA under the Long-term Planning project, ref F2 2018-25829

and coherence between climate adaptation and mitigation; mobilisation of climate finance and reorientation of global and national financial flows.

Contributions to SDGs

RE is one of the most important drivers of sustainable development at both household and national levels. The proposal contributes to SDG 7 (sustainable energy); SDG 13 (climate action) with focus on mitigation and renewable energy for adaptation and resilience; SDG 8 (decent work and economic growth), and SDG 9 (industry, innovation, and infrastructure). Importantly, by focusing on access and on a just and equitable energy transition (which is the overall theme of IRENA's MTS 2023-2027), the project also contributes to Danish development cooperation's objectives of poverty reduction, (SDG 1 no poverty), and access to RE has a direct impact on the multiple dimensions of poverty. It enables improved livelihoods via access to electricity including clean cooking; water provision; and food production, and it reduces air pollution and provides health improvements and income generation activities in small businesses. It has a direct positive bearing on the lives of women and girls, and IRENA includes gender-disaggregated data in its work where possible.

Climate diplomacy and international processes

The proposal will strengthen the ambitious Danish Climate Diplomacy by supplying data, analysis and lessons learnt at country, regional and global level on pathways to just energy transitions including the co-benefits. The support enables Denmark and IRENA to cooperate to access and influence key international high-policy platforms and networks on energy transition such as the G7-led JET-Ps, the COP-processes and the work of the UN Secretary General's Crisis Response Group⁷ on the impact of the food, energy and finance crisis that the Danish Prime Minister is championing. To illustrate how IRENA contributes together with Denmark to raised ambition: IRENA, Denmark, and the Global Energy Wind Council, GWEC, have launched the Global Offshore Wind Alliance, GOWA, a multi-stakeholder alliance for governments, private sector actors, international knowledge institutions and civil society to promote upscaling of offshore wind to 380GW in 2030 and 2000GW by 2050. Membership of the Alliance counts 14 countries and 3 non-governmental entities as of March 2023.

2.3 Choice of implementing partner and cooperation modalities

2.3.1 IRENA's role and key strengths

IRENA is an intergovernmental organisation with its Headquarters in Abu Dhabi, United Arab Emirates (UAE) and a large office in Bonn, Germany. The Agency currently has 167 Members⁸ of which 112 are ODA eligible countries. The agency serves as THE principal platform for international co-operation on renewable energy (RE) - no other Agency has a mandate fully focussed on RE. The Agency's global membership gives it a unique ability – and responsibility – to consider the future energy system based on Members' diverse priorities, abilities, and needs. IRENA's strengths include a global mandate from its Membership with a strong convening power and over a decade of expertise in RE and energy transition pathways. The Agency's approach is intended to ensure that analysis and technical assistance/capacity building are tailor-made to the country or regional needs, based on buy-in by country and regional stakeholders with results directly relevant to the country and region, thus strengthening long-term sustainability of results. IRENA's MTS and rolling two-year work programme and budget (WPB) are developed and implemented in direct consultation with its Membership. Country-level work is at a request, and the Agency works closely with its country focal points (Government ministries) to ensure alignment of IRENA support with country goals and needs, and to ensure that the right stakeholders at

⁷ As governments and households continue to face immense pressure from the once-in-a-generation cost-of-living crisis, including skyrocketing and volatile energy prices, due to the war in Ukraine, the United Nations is calling for energy policy measures that link the need for urgency and long-term sustainable development, see [link](#).

⁸ As of March 2023: 166 countries plus the European Union.

country and regional levels are involved ensuring ownership and long-term sustainability of processes and results created.

IRENA is a centre of excellence regarding data, analysis, policy, technology, resource, and financial knowledge on renewable energy. IRENA is also one of the custodian agencies⁹ for SDG 7 that jointly publish an extensive report on tracking progress on SDG7. IRENA produces annually updated country profiles¹⁰ that provide an overview of developments in RE in countries and areas around the world, including RE consumption, electricity capacity and generation, RE policies, RE resource potential and more. IRENA publishes the annual World Energy Transition Outlook (WETO¹¹), which outlines priority areas and actions based on available technologies that must be realised by 2030 to achieve net zero emissions by mid-century. Global outlooks are now being translated into regional outlooks. Most recently, the 2nd edition of the was released, produced with Danish support under the LTP Project. In the 2023-2027 period IRENA will also be working on and releasing regional outlooks for African regions, including for Northern Africa, Eastern Africa, Western Africa, Central Africa, and Southern Africa, as well as Central America. IRENA supports both the Global South and the Global North in the transition to a sustainable, just, and inclusive energy future.

As also reflected in the 2020 Mid-term Evaluation of IRENA's MTS 2018-2022 (see further information below), IRENA is considered an agile partner. For instance, it was one of the first agencies to analyse the geo-political implications of energy transition as well of green hydrogen, including challenges and opportunities in the Global South. New considerations continue to emerge and include addressing vulnerabilities of the current energy system and its immense impact on facets of economies and societies; energy access and affordability also linked to access to services like health, water, and information technology; and transforming the current energy system to one that is predictable, resilient, inclusive, and sustainable while keeping a holistic approach to the energy transition, with areas such as job creation being an integral part of its work. IRENA's data-based analysis can contribute valuable input to the JET-Ps on socio-economic benefits and jobs and provide roadmaps for how to seize the opportunities of expanding RE supply including, where relevant, with production of power-to-X (PtX) and green fuels such as green hydrogen for domestic consumption and export. COP27 in November 2022 brought renewed momentum for deeper international collaboration to tackle climate change, and IRENA used the event to host awareness raising activities and formalise its relationships with key partner organisations. With the first 'Global Stocktake' taking place at COP28 in 2023 there will be renewed emphasis on countries to collaborate closely to achieve the 1.5°C Paris Agreement goal and accelerate the deployment of RE. IRENA will be working closely with the COP28 Presidency (United Arab Emirates, where it also has its headquarters) to provide the best available science to inform the process and facilitate dialogue.

2.3.2 Independent Evaluation of IRENA's MTS 2018-2022

The formulation of the Danish Contribution has been informed by the Mid-term Evaluation of IRENA's previous MTS. Conducted by the consulting company IOD PARC in 2020, the focus was on the reach,

⁹ IRENA is one of the five custodian agencies for SDG7 (Ensure access to affordable, reliable, sustainable and modern energy for all). The annual global tracking report on SDG 7 (<https://www.irena.org/publications/2022/Jun/Tracking-SDG-7-2022>) is a collaboration among these custodian agencies who jointly, disseminate comparable datasets worldwide to improve the quality of global tracking. The World Bank and World Health Organization are responsible for tracking progress toward SDG target 7.1 (universal access). The International Energy Agency (IEA), IRENA and the United Nations Statistics Division (UNSD) are responsible for SDG target 7.2 (renewables). IEA and UNSD are responsible for SDG target 7.3 (energy efficiency). IRENA and the Organisation for Economic Co-operation and Development (OECD) jointly track target 7.a (international cooperation). IRENA is responsible for target 7.b (infrastructure and technology).

¹⁰ The country profiles: <https://www.irena.org/Statistics/Statistical-Profiles> include a wide range of information including data and trends on: GDP, SDG# target 7.3.1 Energy intensity; SDG#7 target 7.1.1 Access to electricity (% population); 7.1.2 Access to clean cooking (% population); 7.2.1 Renewable energy (% of total final energy consumption TFEC); SDG#7 indicator 7.a.1 Public flows to renewables; SDG#7 indicator 7.b.1 Per capita renewable capacity; air particulate matter; Total Energy Supply (TES) by source /RE/non-RE; RE Consumption (TFEC) by sector; electricity capacity (installed, by generation type and capacity utilization); information on latest policies, programmes, and legislation; CO₂ emissions by sector; and RE resource potential.

¹⁰ (but may graduate from the list in 2023)

¹¹ <https://www.irena.org/Publications/2023/Mar/World-Energy-Transitions-Outlook-2023>

the effectiveness, and impact of IRENA's activities. Some of the key observations from the evaluation are listed in Box 2.1 below:

Box 2.1: Key observations from the Mid-term Evaluation of the IRENA MTS 2018-2022

- IRENA performed effectively against its 2018-19 work programme and budget.
- IRENA's value addition was found to be its convening power, the inclusive approach to collaboration and partnerships, and the facilitation of networking and relationship building across the renewable sector.
- IRENA's work on the generation and curation of renewables-related data and analyses was also universally commended, with stakeholders placing particular value on the independence, objectivity and reliability of IRENA's contributions." IRENA's work on co-benefits, job creation and socio-economic outcomes was highly valued by members and partners, and the evaluators found that IRENA should continue to deepen this work and promote it amongst relevant (energy and non-energy) decision-makers.
- IRENA's global membership and mandate and the exclusive focus on renewable energy were main comparative advantages, as perceived by Members and partners.
- The size of the Agency enables flexibility, agility, and responsiveness.
- IRENA has an opportunity to address knowledge gaps, covering how countries can build the necessary political and societal momentum for a renewables-based energy transition, and around the practical, tangible steps that will be required.
- IRENA's conceptualisation (and pursuit) of energy as a means to delivering higher-level socio- economic and climate goals, rather than energy as an end in itself, was important.
- Views differed amongst IRENA Members and partners on whether IRENA should engage at country level¹².
- While teams within IRENA had relatively well-developed output and activity-focused monitoring systems, there was limited substantive outcome or impact level monitoring being undertaken within the Agency, and no shared results or monitoring framework that all teams could use and contribute to. A systematic, shared, institution-wide results framework and monitoring strategy was planned, and this should be prioritized

2.3.3 Results and lessons learned from previous Danish support to IRENA

The present proposal for a Danish Contribution to IRENA for 2023-2027 has also been informed by results and lessons learnt from previous Danish support to Long-Term Planning (LTP, 2018-2022 and with focus on the ASEAN region) and SIDS Lighthouses Initiative phase 2 (SIDS LHI 2.0 2019-2023 with focus on ODA eligible SIDS) – and this includes consideration of the conclusions and recommendations of the MFA mid-term review of the LTP project in 2021. Key lessons are summarised in Box 2.3 below:

Box 2.2: Key lessons learned from previous Danish support to IRENA

- Countries and stakeholders emphasised IRENA's legitimacy as an intergovernmental organisation. IRENA's comparative advantage was confirmed by stakeholders to be its global and regional approach and outreach, its generally holistic approach and its outlook as international energy organisation. Also, its capacity to perform socio-economic analyses e.g. in end use sectors/hard abatement sectors were considered relevant and attractive.
- There were synergies and complementarities that should be further exploited and supported, e.g. by matching IRENAs regional (ASEAN) perspective with the Danish Energy Partnership Programme (DEPP) country and provincial perspective on long term planning, and activating IRENAs socio-economic impact analysis and advise on enabling policy frameworks, that could be very useful to DEPP supported activities at the provincial and local level.
- Covid-19 disrupted work streams making it difficult to engage countries through in-person meetings and workshops and also resulting in delays on the recipient countries side.
- Evidence was not found (by the Danish MTR of the LTP project) of the risk management monitoring/updates called for in the Project Document, and it was found difficult to assess the available budget versus the output targets and the current stage of implementation. Reports to the Steering Committee (SC) and the SC minutes lacked specific details that could improve the oversight by the SC.

¹² IRENA is not an implementing agency; the issue of country level engagement remains open.

- Increased interest from Member States put a strain on IRENA's human resources. Many requests were received for further work, for example for socio-economic impact assessments and LTES related activities. IRENA continues to engage with countries to support them with socioeconomic impact assessment for informed policy making.
- SIDS still consider the process to access grant and concessional loan financing burdensome and bureaucratic. While grants may still play an important role in specific contexts and for emerging markets and technologies, RE development approaches which are exclusively based on grants may crowd out business models and investment cases by local private sector.

Boxes A.5.1 and A.5.2 in Annex 5 summarise in more details the key results and lessons learned from the LTP and SIDS LHI projects. To date, Denmark has funded two dedicated project staff positions, one for the LTP Project, and one for the SIDS Lighthouses programme. The aim has been to promote results and as regards LTP to strengthen coordination with the Danish Energy Agency on the Strategic Energy Sector Cooperation. Note that while the intention under LTP and SIDS projects was to hire secondments under the project, Denmark and IRENA were unable to fund suitable candidates to fill the positions. This resulted in delays in both projects in terms of delivery of work. Instead, IRENA advertised through its processes noting that Danish nationals were encouraged to apply. The Long-term Planning dedicated staff member started in May 2021. The dedicated SIDS project staff position started only in September 2022. The experience thus far with dedicated project staff has been positive, including strengthening linkages with Danish bilateral energy partnership programmes; however, the traditional secondment system seems to not be the appropriate avenue.

2.3.4 Denmark-IRENA Strategic Partnership

Denmark and IRENA in 2020 developed a strategic partnership centred around eight areas of cooperation based on IRENA's mandate, comparative advantages, and expertise; these areas of cooperation are aligned with IRENA's draft MTS. Further, the strategic partnership has become stronger in the light of the climate ambitions and green transition of the Danish Government.

To make the cooperation even more strategic, reflect the Strategic Partnership principles, and to reduce transaction costs, Denmark and IRENA have agreed to develop the present project proposal cutting across all the cooperation areas in the elaborated strategic partnership. The project supports all 5 pillars under the new draft IRENA MTS mentioned in the next section below, but with a targeted focus in terms of geographies and themes, reflecting the Danish interest – and ensuring full DACability of the grant.

Box 2.3: Denmark-IRENA Strategic Partnership

Areas for cooperation in the Denmark – IRENA Strategic Partnership

1. Production, dissemination, and use of analyses on renewable energy and socio-economic benefits in energy transitions.
2. Dissemination of recommendations on energy scenarios and planning as tools for NDC-enhancement and ambition.
3. Advance the role of renewable energy as part of security of energy supply.
4. Catalyse deployment of renewable energy solutions for deep decarbonization of the energy system including the production of green fuels.
5. Collaboration with the private sector on finding innovative solutions and technologies (such as green hydrogen) and securing finance for energy transition projects.
6. Promotion of increased climate finance and investments in renewable energy through a strengthening of the Climate Investment Platform (CIP).
7. Strengthening of synergies and collaboration between stakeholders in the international climate/energy architecture based on comparative advantages.
8. Strengthening the global dialogue on energy transformation with an emphasis on the socioeconomic benefits of the green transition and the synergies between climate objectives and SDGs.

2.4 IRENA's Medium Term Strategy 2023-2027, Theory of Change, and Results Framework

IRENA's Medium-term Strategy (MTS) 2023-2027 was approved¹³ by the IRENA Assembly in January 2023, setting the direction and priorities for the coming five-year period. The MTS is informed by the lessons learned over the past decade in the Agency's efforts to support countries in redesigning and strengthening their energy systems to enable human development and climate-proof the future. As noted in the MTS document, the adoption of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change in 2015 provided a direction for joint action, with energy at the heart of both agreements. The coming years are deeply consequential, as they will define whether the goals set for 2030 will be realised while staying on a 1.5°C pathway. Amidst the pressure to deliver, renewables-based transitions create a vibrant climate for innovation, investment, job creation and new economic opportunities. With the backdrop of a shrinking timeline and pressure to deliver, the MTS is the last full five-year cycle towards 2030 that outlines IRENA's contribution to global energy efforts. For the next five years, the following *mission* will guide the Agency's work: *IRENA will take the leading role in accelerating the global, renewables-based energy transition to fight climate change, enhance human welfare and drive an urgent and systemic shift for increased energy access, reduced inequalities, improved energy security, and prosperous and resilient economies and societies.*

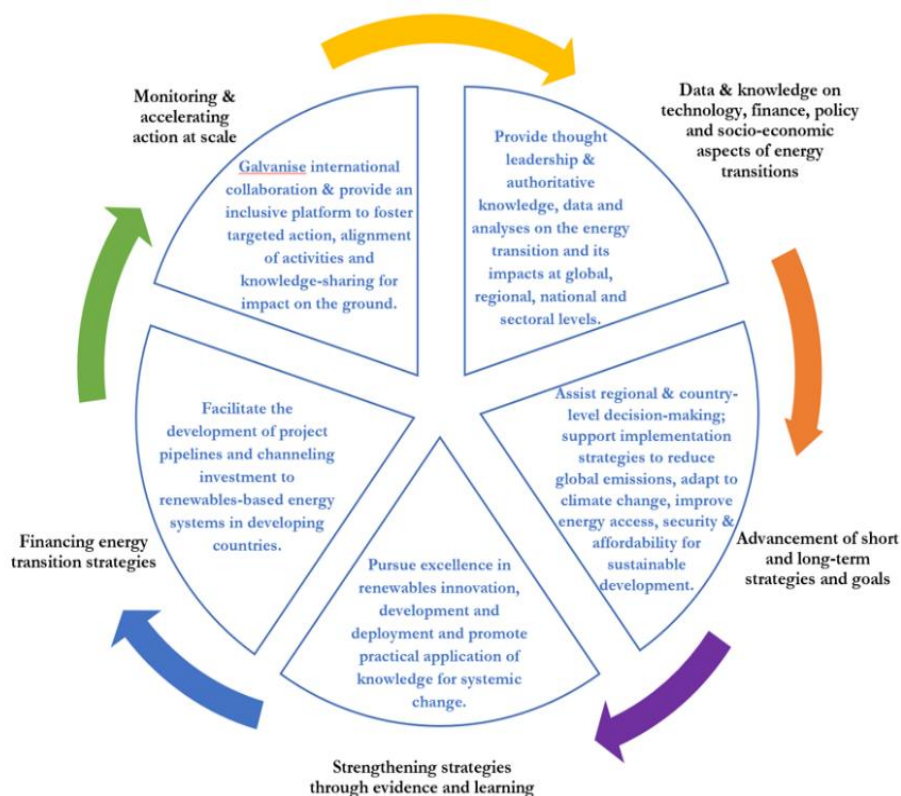
The five “pillars”¹⁴ under IRENA's new MTS 2023-2027 are: i) Centre of Excellence for the Energy Transition; ii) International Collaboration and Network Hub; iii) Global Voice for Renewables; iv) Support for Regions and Countries; v) Facilitating Projects and Mobilising Capital. IRENA's comparative advantages on energy transition building on these pillars are illustrated in Figure 2.1¹⁵, where the strategic objective for each pillar is stated inside the “wheel”, and key activities in the “value chain” are shown outside the “wheel”.

¹³ IRENA Official Document A/13/DC/1: [link](#) and A/13/4: [link](#)

¹⁴ During MTS consultations, Members noted that many elements of the 2018-2022 MTS remained valid but also stressed the urgency to accelerate just and inclusive transitions and tackle the increasingly complex impacts of systemic change reverberating across all energy sectors and beyond. IRENA's MTS pillars thus shifted in focus. The changing of pillars brought focus on systemic changes in energy and beyond; greater focus on access and equality; substantive additions of interaction between renewables and energy security and resilience; an additional pillar nuancing regional and country level work; and a 360° approach to programme.

¹⁵ Source: Figure 2 in IRENA Official Document A/13/4.

Figure 2.1. Illustration of IRENA MTS 2023-2027 pillars



The Agency has long promoted a holistic approach to transitions, in which transitions cannot be considered in isolation from the broader economy, given the systemic change that will have wide-ranging effects. And by providing data-driven analysis and support for policymakers, IRENA facilitates deployment of renewables and financing for clean energy, combining elements of the above-cited five MTS pillars, at country and regional levels and thus contributing to achieving the SDGs and the Paris agreement. The Agency's work is demand-driven by its Membership and is context specific¹⁶ and based on a close dialogue with national stakeholders and coordination with other partners. The same approach applies to support for regional organizations. At the global level, engagement in international events or initiatives is based on IRENA's expertise in cooperation with a variety of stakeholders and sought by international actors and processes. IRENA provides data, analysis, lessons learnt and knowledge sharing platforms on key RE topics. Annex 9 reflects cooperation with selected international partners.

Figure 2.2 shows IRENA's first Agency Theory of Change (ToC), underpinning its newly approved MTS. The previous IRENA MTS 2018-2022 did not have a ToC. The ToC for the new MTS was first prepared in draft by IRENA for discussions by the MTS working team led by Denmark and Kenya and was endorsed by IRENA's 24th Council (ref IRENA document C/24/3) and later adopted by the 13th IRENA Assembly in January 2023 and included in document A/13/4. It is noted that the use of some terms such as activities and outputs in the Agency ToC differ slightly from the way these terms are used by Danida.

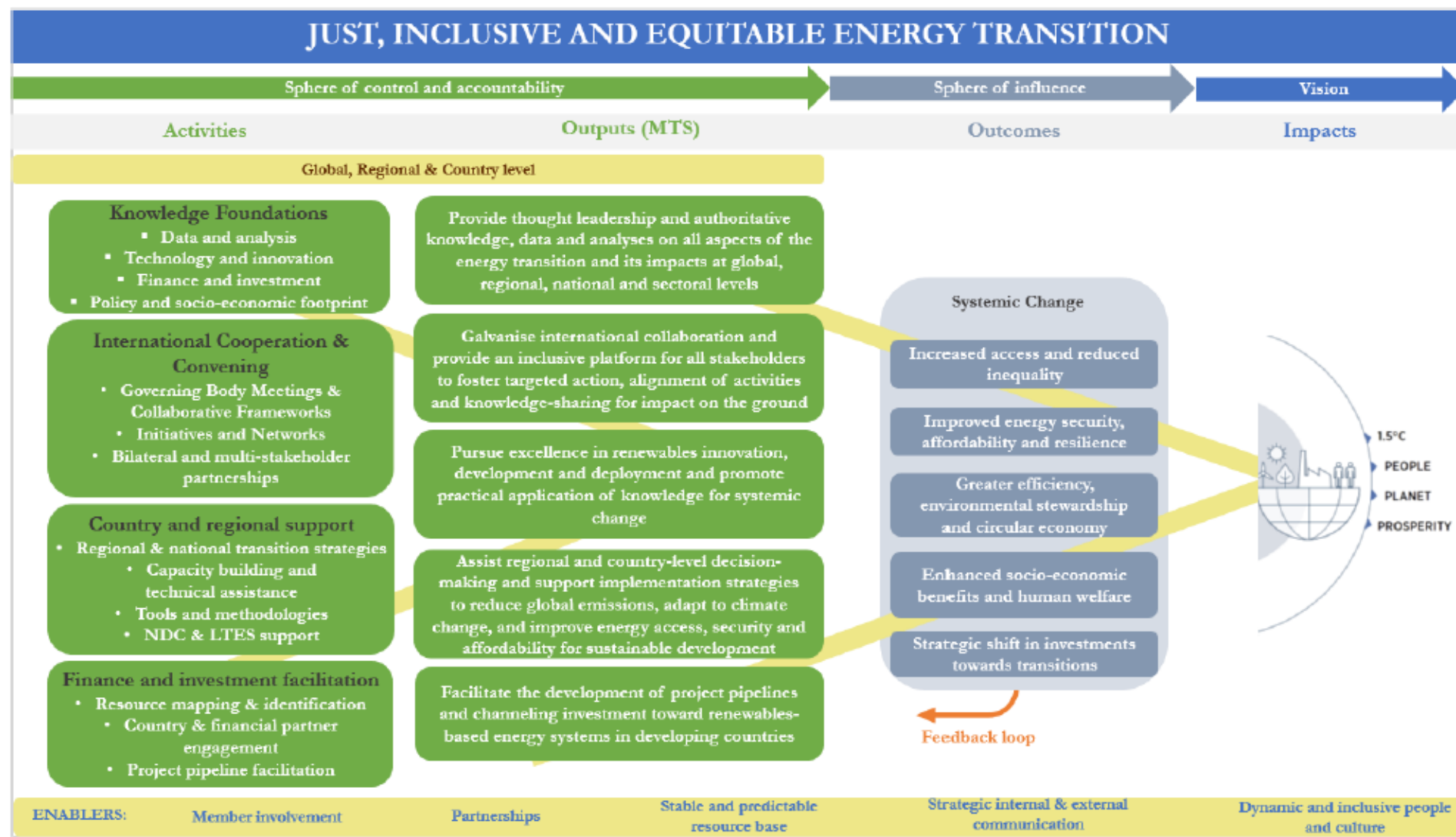
IRENA is now – for the first time - translating its overall Theory of Change (ToC) into an Agency-wide results framework. The aim is to further strengthen documentation and communication of results to IRENA Member countries, and stakeholders in the international energy and climate architecture. It is expected that a stronger focus on results will also enable additional funding from contributors. This work was launched at an IRENA senior management retreat in late February and is underway from early March 2023, with a view to integrating a results-based management concept into the IRENA Work Programme and Budget (WPB) that is scheduled for completion by late September 2023 prior to the Council meeting.

¹⁶ But IRENA does not have country presence and is not engaged in actual physical implementation on the ground.

In the first stage, IRENA focuses on development of the substantive side of the results framework and definition of baseline and targets. IRENA is basing its development of the results framework on guidance from the United Nations Sustainable Development Group (UNSDG) including its RBM handbook¹⁷. The approach toward IRENA's results-based management (RBM) approach is illustrated in Figure 2.32. Denmark will keep a close dialogue with IRENA its development of the Agency RBM approach and results framework, and a good opportunity for a consultation in this regard may be in connection with the IRENA Council meeting in the fall (October) 2023. Moreover, as further elaborated in Chapter 8, and elsewhere in this PD, the Steering Committee meeting held at the end of the Project Inception Phase will approve the Project's results framework at output level, ensuring that it is aligned to IRENA's RBM and results monitoring system.

¹⁷ <https://unsdg.un.org/resources/unsdg-results-based-management-handbook>

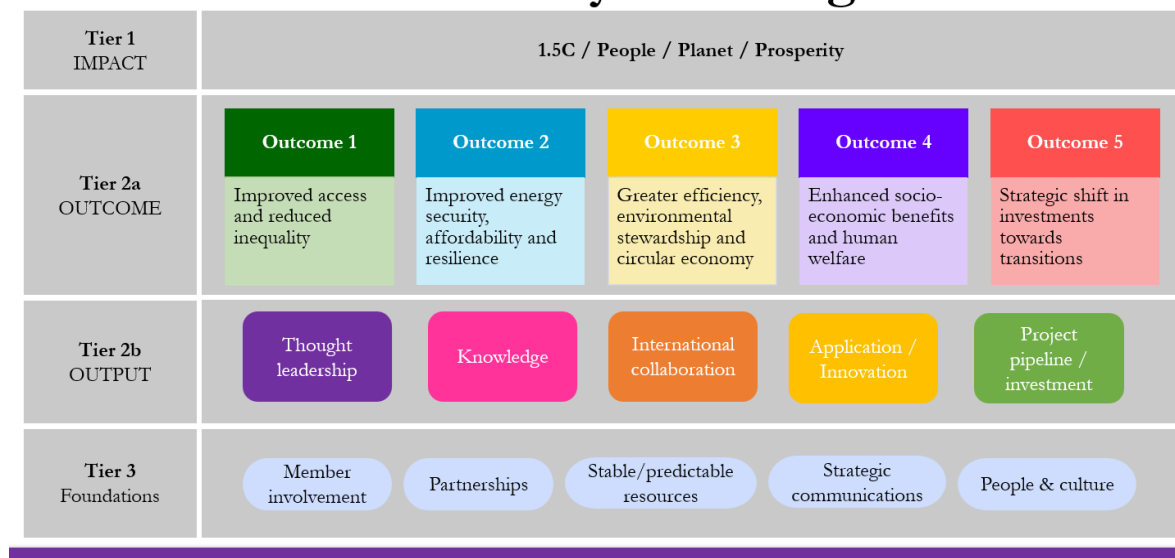
Figure 2.2: IRENA Theory of Change



Note: This Theory of Change, was approved by the 13th IRENA Assembly in January 2023 as part of the Agency's MTS 2023-2027 and is found in IRENA Official Document A/13/4

Figure 2.3: Illustration of IRENA’s translation of its ToC into a results-based management approach

RBM based on Theory of Change



2.5 Strategic priorities for the Danish Contribution to IRENA 2023-2027

Geographic and thematic strategic priorities

IRENA’s DAC coefficient is 66%, as it works beyond the ODA eligible/DAC countries. The Danish Contribution is earmarked to ODA-eligible developing countries only. Denmark’s geographical priorities are in Africa and Asia, including least developed countries (LDCs), and emerging economies with high emissions where further RE deployment has significant emission reduction potential. Synergy with Danish bilateral Government-to-Government partnership programmes is also a guiding principle for geographic priorities. The Africa region and sub-regions, are also a Danish priority, as is the sub-region of the Association of Southeast Asian Nations (ASEAN), which faces a 50% rise in regional energy demand within the decade and which has already been a priority for Danish support to IRENA under the LTP Project. A special target group are small island developing states (SIDS), which are also currently supported by Denmark through the SIDS LHI programme. The main emphasis in the grant is on climate change mitigation, but it also supports the energy transition in climate vulnerable SIDS, which also has benefits in terms of strengthened adaptation and resilience to climate change. Table A.1.1 in Annex 1 provides overview of selected country information for SIDS, ASEAN, and relevant emerging economies.

Thematic priorities for Denmark’s support are aligned to IRENA’s MTS 2023-2027 described above. The operationalisation of this support is based on a set of eligibility criteria as well as “ring fencing” of five areas of particularly high thematic priority (The Africa Coalition Initiative, the support for energy work of NDCs through the NDC Partnership, GOWA, a continuation of SIDS lighthouse, and the synergies with the Danish Strategic Energy Sector Support through DEA, with a focus on socio-economic analysis respectively). These priorities are further elaborated in chapter 3 and 4. Based upon a results framework at output level to be developed during the Project’s Inception Phase, detailed annual work plans and budgets will be developed and approved by the Project Steering Committee, as further elaborated in the brief description of the Project in Chapter 3 and in Chapter 8 on work planning. These work plans will also be aligned to IRENA’s rolling two-year work plans and budgets, thus also ensuring alignment of Danish support to demand-led priorities decided by IRENA Members.

2.6 Target groups and alignment with Danish cross-cutting priorities

The ultimate beneficiaries of the Danish support to IRENA are households and enterprises in ODA eligible developing countries. As an intergovernmental agency, IRENA works with governments and IRENA has a list of government-level (Ministry) focal points, provided by its Members, which serve as

a first point of contact for IRENA when undertaking work. The political economy and stakeholder analysis in Annex 1 provides further information on IRENA's outreach and engagement with key stakeholders in countries and regions. The Danish support through IRENA will therefore also target decision makers at various levels in ODA eligible governments, as well as sector experts, bilateral donors, multi-stakeholder coalitions, private sector actors and civil society as well as academia, regional institutions, and international organisations.

IRENA has a clear mission fully aligned with the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change, as also reflected in this Project. The theme of IRENA's new MTS 2023-2027 of a just, inclusive, and equitable energy transition, reflects the Agency's emphasis on the needs for access to sustainable energy at all levels of society, including for disadvantaged groups, leaving no-one behind. IRENA is working to improve energy access at household level through its energy transition analytical work with increasing focus on RE in access and nexus issues.

For nearly a decade, IRENA has developed analysis and filled knowledge gaps on the role of gender¹⁸ in the energy transition including the socio-economic impacts of gender disparity in the renewable energy sector. This has included specific analysis on gender equity throughout the energy sector, data collection and targeted technology and sector specific analysis. Examples include the first ever gender report¹⁹; the recently released [Solar PV: A Gender Perspective](#)²⁰; [Fostering Livelihoods with Decentralised Renewable Energy: An Ecosystems Approach](#); and [Community Energy Toolkit](#). Note as well that IRENA's flagship publication, the [World Energy Transition Outlook](#) now includes specific data, analysis and related recommendations on gender elements of the energy transition.

IRENA does not have a specific policy on a human rights-based approach to development (HRBA). And while access to energy is not a human-right as such, IRENA's work includes its key role in improving data for more well-informed decisions thus contributing indirectly to the overall human rights principles of participation, accountability, non-discrimination, and transparency. IRENA encourages youth to identify the role that they can play in shaping the energy transition within their communities through the IRENA [Youth Forum](#) and engages youth through capacity-building initiatives on governance, education and innovation. The ninth edition of IRENA's series, [Renewable Energy and Jobs: Annual review 2022](#), produced in collaboration with the International Labour Organization (ILO), provides the latest estimates of renewable energy jobs and employment globally.

Supporting countries in their energy transition will enable them to benefit from the wider socio-economic opportunities, which include improving health outcomes (e.g. through the reduction of air pollution) and protecting biodiversity (by reducing deforestation). IRENA demystifies complex areas such as the [role of bioenergy in the energy transition](#) to ensure policy makers understand how such solutions can improve degraded land, benefit biodiversity, and improve soil quality, when practised sustainably.

2.7 Justification in relation to OECD DAC Criteria

The Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) has defined six quality criteria²¹.

¹⁸ For full overview of IRENA's work on gender please see [here](#).

¹⁹ "<https://www.irena.org/Publications/2019/Jan/Renewable-Energy-A-Gender-Perspective>"

²⁰ For related Wind technology analysis with gender focus see [Wind Energy: A Gender Perspective](#)

²¹ <https://read.oecd.org/10.1787/543e84ed-cn?format=pdf>

Table 2.1 Justification in relation to OECD DAC Criteria

Criteria	Justification
Relevance	<ul style="list-style-type: none"> - IRENA's 2023 WETO Preview link states that <i>"to keep 1.5°C alive, deployment levels must grow from some 3,000 gigawatt (GW) today to over 10,000 GW in 2030, an average of 1,000 GW annually"</i>. This project is consistent with the UN Secretary General's call link in connection with the launch in March 2023 of the Synthesis Report of the Intergovernmental Panel on Climate Change. - Focus on the just inclusive and equitable energy transition, consistent with the SDGs and the Paris Declaration on Climate Change. - IRENA's global mandate from its Membership with a strong convening power and expertise in demand-driven advice and assistance on RE and energy transition pathways. - IRENA serves as THE principal platform for international co-operation on renewables - no other Agency has a mandate fully focussed on renewables. - The 2020 Midterm Evaluation's finding that <i>"IRENA produces and curates valuable, reliable, well-used data and analysis that is integral to renewables policy and decision-making processes in developing and developed countries alike. IRENA's inputs are especially valued for their objectivity and independence."</i>
Internal and external coherence	<ul style="list-style-type: none"> - IRENA is a global centre of excellence regarding data, analysis, policy, technology, resource and financial knowledge on RE. - Inclusive approach to collaboration and partnerships, the facilitation of networking and relationship building across the renewable sector. - IRENA is one of the custodian agencies for SDG 7 on affordable and clean energy and collaborates with a wide range of key actors in sustainable energy and climate action. - Denmark – IRENA Strategic Partnership agreement signed in 2020 to strengthen synergies and collaboration between stakeholders in the international climate/energy architecture.
Effectiveness	<ul style="list-style-type: none"> - Aligned to the IRENA MTS 2023-2027 focused on the just, inclusive, and equitable energy transition. - The Agency's rolling two-year work plans driven by Member country demands and priorities and close consultation processes. - The 2020 Midterm Evaluation concluded that IRENA performed effectively against its 2018-19 work programme and budget.
Efficiency	<ul style="list-style-type: none"> - The size of the Agency enables flexibility, agility, and responsiveness. - Denmark's Contribution consolidated into one project enhancing efficiency and reducing transaction costs compared to the previous support through two separate projects. - Lean management structure building on experience from cooperation with Denmark since 2018.
Impact	<ul style="list-style-type: none"> - RE the most important enabler to make the necessary emission reductions by 2030. - In most countries RE also the least cost option to expand energy supply and increase energy access. - Access to RE a key driver of sustainable development both at household and national levels, contributing to reducing multiple dimensions of poverty by improving livelihoods. - RE contributes to avoiding locking-in investments into fossil fuel infrastructure that can turn into stranded assets. - 2020 Midterm Evaluation finding: stakeholders were <i>"clear in their perceptions that IRENA creates impact across the range of services it provides, with data and statistics being the area which is seen to most influence positive change."</i>
Sustainability	<ul style="list-style-type: none"> - IRENA globally recognized for its analysis on the socio-economic benefits of energy transition and the requirements for skills development to seize the job creation potential and will provide socio-economic footprint analysis that reviews progress along the energy ladder, and evaluation of socioeconomic impacts, jobs, and welfare; this will contribute to sustainability of RE solutions. - IRENA facilitation of peer-to-peer learning a key factor in uptake and use of knowledge and innovation for sustainability. - Member-priority driven approach, strengthening partner commitment and sustainability of outcomes and impact.

- | | |
|--|---|
| | <ul style="list-style-type: none"> - Targeted capacity development and improved data for informed decision making further enhancing sustainability. - Enablers and impact drivers will be used proactively. |
|--|---|

2.8 Development effectiveness

Development effectiveness is related to synergies and coherence between the various development instruments supported by Denmark and between development cooperation and broader Danish foreign and security policies; adaptive management; and transparency, mutual accountability and anti-corruption. Support through IRENA for the NDC partnership and GOWA, and for IRENA's socio-economic work and related advice to the Danish Energy Agency are specific examples of synergies and coherence, and in general close synergy with other Danish bilateral and multilateral support in target countries will be pursued, including through Danish Embassies. Further information on IRENA in the wider international institutional landscape is provided in Annex 1, Table A1.2: IRENA and other international organizations in energy transition and climate change mitigation" and in Annex 9: IRENA Collaboration and Linkages with other International Development Institutions, where Denmark's support for other actors is also reflected. The synergy with broader Danish policies was mentioned in Section 2.2. The adaptive management approach is reflected in the Project's approach to annual work planning to be approved by the Steering Committee, as further elaborated in Chapter 7 and 8. The principles of transparency, mutual accountability and anti-corruption underpin the Voluntary Contribution as reflected in the Agreement with IRENA for the Voluntary Contribution and its alignment to IRENA policy and guidelines.

2.9 Danish commercial interests

Denmark is a global leader in many aspects of the green energy transition, including RE and EE. Denmark's interests and values are strong in this space and the project with IRENA will give opportunities for influence, in the substantive cooperation with IRENA. Denmark has, as a Member, also a voice in the IRENA Assembly and Council to influence IRENA directions and priorities. The visibility of Danish interests/values/expertise will also be increased through IRENA's reporting to the Council and Assembly on this cooperation. In the general area of the energy transition and climate change mitigation there are many opportunities for commercial engagement for the Danish resource base. As stated by the [MFA Trade Council](#): *"Energy technology is one of Denmark's leading commodities and areas of expertise on the global market."* The Confederation of Danish Industry [Energy](#) mentions that in 2021, Danish export of energy technology and services was DKK 105 billion, which was equivalent to 11.3 % of the total Danish export of goods and services that year (see also DEA press release [link](#) in Danish).

Increased analysis and awareness of the urgent need for upscaling RE will make Danish private sector solutions increasingly relevant, and Denmark's contribution through this Project will help strengthen the enabling framework and investment opportunities for increased RE deployment in the target countries. Support for GOWA is of particular relevance in this regard, given Denmark's strength and commercial interests in offshore wind. However, IRENA is a knowledge and technical assistance organization that does not implement "hardware" projects on the ground. IRENA's own business opportunities (mainly for consultancy work) are announced through the [IRENA procurement website](#) while commercial opportunities in target partner countries could be found through national procurement systems. The IRENA Coalition for Action includes Danish companies such as Ørsted and Vestas, and in recognition of the fact that scaling-up RE deployment depends on continuous public-private dialogue, IRENA facilitates discourse and dialogue between its Member States and the Coalition for Action. IRENA's annual pre-Assembly Public-Private Dialogue gathers around 250 multi-stakeholders each year. This has become a key platform for countries and the Coalition to exchange views on the latest renewable energy trends. Smaller roundtable discussions are also held between IRENA Member States and Coalition representatives. Information on Danish knowhow and technology in the RE space is found in Annex 1.

3 Project Objective and brief summary description of the Project

3.1 Project objective

To facilitate the rapid deployment of renewables in ODA eligible countries in support of a just energy transition to enable the achievement of the Sustainable Development Goal on Energy (SDG7) and to make the necessary emission reductions by 2030 to keep 1.5°C within reach.

3.2 Brief summary description of the Project

The Project is a voluntary contribution of DKK 153 million in grant funds, earmarked to ODA-eligible countries and with activities, outputs, and outcomes aligned with the IRENA MTS 2023-2027 and its related Theory of Change. The support will also be aligned to the IRENA Agency results framework (still under development, targeted for late September 2023), and to the rolling two-year IRENA Work Programmes and Budgets (WPBs) decided by IRENA Members including Denmark. The Results Framework for the Danish Contribution has been developed in the present PD at objective, impact, and outcome levels, while as further described in Chapter 8 Work Planning, the Project results framework at output level (along with indicators and annual results targets) will be developed at by IRENA during an Inception Phase in Q3-Q4 2023 so that it can be aligned with the IRENA Agency results framework and results based management (RBM) approach. The alignment to the IRENA Agency WPB process is further described in Chapter 8, where it is also described that annual work plans directly linked to the Danish Project results framework at output level will be approved by the Steering Committee.

The Danish support will cover costs of IRENA staff (including two dedicated project staff positions), consultants, travel, and events, as per standard IRENA cost categories, as well as IRENA overheads. The budget also covers the MFA Inception Review and the mandatory MFA Mid-term Review that will include outcome harvesting.

Eligibility criteria for activities to be supported under the Danish grant will include the following that must all be met:

- Related to ODA eligible²² countries/regions and prioritised by Denmark, as reflected in this PD or agreed by the Steering Committee.
- Included under agreed areas for cooperation in the Denmark – IRENA Strategic Partnership Agreement (see box 2.3).
- Aligned to IRENA MTS, ToC, and Agency Results Framework.
- Specifically related to the results framework, indicators, and targets in the output level results framework for the Danish Contribution developed during the Inception Phase.
- Respecting the ring fencing of Danish Contribution resources for prioritised thematic areas.
- Included in the annual work plan and budget for Danish support agreed by the Steering Committee.
- Clearly identifies beneficiary targets group(s) and intended uptake.

The specific thematic priorities for which resources are ring fenced, are briefly described below.

Thematic focus on an African focused initiative for raising and implementing the renewable energy ambition in Africa

A budget (see Chapter 9 budget) is allocated for IRENA to support establishing and implementing (with partners) a Danish-German-IRENA initiated African-focused initiative for raising and implementing renewable energy ambition in Africa. In the current global context and its impacts on Africa (see context), the need to ramp up support for a green (and just) energy transition (also delivering on access to energy) based on renewable energy, has been identified. Based on dialogue with progressive renewable energy endowed African countries, including Kenya, Ethiopia, Rwanda, Niger, at COP 27 and IRENA Assembly, IRENA is currently conducting a fact finding on the needs of these countries in relation to

²² In line with the OECD list of ODA Recipients, effective for reporting on 2022 and 2023 flows. <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-of-ODA-Recipients-for-reporting-2022-23-flows.pdf>

energy transition and –access. The initiative is likewise in dialogue with other partners with an interest in supporting energy transition in Africa, including Global Energy Alliance for People and Planet, GEAPP, and Rockefeller Brothers Fund. The initiative will in the first instance, focus on African countries with or working on ambitious NDCs focused on energy transition and building energy systems based on 100% renewable energy by 2030 and/or with long term strategies for achieving Net-Zero emissions by mid-century. The objective is to accelerate a race to the top. Three clusters of focus have emerged: 1. Technical assistance and capacity building to improve regulatory frameworks for renewables and thus enabling environment for investments; 2. Attracting and mobilising finance; and 3. Engaging the private sector. IRENA will use its global membership and extensive network to bring in a range of partners who can contribute to the implementation of country plans and strategies. In collaboration with relevant government agencies, the Agency will facilitate the engagement of diverse institutions and experts to develop a country-specific tailored technical assistance and investment plan for participating African countries. Currently the initiative is aiming for an official launch at COP28. IRENA will also maintain an inventory of country requests and a roster of available expertise to facilitate timely responses to such requests. More countries and development partners are expected to join the effort as it expands, while focus at the beginning is to go deep in a few countries, to demonstrate the value it can produce.

Thematic focus on support for energy-requests from ODA eligible developing countries through the [NDC Partnership](#)

The NDC Partnership brings together more than 200 members, including more than 115 countries, developed and developing, and more than 80 institutions, to create and deliver on ambitious climate action that helps achieve the Paris Agreement and the Sustainable Development Goals (SDGs). Governments identify their NDC implementation priorities and the type of support that is needed to translate them into actionable policies and programs. Based on these requests, the membership offers a tailored package of expertise, technical assistance, and funding. This collaborative response provides developing countries with efficient access to a wide range of resources to adapt to and mitigate climate change and foster more equitable and sustainable development. The intention is that the first responses to needs are provided by NDC-Partnership developed country members, and institutional or associate members, and that the NDC Partnership Action Fund is the last resort for funding. IRENA is indeed responding to most of the energy requests that come from developing countries through the NDC-Partnership (NDC-P), but requires support to provide a comprehensive and solid response to the enormous needs in countries. Denmark will as one of the first members of NDC-P and a strong supporter of IRENA seek to strengthen synergies between IRENA and the NDC-P and improve the energy parts of NDCs, by providing support to IRENA to play its part. The NDC Partnership has received 5,550 requests from countries in total, of which, 855 are related to energy transition, making up 15% of all requests. These 855 energy transition-related requests were submitted by 49 countries. Requests for technical assistance make up 61% of energy transition-related requests. 29% of the requests have policy, strategy, and legislation as the catch-word. This overview shows the importance of the current and future provision of energy sector advice to countries by IRENA.

Thematic focus on GOWA to promote offshore wind in ODA eligible countries

IRENA is one of the founders of the Global Offshore Wind Alliance²³ and will be co-chair of the Alliance together with the Global Wind Energy Council, Denmark, and Colombia. It is a multi-stakeholder Alliance comprising government and non-state actors across the entire value chain. Massively scaling up renewable energy by offshore wind will increase access to renewable energy and is a prerequisite for economy wide decarbonisation of hard to abate sectors that cannot be electrified – shipping, aviation, heavy land transport, steel, cement, chemical industry and aluminium. The Global South is hosting a large number of heavy industry players of regional and global importance, that are central to economy wide decarbonisation. IRENA will provide demand-driven data, analysis, capacity building and technical assistance in support of accelerating offshore wind under the GOWA umbrella. IRENA will also create synergies between GOWA's workstreams and country demand for links to power-to-X (PtX) and green hydrogen opportunities and roadmaps for wider decarbonization. Finally, IRENA - given its mandate and expertise - has a strong convening power to include offshore wind in international, regional, and

²³ GOWA: <https://www.irena.org/Energy-Transition/Partnerships/GOWA>

national high level energy transition and climate diplomatic dialogue. Therefore, a budget is allocated for targeted work by IRENA through GOWA, as well as support for a dedicated project staff position (IRENA employee)²⁴ focused on GOWA, who will work as part of the GOWA secretariat. While the Alliance also includes non-ODA countries, support under this grant will relate strictly to ODA eligible countries only.

SIDS Lighthouses Initiative

The SIDS Lighthouses Initiative (LHI) is the framework of action for energy transitions and climate action in SIDS. Coordinated by IRENA, the SIDS LHI was launched at the United Nations Climate Summit in the margins of the United Nations General Assembly in 2014 as a response to the call to action from Third International Conference on SIDS, the S.A.M.O.A. Pathway. Today the Initiative brings together 40 SIDS as well as 36 partners. Its current target is to achieve 10 gigawatts of total renewable energy installed capacity in all SIDS by 2030. This would require quadrupling of the average capacity growth observed in the past seven years. The update of the LHI target was prompted by the fact that the previous target, amounting to 5 GW of total installed renewable energy capacity by 2023, had been achieved and exceeded three years in advance. Since the launch of the SIDS LHI in 2014, the uptake of renewable energy in SIDS has grown consistently, with remarkable acceleration in the years before the COVID-19 pandemic. Installed renewable energy capacity in SIDS grew from 3.5 GW in 2014 to 5.9 GW in 2020, hitting record growth of 19.5% between 2018 and 2019.²⁵ SIDS LHI activities include NDC enhancement and implementation²⁶ support including in the development of energy management methodologies for GHG emissions, target tracking, roadmaps for the electrification of the transport sector, and emerging technologies such as green hydrogen and ocean energy, rooftop solar simulation, energy monitoring, reporting and verification (MRV), mitigation scenarios, project facilitation and support to access to finance. It also involves delivery of capacity building support and knowledge sharing. For example, while the initiative collects data and statistics on SIDS, tracking their progress on renewable energy capacity, it also works on aiding SIDS to improve methodologies for data collection, analysis, recording and reporting.

Socio-economic analytical work

IRENA's socio-economic work, mentioned earlier in the document, looks at how the energy transition can generate benefits beyond energy solutions, leading to policies able to deliver multiple advantages for society. They include improving energy access, healthcare, gender equity and welfare, and providing wider economic and employment progress. This analysis extends into macro-economic benefits, the link between energy and jobs, gender, and local value creation²⁷. Socio-economic footprint analysis delves into the implications of the energy transition, providing footprint measurement in terms of GDP, jobs and welfare. The need for holistic employment and just transition policies is highlighted by analysing the implications of the transition on whole-economy and energy sector jobs. Climate damages have been included into the macroeconomic analysis, bringing about important socio-economic consequences. Most recently, and linked to Danish priority countries, IRENA has completed socio-economic of the energy transition analysis for [Malaysia](#), [Indonesia](#), and [ASEAN](#)²⁸. This is used directly by informing the implementation of the DEA Strategic Energy Sector Support. To illustrate, in response to work completed under the long-term planning project IRENA received six formal requests from its Members (from Antigua and Barbuda, Ghana, Indonesia, Kazakhstan, Japan and UAE) to conduct assessment of the socioeconomic impacts of their energy transitions. Two requests have been received to integrate IRENA modelling software into national systems following virtual training sessions on energy planning.

²⁴ Funded under the budget allocation for offshore wind support (GOWA) - see budget line 2 in Table 6.1. The job profile will be developed in collaboration with GOWA partners.

²⁵ More information and data may be found on the SIDS LHI website at www.irena.islands.org

²⁶ Currently support provided to: Antigua and Barbuda, Belize, Cuba, Dominica, Dominican Republic, Fiji, Grenada, Mauritius, Palau, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, São Tomé and Príncipe, Seychelles, Solomon Islands, Tonga, and Trinidad and Tobago.

²⁷ More information is available at www.irena.org/Energy-Transition/Socio-economic-impact.

²⁸ Supported under the Danish Long-term Planning project (LTP 2018-2022).

Recommendations from the work also informed Indonesia as the G20 2022 President and informed meeting proceedings as well as Egypt as COP2022 President.

In order to enhance synergies between bilateral energy cooperation programmes implemented by the Danish Energy Agency (DEA) and IRENA, and with a particular focus on socio-economic aspects of the energy transition, a dedicated project staff position (IRENA employee) has been included in this project²⁹. This also builds upon (and seeks to extend the role of) the IRENA dedicated project staff position included in the previous Danish funded LTP project, which has proved to be highly relevant in strengthening collaboration and synergy. The main role of this new project staff position will consist in contributing to socio-economic aspects of the energy transition, including knowledge exchanges across the two organisations on their respective programmes, and to the identification of complementarities and avoidance of duplication of work at country-level. This dedicated project staff member will liaise with the Danish Ministry of Climate, Energy and Utilities, the Danish Energy Agency and the Danish Ministry of Foreign Affairs to strengthen ties between energy experts from Danish and IRENA sides, respectively. The dedicated staff member will be in charge of maximizing synergies and complementary activities to the Danish bilateral work on the energy transition and its socio-economic aspects, e.g. by ensuring coordination between the DEA's country-level teams and relevant Danish energy advisers posted at Danish Embassies on the one side and IRENA teams on the other.

4 Theory of Change and key Assumptions

The narrative ToC for the Danish Voluntary Contribution to IRENA is briefly outlined below. Please note this is a ToC designed by Denmark/MFA, describing the Contribution from Denmark to IRENA. Nevertheless, it is partly building upon the ToC of IRENA itself:

If Denmark provides an earmarked voluntary contribution aligned to IRENA's Medium-term Strategy, and with particular focus on:

- *an African-led coalition for raising RE ambition in Africa.*
 - *support through the SIDS Lighthouses Initiative for SIDS energy transition efforts from fossil fuel dependence to RE.*
 - *improving energy parts of nationally determined contributions (NDCs) through IRENA support for the NDC-Partnership.*
 - *accelerating offshore wind energy development under the Global Offshore Wind Alliance (GOWA).*
 - *addressing socio-economic aspects of the energy transition in relation to Danish bilateral energy cooperation in countries in Africa and Asia.*
 - *other earmarked support decided by the Steering Committee based on a set of eligibility criteria and contributing to the IRENA MTS 2023-2027.*
- *Then IRENA will undertake a combination of activities under the five pillars³⁰ in the MTS within the following areas and above defined geographies (ODA-only):*
 - *Strengthen knowledge foundations through data and analyses and policy development in areas such as technology and innovation, finance and investment, and socio-economic footprint of the just inclusive and equitable energy transition.*
 - *Strengthen international convening and cooperation through collaborative frameworks, initiatives and networks, and bilateral and multilateral partnerships and events.*
 - *Strengthen its country and regional support through regional and national transition strategies, technical assistance and capacity development, tools and methodologies, and support for long-term energy scenarios and NDCs.*

²⁹ For this position (funded under the allocation for IRENA socio-economic work - see budget line 5 in Table 6.1), the qualification requirements should include the following: - strong knowledge of Danish energy policies, strategies and methodologies and understanding of the Danish energy sector and model; - knowledge of Danish best practice on energy policy and international energy partnerships as a part of the bilateral energy programmes implemented by DEA; - understanding of technology and policy issues related to energy transitions; -substantive experience in socio-economic aspects of the energy transition; -strong cooperation and networking skills and ability to work with multicultural teams.

- Facilitate increased finance and investment in RE through resource identification and mapping, engagement with financial partners, and investment pipeline facilitation.

- And then IRENA will deliver outputs in:
 - Thought leadership.
 - Knowledge.
 - International collaboration.
 - Application and innovation.
 - Project pipelines leading to investment.
- And then Denmark through IRENA will contribute to the following IRENA MTS outcomes in the targeted ODA eligible countries and regional institutions:
 - Increased energy access and reduced inequality
 - Improved energy security, affordability, and resilience
 - Greater efficiency, environmental stewardship, and circular economy
 - Enhanced socio-economic benefits and human welfare
 - Strategic shifts in investments towards transitions
- And then, a just energy transition in ODA eligible developing countries will be supported in the efforts to achieve SDG7 and contribute to the necessary emission reductions by 2030 to keep 1.5°C within reach. (i.e. the objective of the Danish voluntary contribution Project).

And then Denmark's support will have contributed to the IRENA RBM intended impact of ensuring that all countries and regions have an opportunity to realise the benefits of the transition along a 1.5°C pathway with benefits for people, planet, and prosperity. As a supplement to the above narrative "if-then" style theory of change (ToC), responses to the 8 Danida AMG standard questions underpinning the ToC are briefly summarised in Box A3.2 in Annex 3.

Key assumptions related to the Danish support include the following:

- IRENA effectively and efficiently develops a results framework at output level with SMART indicators and annual results targets acceptable to the Steering Committee or which can be adjusted with SC comments.
- On this basis, IRENA develops annual work plans and budgets for the Danish Contribution consistent with the Danish project results framework and aligned to IRENA's agency results framework and two-year WPBs.
- IRENA is capable of retaining/ recruiting qualified key staff, including the dedicated staff positions funded by Denmark related to i) GOWA and ii) socio-economic aspects of the energy transition and enhancing synergies between the bilateral energy cooperation programmes run by the Danish Energy Agency and IRENA.
- There is effective uptake of IRENA knowledge products, data, and analyses. IRENA has therefore been able to influence policy direction, as evidenced in concrete implementation of policy actions to which IRENA support has contributed or can be attributed.
- IRENA is able to ensure additionality and synergies in a field with many actors and initiatives.

More detailed assumptions, enablers, and drivers that should be used by IRENA to strengthen impact are listed in Box A3.2 in Annex 3.

5 Summary of the Results Framework at Outcome Level

Table 5.1 below presents a result framework at outcome level, developed by MFA with inputs from IRENA. Project outcomes listed below build directly upon the current IRENA Theory of Change outcomes and the IRENA bi-annual work plan 2022-2023, as well as the IRENA results-based management framework (RBM) approach currently under development in IRENA See also Figure 2.3).

While presenting this overall outcome-based result framework, it is noted that it will be revised and elaborated in the inception phase, to reflect and align with the overall IRENA RBM framework. Furthermore, the elaboration of specific activities and outputs will be defined in annual work plans that will be presented to and approved by the project Steering Committee. These work plans will naturally be aligned with the overall RBM framework and IRENA biennial Work Programmes and Budgets and will reflect the earmarking/targeting of the Danish support to IRENA. As explained in following chapters, IRENA will report on the work plans and accounts approved by the SC, and the ODA eligibility of support through the Danish Contribution will thus be fully reflected.

Table 5.1: Results framework at outcome level

Project Title		Danish Support to IRENA 2023 – 2027
Project Objective		Facilitate the rapid deployment of renewables in ODA eligible countries to enable the achievement of the Sustainable Development Goal on Energy (SDG7) and to make necessary emission reductions by 2030 to stay on the 1.5°C pathway.
Impact Indicator		ODA Countries achieve their renewable energy targets under SDG7 ³¹ .
Baseline	2022	Status in the SDG 2022 Progress Report of target 7.2, by 2030 “increasing substantially the share of renewable energy in the global energy mix.” ³²
Target	2027	Substantially increased share of renewable energy in the global energy mix as per SDG7 Progress Report ³³

Outcome 1: Increased access and reduced inequality.		
Outcome indicator		Evidence of uptake of IRENA advice in national and regional-level policies and programmes that improve energy access and reduced inequalities ³⁴
Baseline	2022	There are gaps - in particular in DAC countries ³⁵ - in linking energy access to livelihoods and attracting sufficient capital to achieve SDG7 and reduce inequality.
Target	2027	Five national and regional-level policies and programmes in DAC countries address measures to increase access and reduce inequality.
The Danish contribution for the African-focused coalition for raising renewable energy ambition in Africa is an example of support for this outcome.		
Outcome 2: Improved energy security, affordability and resilience		
Outcome indicator		Increased installed renewable energy capacity in SIDS ³⁶
Baseline	2020	Installed renewable capacity of 5GW in SIDS ³⁷ in 2020 ³⁸
Target	2027	Installed renewable energy capacity of 8 GW by 2027.
The Danish contribution for SIDS Lighthouses is an example of support for this outcome.		
Outcome 3: Greater efficiency, environmental stewardship and circular economy		
Outcome indicator		The avoided value of fossil fuel imports displaced by increased renewable energy deployment over the 2023-2027 period in DAC countries (Calculation: ‘barrels of oil displaced’ x ‘USD per barrel of oil’)
Baseline	2022	0

³¹ **Means of verification:** [SDG7 Tracking Progress report](#)

³² The main indicator used to assess progress toward that target is the share of renewable energy in total final energy consumption (TFEC). While no quantitative milestone has been set for SDG 7.2, custodian agencies for SDG 7 assess that the current trend in the indicator is not in line with the ambition of the target, and much faster renewable energy uptake is needed.

³³ **Means of verification:** [SDG7 Tracking Progress report](#)

³⁴ **Means of verification:** Number of national policies IRENA records linked to improved energy access and reduced inequality.

³⁵ Gaps have been identified in IRENA analysis. See [here](#)

³⁶ This is an example indicator. **Means of verification:** [SIDS LHI Progress report](#).

³⁷ This is an example indicator. **Means of verification:** [SIDS LHI Progress report](#).

³⁸ See also page 12 in [link](#).

Target	2027	Reduced imports of fossil fuels of USD 1.9 billion per year compared to 2022 ³⁹ .
The Danish contribution for IRENAs response to NDC Partnership energy requests is an example of support for this outcome.		
Outcome 4: Enhanced socio-economic benefits and human welfare in DAC countries from deployment of RE		
Outcome indicator		Increased rate of renewable energy employment ⁴⁰
Baseline	2020	In ODA Africa countries, 0.5 million RE jobs In ODA ASEAN countries, 1.3 million RE jobs In ODA SIDS, 30 thousand RE jobs
Target	2027	In ODA Africa countries, 0.7 million RE jobs In ODA ASEAN countries, 1.6 million RE jobs In ODA SIDS, 50 thousand RE jobs
The Danish contribution for IRENA's socio-economic work and advisory support in this space, including to the Danish Energy Agency, is an example of support for this outcome.		
Outcome 5: Strategic shift in investments towards transitions		
Outcome indicator		Share of RE in power generation in DAC countries ⁴¹
Baseline	2020	In DAC countries, 21.2% renewable share of electricity generation in Africa, 26.6% renewable share of generation in ASEAN, and 15.5% renewable share of generation in SIDS.
Target	2027	25% in Africa, 30% in ASEAN, and 20% in SIDS
The Danish contributions for GOWA and the African-led coalition for raising renewable energy ambition in Africa are examples of support for this outcome.		

6 Budget and Financial Management

Budget

Denmark will support IRENA with an earmarked grant amounting to DKK 153 million⁴² covering the period 2023-2027. DKK 250,000 is allocated for an MFA (ELK-led) Inception Review (preferably undertaken as a desk review), and DKK 400,000 is allocated for a Mid-term Review (MTR) and outcome harvesting to be conducted by the MFA in collaboration with MCEU and which will include field visits to verify results achieved and assess uptake and outcomes of IRENA support. IRENA's standard administrative charge Programme Support Cost (PSC) is 7%, calculated on the project direct costs (i.e. the full grant less the PSC and the costs of the Inception Review and the MTR). The Danish contribution is allocated at outcome level as indicated in Table 6.1. The relative distribution of the budget to the outcome areas is building upon past experience (absorption capacity, the speed of implementation etc.), these areas inclusion in the current URENA bi-annual work plan, and contributions from other donors. For instance, IRENA has secured additional funding from Germany and Norway to its work with SIDS. Earmarking for the SIDS Lighthouse work reflects these funding sources.

IRENA budgeting for this programme includes the following expenditure categories: i) Consultants, interns, project and dedicated/seconded personnel; ii) programme and expert meetings; iii) travel of staff; iv) and contractual services⁴³. IRENA budgeting follows the United Nations General Assembly (UNGA)-approved rates for staff costs and UN guidelines on consultants' remuneration. Travel of

³⁹The USD 1.9 billion per year estimate is based on a more than doubling of renewable power generation new capacity in SIDS per year to 750 MW/year. It assumes USD 115/barrel (landed) for diesel costs. The target can be adjusted for changes in fossil fuel prices and updated annually. This formulation of the target ensures it is a robust metric that is not invalidated by changes in underlying fossil fuel cost expectations over the project duration.

⁴⁰ **Means of verification:** [IRENA Renewable Energy and Jobs Annual Review](#)

⁴¹ Given the complexity of measuring this outcome, this is a proxy. Activities and outputs proposed under this outcome focus on filling knowledge gaps for government and affecting policy change that promote renewable options instead of fossil fuels-based options.

⁴² Less DKK 400,000 for the mandatory MTR, administered by the MFA.

⁴³ Consultancy company contracts.

participants is guided by the provisions of the IRENA Assembly- decision A/2/DC/11 on the Fund for Developing Country Representatives. Meeting costs are estimated based on IRENA's budgeting formulae, developed and refined with the experience to date, which are used for all budgeting of core and non-core resources. These formulae are aligned with financial policies and procedures that require efficiency, cost effectiveness and value for money, in accordance with procurement rules. Staff travel is guided by the provisions of IRENA Staff Regulations and Rules.

IRENA will ensure that the Danish Voluntary Contribution is recorded in the accounts of IRENA.

The Danish contribution is allocated at outcome level as indicated in Table 6.1. The budget at output level will be developed by IRENA during the inception phase along with the results framework at output level, for approval by the Steering Committee (SC) with Danish participation. Annual budget allocations for activities and outputs will be decided according to the annual work plans and budgets for the Danish Contribution to be approved by the SC.

Ensuring that the Contribution is fully ODA eligible

IRENA's ODA-eligibility co-efficient is 66%⁴⁴. Through the selected country focus and earmarking, the Danish grant will fulfil the specific requirement for 100% ODA compliance, consistent with the OECD DAC [list of ODA recipients](#).

Danish Contribution in the context of other IRENA funding

IRENA funding comes from both a core budget and voluntary contributions. All IRENA Members provide core contributions based on a UN scale of assessment. The 2020-2021 biennium budget comprised assessed core funding contributions from Member countries (USD 44.4 million) based on the scale of assessments of the United Nations, and non-assessed core funding⁴⁵ (USD 21.7 million) for a total core budget of USD 66.1 million. In addition, voluntary contributions (VC) totalled USD 21.3 million⁴⁶.

Denmark's multi-year VC to IRENA during 2020-2021 was approximately USD 3 million, which makes Denmark the third largest VC donor during this period, after Germany (approximately USD 5.1 million) and Norway (approximately USD 4.6 million). As a Member, Denmark provides assessed core funding to IRENA, which in 2022 amounted to USD 128,314⁴⁷. The current project is a Contribution additional to the Assessed Danish contribution. Today, the largest donors to IRENA are Germany, Denmark, Norway, and the UAE. For a full overview of IRENA donors in the 2022-2023 biennium please see document [C/23/2](#). As the project activities described in the document are in line with IRENA's MTS and approved Work Programme, activities are likely to benefit from additional in-kind and financial support from other donors/members.

Dedicated project staff

Based on the positive experience with dedicated project staff funded by Denmark (see also Section 2.3.3), the project will include support for two dedicated project staff positions related to i) GOWA and ii) socio-economic aspects of the energy transition and enhancing synergies between the bilateral energy cooperation programmes run by the Danish Energy Agency and IRENA. The budget for these two positions (at P3 level) is included in the budget allocations for GOWA and for IRENA's socio-economic work, respectively (see budget lines 2 and 5 in Table 6.1). The two job profiles will be developed after approval of the Danish Voluntary Contribution, including in collaboration with the Danish Energy Agency and GOWA partners.

Financial management

The funds will be administered under a Donor Agreement between IRENA and the Danish MFA to which the present PD is an annex and integral part. Disbursements will be made annually according to

⁴⁴ See: [link](#)

⁴⁵ Funding from UAE and Germany for IRENA headquarters/offices.

⁴⁶ [Annual Report of the DG on the Implementation of the Work Programme and Budget for 2020-2021 \(A/12/3\)](#)

⁴⁷ [Annual Report of the DG on the Implementation of the Work Programme and Budget for 2020-2021 \(A/12/3\)](#)

the schedule shown on the cover page of this PD. Disbursements will be based on the MFA receiving a disbursement request with two signatures from IRENA and IRENA will no later than within 14 days issue receipt of funds to the MFA.

The Danish grant must be spent solely on activities leading to the expected outputs and outcomes as agreed between the parties. The implementing partner IRENA is responsible for ensuring that the funds are spent in compliance with the agreement and with due consideration to economy, efficiency, and effectiveness in achieving the results intended. IRENA will apply its anti-corruption measures and other measures for respecting Danish red lines (child labour, SEAH, anti-terrorism), as relevant. Thus, IRENA is committed to maintaining standards of conduct that govern the performance of its staff including the prohibition of corrupt practices in connection with award and administration of contracts, grants, or other benefits, as set out in the IRENA Staff Rules, including the Code of Conduct and IRENA Financial Regulations. Any staff recruited specifically for the project will be subject to IRENA Code of Conduct and Ethics Policy.

Should an audit report contain observations relevant to activities funded under this project, such information, along with IRENA's comments thereon, must be submitted without delay to the MFA.

Financial management will be in accordance with [IRENA's Financial Regulations](#)⁴⁸ which have in the past been considered by the MFA to be adequate for cooperation on the LTP and SIDS LHI projects. However, as recommended in connection with the Danida Programme Committee meeting, an MFA financial management capacity assessment is considered relevant. IRENA has welcomed such an MFA financial dialogue and monitoring visit. The timing of such dialogue visit has still to be decided and could possibly be related to the mandatory Mid-Term Review.

Table 6.1: Danish voluntary contribution budget at outcome level

Budget item ⁴⁹	Total DKK (in millions)
1. Allocation for Africa Coalition initiative	18.0
2. Allocation for offshore wind support (GOWA)	8.0
3. Allocation for IRENA response on energy via the NDC partnership	13.0
4. Allocation for SIDS Lighthouses Initiative	7.0
5. Allocation for IRENA socio-economic work	17.0
6. Allocation for IRENA Medium-Term Strategy support	79.3
7. Inception Review (0.25) and Mid-term review (0.4) (administered by the MFA)	0.65
8. IRENA PSC ⁵⁰ (7% of direct costs i.e. excluding inception and mid-term reviews and excluding IRENA PSC)	10.0
Total	153.0

7 Institutional and Management Arrangement

IRENA Governance

IRENA has three principal organs:

⁴⁸ These Regulations also cover procurement (in Section 9.1), and further information on IRENA procurement principles can be found [here](#) and the General Terms and Conditions for Professional Services can be found [here](#).

⁴⁹ Budget was developed based on discussions with Denmark and what IRENA would seek to achieve for this project.

⁵⁰ Consistent with IRENA's policy and practice, the contribution would be subject to a 7% charge for the indirect administrative and support costs incurred by IRENA for implementing various activities.

- i. the Assembly of IRENA Members, the Agency's supreme decision-making body, which meets once a year;
- ii. the Council, which meets at least twice a year where IRENA's membership is represented in regions (21 members), but all members can attend the meetings as observers; and
- iii. the Secretariat, which comprises the Director-General and his staff, provides administrative and technical support to the other two organs and their subsidiary bodies.

Denmark is influencing the strategic direction of IRENA in several ways. As member of the Council Denmark has been co-chairing the working group on the new MTS in collaboration with Kenya. Furthermore, Denmark as Council member engages in discussions of programmatic, strategic, and institutional matters related to the implementation of the work programme and in preparation for Assembly sessions. Denmark actively engages in “Collaborative Frameworks⁵¹” for all IRENA members and private sector actors on “Ocean Energy and Offshore Renewables” (co-chair), on “Just and Equitable Energy Transition”, on “the Geopolitics of Energy Transformation”, on “Green Hydrogen” and on “Critical Materials”.

Similarly, Denmark collaborates closely with the IRENA Secretariat on providing input and setting direction and agendas for several international processes and events. Examples are the UN High Level Dialogue on SDG7 in 2021 for which IRENA, UNEP and Denmark organized the Energy Action Day with several thousand participants; several energy transition relevant events for COP26; the UN Secretary General's Crisis Response Group's work on addressing the Energy Crisis, and support for the Egyptian COP27- and now the UEA COP 28 Presidencies.

Finally, the close collaboration with the IRENA Secretariat on the programming of the current project, has enabled Denmark to provide inspiration and guidance to IRENA on developing the new Theory of Change and results framework with the view to further strengthening its monitoring and reporting.

Project management for Voluntary Contribution

A Steering Committee (SC) consisting of the MFA, the MCEU, the Danish Energy Agency, and IRENA – and when deemed relevant Denmark embassies - and IRENA will meet twice a year (in January after the IRENA Assembly and in the fall, around the time of the fall Council) to approve the work plan and budget for the coming year as well as to discuss and approve progress reports, project accounts, and allocation of funds. The SC will closely monitor both substantive and financial progress and monitor risks and mitigation of risks. IRENA will serve as the secretariat for the Steering Committee. Draft TOR for the SC and description of IRENA's responsibilities as Secretariat are found in Annex 12.

IRENA and Denmark will work to set up a broader donor coordination for the SIDS Lighthouses Initiative to increase efficiency and effectiveness of donors and reduce transaction costs on the side of IRENA.

8 Work Planning

IRENA Work Programme and Budget (WPB) cycles

To meet the goals set out in the MTS 2023-2027, IRENA will have three Work Programme and Budget– (WPB) cycles: WBP 2022-2023 (already in place), WBP 2024-2025, and WBP 2026-2027. While the focus of the WPB s and their overarching vision will be aligned, implementation will evolve with the needs of IRENA Members. This approach ensures that IRENA's work remains agile enough to respond to emerging needs in a dynamic field while maintaining a strong vision and strategy. IRENA's WPBs are developed based on Member consultations on the focus of work initiated the year prior to adoption. The below Figure 8.1 illustrates this process.

Doing Development Differently

⁵¹ Collaborative Frameworks seek to facilitate peer-to-peer collaboration and knowledge exchange on key aspects of the energy transition. They also serve as multi-stakeholder platforms for co-operation and coordinated action, bringing public, private, intergovernmental and non-governmental actors together to support and accelerate the global energy transformation, see [link](#).

IRENA's way of working is agile in nature. By working hand in hand with its Members, the Agency ensures that the work undertaken remains aligned with country and regional needs. Country level work integrates direct stakeholder consultations into the initiation of work plans – these are most often referred to as kick-off and validation meetings. During these meetings IRENA presents plans or preliminary results and seeks country feedback, review, or validation of results. This way of working allows IRENA to receive feedback on results and adapt to emerging needs and integrate these into work being undertaken.

IRENA results-based management (RBM)

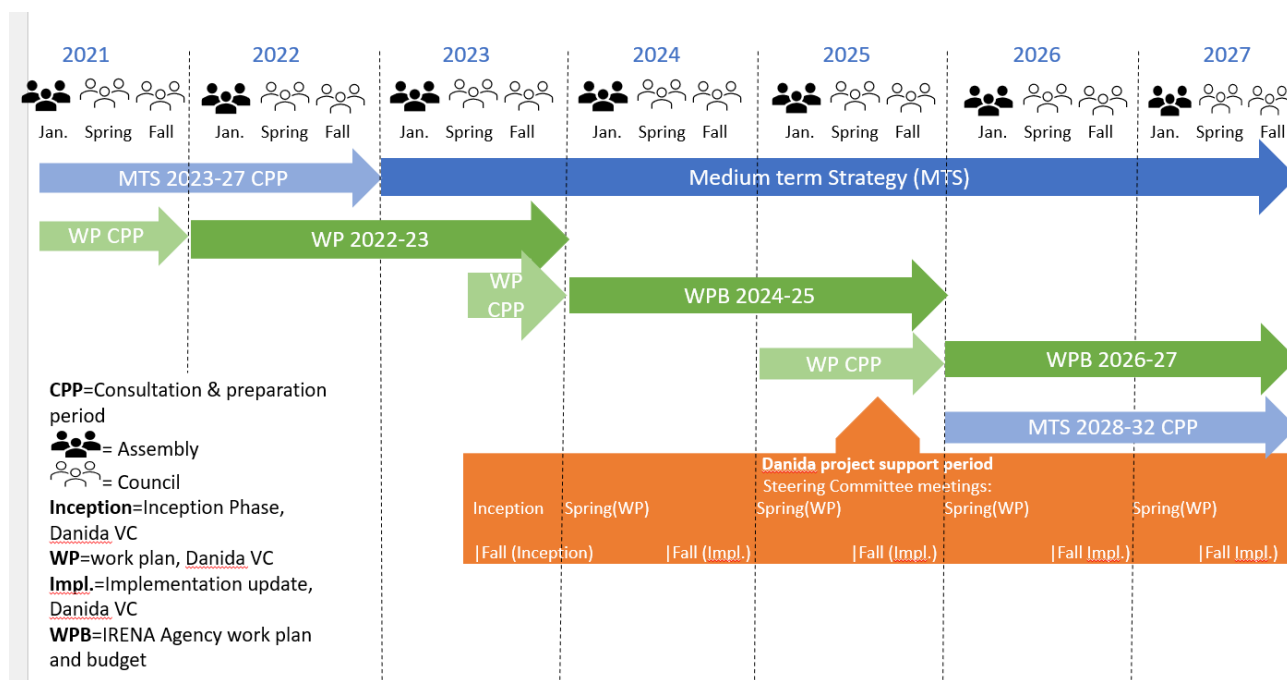
As mentioned in the foregoing and illustrated in Figure 2.3, IRENA is in the process of developing its RBM approach. The Steering Committee meeting held at the end of the Project Inception Phase will approve the Project's results framework at output level, ensuring that it is aligned to IRENA's RBM and results monitoring system.

Work and budget planning cycle for the Danish Contribution

The process for work and budget planning is shown in Figure 8.1. below. During the Inception Phase (Q3-Q4 2023) IRENA will develop the results framework at output level together with SMART⁵² indicators and annual targets for each year of implementation of the Contribution. This work will proceed in parallel with IRENA's development of its Agency results framework and RBM, thus enabling the Contribution project results framework to be aligned to the IRENA Agency results framework. The MFA/ELK-led Inception Review will have a specific focus on assessment of the results framework developed in the inception phase, informing the inception Steering Committee meeting and guiding the implementation and monitoring of the Danish support. A work plan and budget at output level for the Contribution project will be prepared by IRENA for the coming year. The SC at its first meeting will approve the Contribution project results framework and annual work plan and budget. The annual cycle will thereafter be that i) IRENA will submit a proposed work plan and budget for the coming year to the SC meeting in the spring (after the IRENA Assembly) which will be directly related to the Project results framework at output level; ii) IRENA will submit to the SC meeting held in the fall, a yearly stocktake report to Denmark (a shorter, high-level report to address any emerging issues and proposals); iii) IRENA will then submit to the SC meeting held in the Spring, a full yearly project progress report to Denmark (reporting to the SC on substantive and financial progress during the past year and issues, risk monitoring and mitigation, and impact achieved). Work plans and progress reports will include budget and relevant financial information.

⁵² Specific, Measurable, Achievable, Relevant, and Time-Bound

Figure 8.1: IRENA MTS and WPB processes and alignment of work plans for Danish support.



9 Monitoring, Reporting, and Communicating Results

A summary list of reporting, reviews, and evaluation is given in Table 9.1 below for the Danish Contribution project as well as for IRENA overall (since information on Council and Assembly meetings is also relevant for Denmark as a Member of IRENA). IRENA's progress reporting to the project Steering Committee described in the foregoing will be focused on results achieved against the agreed results framework (outputs, activities, targets in relation to baselines, be analytical and issues-oriented, use a "traffic signal" approach (as already practised under the SIDS LHI project) where green indicates that the work is on track, amber signals need for management attention and remedial action, and red signals major issues that may requires the SC's decisions. It will build upon IRENAs own RBM to be developed currently. Reporting to the SC will enable the SC to monitor assumptions and risk factors and take remedial action if required. Reporting to the SC will also enable the SC to keep informed about synergies with other initiatives in the international arena and in the project target countries – particularly those that are also supported by Denmark – and be aware of any potential risks of overlap with other initiatives where remedial action could be taken. Denmark and IRENA will also explore opportunities to set up one donor dialogue programmes with multiple donors such as for SIDS LHI.

The relevant unit in the Ministry of Foreign Affairs of Denmark shall have the right to carry out any technical or financial supervision mission that is considered necessary to monitor the implementation of the project. After the termination of the project support, the relevant unit in the Ministry of Foreign Affairs of Denmark reserves the right to carry out evaluations in accordance with this article.

A plan for communicating results is summarised in Annex 7.

Table 9.1: IRENA monitoring and reporting

Type of report	Explanation	Deadlines	Internet links to examples of reporting
Project specific monitoring and reporting for Denmark's Voluntary Contribution			
Inception Report	Inception Report defining the Project results framework at output level and project work plan for 2024 and its	Latest after 6 months of initiation of implementation.	N/A

	alignment with the IRENA MTS, ToC, Results Framework, and biennial WPB.		
Yearly project progress report to Denmark (to the SC meeting held in the Spring)	Reporting to the Steering Committee (SC) on, substantive and financial progress the past year and issues, risk monitoring and mitigation, and impact achieved. Proposed work plans for the coming year and identification/updating of issues and risks anticipated for year to come	Two weeks in advance of the SC meeting.	N/A
Yearly stocktake report to Denmark (to the SC meeting held in the fall).	Short, high-level report to address any emerging issues and proposals.	Two weeks in advance of the SC meeting.	N/A
Minutes of SC meetings	Summary reports of the Steering Committee meetings including agreed follow-up actions with deadlines	Within one week of the SC meeting	N/A
Communication of results	See Annex 7	When relevant in relation to agreed work programme and specific events	N/A
Inception Review	The Inception Review is administered and undertaken by the MFA, but IRENA inputs to the Review will include the draft results framework at output level. This review will inform the Steering Committee and guide the implementation and monitoring of the Danish support.	Late 2023	N/A
Mandatory Mid-term Review	The MTR is administered and undertaken by the MFA, but IRENA inputs will be required in preparation for the MTR	Mid-2025	N/A
Financial Management Capacity Assessment	Undertaken by the MFA – IRENA will be required to provide inputs and information to this dialogue that may be undertaken in connection with the MTR	tbd	N/A
Final narrative progress report		Q2 2028	N/A
Final audited accounts/financial report	NB! The yearly financial statements for the past financial period presented to Assembly (see below) will likewise be shared with MFA	Q2 2028	N/A
IRENA general agency monitoring and reporting:			
Progress /Annual Report (narrative with financial information)	Progress updates on activities submitted twice per year. Annual update submitted once a year.	30 days prior to meeting. Spring Council is in approximately May of every year) Fall Council is approx. Oct. of every year. 30 days prior to meeting. Assembly is in January of every year.	May 2022 Progress Report C/23/2 Annual Report of the DG on the implementation of the Work Programme and Budget for 2020-2021 A/12/3

Audited Financial Statements	In accordance with Financial Regulation 12.2 the Director-General submits to the Assembly yearly financial statements for the past financial period at least 45 days before the opening of the regular session.	Spring Council	Audited financial statements for 2021 - C/23/4
Work Programme	IRENA performs its activities on the basis of its two-year Work Programme and Budget (WBP), which is prepared by the Secretariat, considered by the Council and adopted by the Assembly	14 th Assembly session (Dec 2023 for 2024-25 period)	Report of the Director-General on the Proposed Work Programme and Budget for 2022-2023 A/12/4
External Evaluation	IRENA undertakes an external evaluation mid-MTS cycle. Under the IRENA MTS IRENA seeks to conduct a deep dive of one country or programme area per year.	2025	Medium-term Strategy 2018-2022 Mid-term Evaluation A/11/13
Self-assessment	IRENA undertakes a self-assessment of its work on a biannual basis	2023	Work Programme Self-Assessment 2020-2021 C/22/INF/2

10 Risk Management

IRENA does not have an Agency Risk Management Matrix⁵³. Key risks and mitigation measures, as seen from Denmark's point of view, include the following:

Contextual risks

- Implications of the geopolitical situation and particularly elements of the current energy, finance, and food security crisis, which can divert decision makers' attention from the green energy transition and to short-term fossil-based energy solutions.
- Vested interests and fossil fuels subsidies that undermine a level playing field for renewable energy.
- Implications of severe climate change (heatwaves, floods, fires) and related stress on national systems and associated short term priorities.

IRENA's way of working is based on strong political buy-in to achieve impact, and the Agency works closely with its Members and partners to mitigate these risk factors.

Programmatic risks

- Continued restrictions related to COVID-19 that will impact direct/physical engagement with stakeholders. IRENA has during the COVID-19 crisis found ways and means of engaging effectively with partners despite these restrictions but emphasises the importance of in-person meetings with partners and will pursue these within the limitations of any restrictions that may be in force.
- Data is a backbone of IRENA analysis and so lack of data and inadequate data quality are key programmatic risk factors. While IRENA has a solid foundation of data and analysis with which it relies, up to date and local data ensures analysis remains relevant given the fast-paced change the sector undergoes. While lack of data can affect the nuance of the analysis produced, IRENA will rely on its expertise and other regional or similar data in cases where local data may not be produced.
- Risks are associated with the uptake of IRENA's capacity building and technical assistance activities related to the provision of policy recommendations at country and regional level. These risks are mitigated through the Agency's extensive and regular demand-driven dialogue with countries and outreach to the different groups of stakeholders, and through effective and targeted communications.
- While IRENA does not implement projects on the ground, large-scale RE projects will have environmental impacts. Also, the not-in-my backyard (NIMBY) syndrome related to solar and wind

⁵³ Although IRENA has to a very limited extent included some risk assessments in progress reporting to Denmark under the SIDS LHI project.

projects are well-known in many countries. These issues need to be addressed in IRENA's publications, communications and learning opportunities etc.

- An energy transition that is narrowly focused on energy as a “sector” and does not take the socio-economic aspects into account, is not likely to succeed. This risk is mitigated by IRENA's overall attention to the just and equitable transition that is the overall theme of its MTS 2023-2027. Moreover, the 2020 Evaluation of IRENA's MTR found that IRENA's conceptualisation (and pursuit) of energy as a means to delivering higher-level socio- economic and climate goals, rather than energy as an end in itself, was important.
- The same Evaluation found that the *“organisational leanness also introduces a level of risk given the scope of IRENA's mandate and the number of initiatives and activities.”* and *“The major risk the evaluation team see that IRENA need to manage is the potential of trying to do too much with finite resources and potentially a) over-reach, leading to a staff team that become overstretched and less effective and b) become perceived as undertaking work which is either outside their core comparative advantage or undermines where that value comes from”*. This risk is to some extent mitigated by the Danish funding of two dedicated project staff positions but will need to be closely monitored during implementation.

Institutional risks

- Potential for overlap with other organisations and initiatives: IRENA works closely with its partners and countries to mitigate this risk, but the institutional architecture is complex and dynamic, and continued attention to additionality and synergy will be needed.

A detailed project risk matrix, developed by Denmark and seen from Denmark's perspective, is found in Annex 4. It will be important to review this risk matrix at the end of the Inception Phase when the full results framework at output level for the Danish Contribution has been developed, and the Steering Committee should consider this – as well as monitor risks during project implementation (see SC TOR in Annex 10).

11 Closure

An exit strategy for Danish support to IRENA 2023-2027 will be discussed at the mandatory Danida Mid-term Review based on suggestions by the MFA/MCEU/IRENA put forward to the MTR review team.

IRENA's final report to the MFA on the Voluntary Contribution will be due in Q2 2028.

GDK's final results report will follow IRENA's final report to the MFA.

Closure of accounts, final audit, administrative closure will be completed by mid-2028.

Annex 1: Context Analysis

Note⁵⁴

1. Overall Development Challenges, Opportunities and Risks

In the [Sustainable Development Goals Report 2022](#), the United Nations Secretary General painted a bleak picture of the current challenges: “As the world faces cascading and interlinked global crises and conflicts, the aspirations set out in the 2030 Agenda for Sustainable Development are in jeopardy. With the COVID-19 pandemic in its third year, the war in Ukraine is exacerbating food, energy, humanitarian and refugee crises – all against the background of a full-fledged climate emergency. The Ukraine conflict has also caused food, fuel and fertilizer prices to skyrocket. It has further disrupted supply chains and global trade and caused distress in financial markets. By current estimates, the war could cut global economic growth by 0.9 percentage points in 2022, as well as undermine development aid to the world’s poor. These situations will only deteriorate with climate change, which acts as a “crisis multiplier”, and whose impacts are already being felt across the globe. The COVID-19 pandemic and the war in Ukraine have further delayed the urgently needed transition to greener economies. Based on current national commitments, global greenhouse gas emissions are set to increase by almost 14 per cent over the current decade. A recommitment by governments, cities, businesses, and industries to ensure that the recovery reduces carbon emissions, conserves natural resources, creates better jobs, advances gender equality and tackles growing poverty and inequalities is a further imperative. The availability of high-quality data is also critical, helping decision-makers to understand where investments can have the greatest impact”. The Report also noted that the global electricity access rate increased from 83 % in 2010 to 91% in 2020 and that over this period, the global population without electricity shrank from 1.2 billion to 733 million. But the pace of progress has slowed in recent years, due to COVID-19 and the increasing complexity of reaching those hardest to reach. In 2020, 77 % of the global population without electricity lived in sub-Saharan Africa, mainly in rural areas (outcome 1).

The Working Group II report of the Intergovernmental Panel on Climate Change (IPCC), “Climate Change 2022” was a dire warning about the consequences of inaction on the climate crisis.

IRENA’s [World Energy Transitions Outlook 2022](#) stated that “Given the ongoing pace and scope of the energy transition, anything short of radical and immediate action will diminish – and may possibly eliminate – the chance of staying on the 1.5°C or even 2°C path. And the surge of net zero commitments shows that we understand the gravity and complexity of the situation. The past couple of years have exposed the weaknesses and vulnerabilities of a system heavily reliant on the fuels of the 20th century. To this, the current crisis in Ukraine brings new levels of concern and uncertainty, crystalising the costs to economies that remain profoundly intertwined with fossil fuels. Many aspects of everyday life feel the repercussions from turmoil in the energy sector. In the absence of alternatives, high fossil fuel prices inflict energy poverty and loss of industrial competitiveness, while citizens worldwide worry about their energy bills and climate impacts as warned by the recent report of the IPCC”. The WETO also noted that “The United Nations High-Level Dialogue on Energy in 2021 highlighted how far we are from realising our pledge to ensure universal access to energy.” However, WETO also highlights opportunities, charting the IRENA recommended fastest path to emissions reduction, consistent with the 1.5°C goal. The Outlook positions efficiency and electrification as primary drivers, enabled by renewable power, green hydrogen, and sustainable modern bioenergy. WETO also shows that, with a holistic policy framework, serious investment and co-operation, the energy transition can be a means for job creation, an inclusive economy, and a more equal world (outcome 4). WETO is the foundation for the development of the IRENA Medium-term Strategy (MTS) 2023-2027, to which the Danish voluntary contribution covering the same time period is aligned.

⁵⁴ As required by Danida guidelines, this context analysis was initially prepared during the identification phase (consistent with the then applicable Danida template for Annex 1) and updated during the formulation phase. The Danida template for Annex 1 has recently been modified (see [link](#) - Section 1: Overall Development Challenges, Opportunities and Risks was changed to 1: Poverty and inequality analysis and a new Section 5 on Migration was added) but given the flexibility in Danida guidelines the formulation team has kept the original structure below as it is considered relevant to this project while noting that inequality issues have been addressed in Section 4: Inequality, Gender, Youth and applying a Human Rights Based Approach and that migration has been addressed in Section 3: Fragility, Conflict, Resilience, Migration. It is further noted that the recently developed Danida Approach and How to Notes have been considered where relevant, particularly the Approach Note on Fighting Poverty and Inequality [link](#) and the How To Note on Energy Transition and Emission Reductions in Developing Countries [link](#)).

RE has become increasingly cost competitive. The IRENA report [Renewable Power Generation Costs in 2021 \(July 2022\)](#) shows that the global weighted average cost of newly commissioned solar photovoltaic (PV), onshore and offshore wind power projects fell again in 2021, despite rising materials and equipment costs - given that there is a significant lag in the pass through to total installed costs. Thus, the global weighted average levelized cost of electricity (LCOE) of new onshore wind projects added in 2021 fell by 15%, year on year, to USD 0.033/kWh, while that of new utility-scale solar PV fell by 13% year-on-year to USD 0.048/kWh and that of offshore wind declined 13% to USD 0.075/kWh. With only one concentrating solar power (CSP) plant commissioned in 2021, the LCOE rose 7% year-on-year to USD 0.114/kWh. The period 2010 to 2021 has witnessed a “seismic” improvement in the competitiveness of renewables. The global weighted average LCOE of newly commissioned utility scale solar PV projects declined by 88% between 2010 and 2021, whilst that of onshore wind fell by 68%, CSP by 68% and offshore wind, by 60%. However, the cost declines in 2021 may not continue as supply chain constraints were already being felt (outcome 2).

Status and progress against SDGs:

IRENA is the co-custodian of [SDG #7 \(Ensure access to affordable, reliable, sustainable, and modern energy for all by 2030\)](#) (outcome 1 and outcome 2). IRENA together with the International Energy Agency (IEA) and the UN Statistics Division (UNSD) are responsible for SDG target #7.2 (By 2030, increase substantially the share of renewable energy in the global energy mix – measured by Indicator #7.2.1: Renewable energy share in total final energy consumption)⁵⁵. The [Energy Progress Report \(June 2022\)](#) stated that although there is no quantitative milestone for SDG#7.2, custodian agencies assess that the current pace of RE uptake needs to rise significantly, to increase the share of RE in total final energy consumption (TFEC), the primary indicator for SDG#7.2. In 2019 (latest available figure), the share of RE in TFEC amounted to 17.7 %—only 0.4 percentage points higher than the year before. However, RE consumption increased by 2.8 % from 2018 because TFEC expanded by 0.7 %. Subsequently, and despite continued disruptions in economic activity and supply chains, RE consumption has grown through the COVID-19 pandemic, in contrast to other energy sources. The Report noted that this suboptimal result underlines the importance of reducing energy consumption through energy efficiency and conservation if rapid progress is to be made toward SDG target #7.2. The largest increase in the share of RE continues to be observed for electricity (renewable electricity use grew more than 5 % year-on-year in 2019 (up from 3 % in 2018), bringing the share of RE in global electricity consumption to 26.2 %) while transport and heat sectors saw much slower progress. Electricity accounted for 21% of global TFEC in 2019. It is the fastest-growing energy end use, as electricity consumption has doubled over the last 23 years, with a 37 % increase in the last decade. Hydropower remains by far the largest source of renewable electricity globally, followed by wind, then solar PV, which recorded the fastest growth rate. Together, wind and solar PV are responsible for 58% of the increase in renewable electricity consumption observed over the last 10 years. It is important to note the significant regional disparities that lie behind these global improvements. Thus, Sub-Saharan Africa has the largest share of renewable sources in its energy supply, though traditional uses of biomass represent more than 85 % of the renewable total. The Report notes that despite continued disruptions in economic activity and supply chains following the COVID-19 pandemic, RE has shown resilience, especially in the electricity sector. However, in 2021, rising commodity, energy, and shipping prices, in addition to restrictive trade measures, have increased the cost of producing and transporting solar PV modules, wind turbines, and biofuels, increasing uncertainty about RE projects. Getting renewable deployment on track with SDG#7.2 and 7.B.1, as well as with the Paris Agreement, will require stronger policies in all sectors and more elective mobilization of private capital and the strategic use of public financing, particularly in developing countries.

⁵⁵ There is also a Target 7.b: “By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing states, and landlocked developing countries, in accordance with their respective programs of support”, measured by Indicator SDG 7.B.1 Installed renewables-based generating capacity in developing countries (in watts per capita) (calculated by dividing the maximum installed capacity at year-end of power plants that generate electricity from renewable energy sources by the country’s population in mid-year. Data from IRENA are used to calculate this indicator). The highest share of renewables to date, 36 %, was recorded in 2020, with 246 watts per capita of renewable capacity installed. This is close to the world average of 36.5 % and the 37 % of developed countries and reflects the economic attractiveness and sharp decline in the costs of renewables, among other factors. Over 60 % of the total renewable power generation added in 2021 had lower costs than the cheapest new fossil fuel option in 2020.

In September 2021 the UN Secretary-General convened the High-Level Dialogue on Energy (HLDE) to promote accelerated implementation of SDG7 and other related SDGs, as well as the climate objectives of the Paris Agreement. Thematic technical working groups prepared reports on five themes (energy access; the energy transition; enabling the SDGs through an inclusive, just energy transition; innovation, technology, and data; finance and investment) and presented recommendations at a ministerial forum, summarized in a “Global Roadmap for Accelerated SDG#7 Action in Support of the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change”. The roadmap emphasizes the importance of rapidly transitioning to decarbonized energy systems, noting that deployment of renewable energy is lagging, particularly in transport, industry, and heating and cooling. It sets out two milestones specific to energy capacity powered by modern renewables. The two milestones specific to energy capacity powered by modern renewables were defined: to double capacity globally by 2025 and to triple it by 2030. In addition, several compacts were announced in October 2021 in connection with the HLDE, including private sector investment commitments amounting to 719 GW of renewables-fuelled capacity as well as aspirations for another 4,534 GW through catalytic partnerships.

According to IRENA, rapid deployment of RE is the only avenue that will enable the achievement of SDG#7 targets and make the necessary emission reductions by 2030 for a chance to stay on the 1.5°C pathway consistent with the Paris Agreement. IRENA’s WETO 2022 analysis shows that over 90% of the solutions shaping a successful outcome in 2050 involve RE through direct supply, electrification, energy efficiency, green hydrogen and bioenergy combined with carbon capture and storage (BECCS) – and that the benefits are large. The 1.5°C-aligned energy transition has the potential for creation, by 2030, of close to 85 million additional energy transition-related jobs compared to 2019 and supporting a boost in global gross domestic product (all outcomes). Investment decisions are long-lived, and the risks of stranded assets are high, so decisions should be guided by long-term logic. IRENA estimates that USD 0.7 trillion in annual investments in fossil fuels should be redirected towards energy transition technologies. Measures to eliminate market distortions, coupled with incentives for energy transition solutions, should facilitate the necessary changes in funding structures. While most of the additional capital is expected to come from the private sector, public financing will also have to double in order to catalyse private finance and create an enabling environment for speedy transition with optimal socio-economic outcomes (outcome 5).

As for example described in the 2021 HLDE Theme Report on “Enabling SDGs Through Inclusive, Just Energy Transitions”, energy is an enabler of sustainable development and closely linked to and synergetic with the other 16 SDGs. The Danish contribution to IRENA is also closely linked to the following SDGs in addition to SDG#7 and progress and issues are briefly noted, drawing on information mainly from the Sustainable Development Goals Report 2022:

SDG #1 (End poverty in all its forms everywhere): The COVID-19 pandemic has put steady progress in poverty reduction over the past 25 years into reverse, with the number of people in extreme poverty increasing for the first time in a generation. Now, rising inflation and the impacts of the war in Ukraine may derail progress further. The combined crises could lead to an additional 75 million to 95 million people living in extreme poverty in 2022, compared with pre-pandemic projections. SEforALL has emphasized the role of decentralized renewable energy in ending energy poverty⁵⁶, directly impacting SDG#1. Increasingly, the concept of a just⁵⁷ energy transition that is inclusive and equitable, focuses on poverty issues, albeit with varying terminology as regards poverty and energy poverty.

⁵⁶ While there is no universally accepted definition of energy poverty, a multi-agency Executive Note on energy poverty prepared for G20 with IRENA inputs proposed the following G20 definition of energy poverty: “Energy poverty occurs when households or territorial units cannot fulfill all of their domestic needs (lighting, cooking, heating, cooling, information energy communication) as a result of lack of access to energy services, an inability to afford them, or their poor quality or unreliability in order to, at minimum, safeguard their health and provide for opportunities to enhance their wellbeing. Energy poverty affects, to a greater or lesser extent, every country (both developing and mature economies) and requires addressing constantly changing risks while targeting support to populations most vulnerable to these risks. For developing economies energy poverty should also take into consideration energy services needed by public services and productive uses”.

⁵⁷ Responding to a growing call among Members during the 11th session of the IRENA Assembly to address more strongly the equity and justice elements of the energy transition, IRENA has in 2021 established the Collaborative Framework on “Just and Inclusive Energy Transitions” and the IRENA MTS 2023-2027 theory of change is developed under the heading of a “Just, Inclusive, and Equitable Energy Transition). See also e.g. the COP26 Just Transition Declaration that recognizes the need to ensure that no one is left behind in the transition to net zero economies and which

SDG#8 (Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all): The COVID-19 pandemic precipitated the worst economic crisis in decades and reversed progress towards decent work for all. Although the global economy began to rebound in 2021, bringing some improvement in unemployment, recovery remains elusive and fragile. Labour market groups most affected by the crisis – women, youth and persons with disabilities – are the last to recover.

SDG #9 (Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation): The COVID-19 pandemic has demonstrated the importance of industrialization, technological innovation and resilient infrastructure in building back better and achieving the SDGs. The Ukraine crisis has also shown the importance of secure, affordable, reliable, sustainable energy services to the goal of SDG#9.

SDG #13 (Take urgent action to combat climate change and its impacts): The world is on the brink of a climate catastrophe, and the window to avert it is closing rapidly. Increased heatwaves, droughts and floods caused by climate change are already affecting billions of people around the world and causing potentially irreversible changes in global ecosystems. To limit warming to 1.5 °C above pre-industrial levels, as set out in the Paris Agreement, global greenhouse gas emissions will need to peak before 2025.

Denmark's geographic priorities for the voluntary contribution to IRENA for 2023-2027 are African developing countries and regions, the ASEAN region, small island developing states (SIDS) participating in the SIDS Lighthouses Initiative and selected emerging economies. In the following, context information and analysis for these geographic priorities is briefly summarised. Please also see selected key information in Table A.1.1 at the end of this Annex 1.

African developing countries and regions:

The geographical focus for this project includes the Africa Region and its sub-regions of Southern Africa, West Africa, East Africa; North Africa as well as specific counties on the African continent: Ethiopia, Egypt, Kenya, Rwanda, Uganda.

Sub-Saharan Africa accounts for over 75% of those living without electricity globally and 35% without clean cooking access. Lack of access to modern and sustainable energy severely affects progress in poverty alleviation, access to quality health services and education, equality (including gender equality), decent work, economic growth, industrialisation, innovation and ultimately sustainable, resilient human settlements. On average, growth in gross domestic product has slowed across African economies in recent years, in part because of lower commodity prices and the effects of the COVID-19 crisis. More than 80% of African countries are still commodity dependent. African population grew by 26% between 2010 and 2020 and is expected to reach 2.5 billion by 2050. And while electricity access rate in Sub-Saharan Africa has grown from 33% in 2010 to 46% in 2019, 570 million people remain without access and only 16% of the population in Sub-Saharan Africa has access to clean cooking, with the access rate as low as 4% in rural areas. A third of African countries are at risk of a debt crisis.

The foreword to the [IRENA and AfDB Renewable Energy Market Analysis: Africa and Its Regions](#)⁵⁸ (August 2022), states that “Africa is at a crossroads. For many of the people of this vast and diverse continent, access to affordable, clean and sustainable energy remains an aspiration. The need for better and more abundant energy is evident in many walks of life, from households relying on dirty fuels for cooking and farmers lacking energy to harvest their crops, and from health clinics struggling to power operating rooms to businesses contending with power outages. Climate change is fast adding new challenges in the form of extreme weather events, rising temperatures and more variable rainfall. We know that renewable energy can help to resolve many of these social, economic, health and environmental challenges. Renewables are key to overcoming energy poverty, providing energy services without damaging human health or ecosystems, and enabling sustainable socio-economic development. As this report shows, a transition to a renewables-based energy system in Africa promises substantial gains in GDP, employment, and human welfare in each of the continent's constitutive regions”. The report acknowledges that while Africa's share of global RE investments and capacity installations remained relatively small over the past decade, the continent can draw on a vast RE resource potential in wind, solar, hydro, and geothermal and falling costs are increasingly bringing RE within reach, whether through grid extension, mini-grids, or stand-alone applications. The Report also advocates that although there is no single path or solution for succeeding in the sustainable transformation of Africa's socio-economic systems, clean energy technologies and RE can be the protagonists of every solution, as these technologies already offer the most competitive, reliable, and sustainable option to generate and supply electricity to African populations and businesses. Their decentralised and scalable nature make them the best

⁵⁸ Note that this comprehensive report (318 pages including statistical annexes etc.) provides information and analysis related to 5 African Regions: North, West, East, Central and Southern Africa – the grouping of countries by region is listed in Annex A to the Report. Annex B summarizes basic energy indicators for Africa by region and country.

technologies to solve energy access challenges for both the rural population and the fast-growing urban and peri-urban populations. Importantly it is also noted that it is in cities and megacities where the bulk of Africa's future population will live and where defining sustainable growth paths will be key to ensuring the next generation's prosperity. The Report therefore underlines the need for a profound energy transition centred on RE and EE, increasingly understood as not only feasible but essential for a climate-safe future in which sustainable development prerogatives are met. Recognizing that the objectives of Africa's energy transition are far-reaching economic diversification, the creation of decent jobs; environmental stewardship and climate resilience, and universal access to affordable, reliable, sustainable, and modern energy, the Report sets out considerations for a green deal on economic and social development tailored to the African context, – leading to comprehensive policy frameworks for sustainable development driven by energy transitions; strong institutions; and international and South-South cooperation.

The African Continental Power Systems Master Plan (CMP) is an ongoing initiative led by the African Union Development Agency (AUDA-NEPAD) which aims to establish a long-term continent-wide planning process for power generation and transmission involving all five African power pools. IRENA together with the International Atomic Energy Agency (IAEA) is supporting this initiative as officially endorsed modelling partners. This follows a two-year consultation process coordinated by the EU Technical Assistance Facility (TAF) for Sustainable Energy, based on which the five African power pools in 2021 selected IRENA and the IAEA.

As part of CMP, IRENA has been supporting the government of Cameroon for the implementation of this capacity building programme to enhance energy planning capacity within national institutions on Long-term planning through training on the SPLAT model and the development of energy scenarios. Under this framework were trained 66 Cameroon representatives in 4 one-week training courses on long-term planning (through SPLAT-MESSAGE software) to reinforce the capacities of national stakeholders to enable preparation of a national renewable energy masterplan⁵⁹. Modelling training was welcomed and noted as an important tool for future policies and decisions:

- Training empowered Cameroon to develop an Energy Masterplan as well as design of the national planning infrastructure and planning studies.
- 92.31% found the capacity-building programme to be of a very good quality / 7.69% excellent. The participants acknowledged the usefulness of the new capacities developed in decision-making and welcomed the opportunities to put it more in practice.
- 28.57% plan to use the new capacities developed in their daily work, with 35.71% planning to use frequently.

IRENA is using the Cameroon example as a pilot and plans to support AUDA-NEPAD undertake similar exercise for other countries in period to come.

ASEAN:

The Association of Southeast Asian Nations (ASEAN) includes the following member states: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. All ASEAN countries except Brunei and Singapore are ODA eligible, while Cambodia, Laos, and Myanmar are LDCs (see Table A.1). Indonesia and Vietnam are Countries that have bilateral energy cooperation with Denmark. Vietnam is not a member of IRENA. The second edition (September 2022) of the ASEAN Renewable Energy Outlook (developed by IRENA in collaboration with the ASEAN Center for Energy (ACE) and the ASEAN Secretariat's Renewable Energy Sub-sector Network) finds that the Southeast Asia region will see rapid economic growth in the coming decades and that energy use is set to grow significantly. The Region stands a crossroads between the choice between a path of continued reliance on fossil fuels, most of which come from non-indigenous sources, increasing the region's emissions and exposure to volatile and increasingly expensive global commodity markets - or utilizing its ample, affordable, indigenous RE resources to lower energy costs, reduce emissions and drive regional economic development. The Outlook, which is guided by IRENA's WETO, finds that while ASEAN has ambitious renewable energy goals in the near-term, the region needs to think and plan for the long-term. The Outlook therefore details a comprehensive pathway for the development of a sustainable and cleaner regional energy system exploring the role of end-use sector electrification, expansion of renewable generation, energy efficiency solutions, emerging technologies such as electric vehicles, hydrogen and battery storage-systems, as well the importance of expanding regional power

⁵⁹ Supported by Danida IRENA project Long-term Planning.

sector integration. IRENA's roadmaps consider multiple possible future energy pathways. The two main scenarios are the Planned Energy Scenario (PES), which considers current and planned policies, and the 1.5°C Scenario (1.5-S), which follows IRENA's WETO 1.5-S scenario aiming to reach net-zero emissions globally by 2050. The ASEAN Outlook shows how the region can transition from just 19% RE share in final energy in 2018 to 65% by 2050, and in the process reduce energy-related CO₂ emissions by 75% compared to current policies. Coal retirement, coupled with the continued expansion of RE, is one important step in aligning with net-zero targets.

While IRENA has an ambitious programme of work, it relies on contributions such as the Danida one to develop and expand on core deliverables. The Danida support towards the ASEAN outlook and the work undertaken in this regard was significant in this sense and continuation of the work would greatly benefit from further support.

Another example of IRENA support, under the Danida Long-term Planning support programme IRENA produced the [Indonesia Energy Transition Outlook](#) (Oct. 2022) During the launch event the Indonesian government voiced strong support for the work and stated that it will be used to inform their own preparation of the Indonesian net-zero roadmap; IRENA continues to support Indonesia in these efforts. Recommendations from the analysis including on socio-economic impacts including in both ASEAN Outlook and the Indonesia Outlook also informed G20 analysis provided to Indonesia in their role as G20 2022 Presidency. This included through technical webinars held in June and July 2022 on solar and wind, and on storage and hydrogen.

SIDS:

IRENA SIDS Lighthouses Initiative (LHI) Annual Progress Report (August 2022) provides an overview of energy transformation and implementation progress in SIDS for 2021. The report highlights that the political commitment to renewables among SIDS remains unwavering despite the setbacks generated by the COVID-19 pandemic. The Report notes that SIDS continue to face significant economic, social and environmental challenges, including those arising from climate change, energy price and supply volatility, and energy insecurity stemming from an over-reliance on imported fossil fuels. Furthermore, recently SIDS have contended with increased risks – including extreme weather events, natural disasters such as volcanic eruptions, and the COVID-19 pandemic – which have consistently weakened their ability to achieve sustainable development. The Report summarizes the 12 key priority areas for support to SIDS that include reviewing and implementing NDCs with technical assistance and capacity building; promoting all RE sources while stepping-up work on wind and solar PV; supporting the development of bankable projects, access to finance and co-operation with the private sector; increasing focus on end-use sectors; leveraging synergies between RE and EE; creating a nexus for RE and agriculture, food, health and water to foster broad socio-economic development; raising awareness about job creation, gender equality and women's empowerment through RE; linking RE uptake to climate resilience and more effective disaster recovery; and enhancing the collection and dissemination of statistics supporting informed decision making). Furthermore, the Report notes that in addition to these priority areas, IRENA, in consultation with all the partners of the SIDS LHI, has set a new target amount of 10 GW of total installed RE capacity by 2030 for all SIDS. Denmark has supported the SIDS LHI since 2018 and support will continue under the new contribution during 2023-2027.

The SIDS LHI receives additional support from IRENA Membership, including from Danida which allows IRENA to extend its support to more countries and extend analytical and capacity work undertaken. This has yielded concrete results summarised in Steering Committee reports and in section 2.5 above.

Specific Danish priority countries and energy cooperation:

Summary information on SIDS and priority countries is given in Table A.1.

SIDS:

Besides contributing to the LHI, Denmark has in September 2022 at the UN General Assembly announced a DKK 75 million (USD 10 million) pledge to the Special Climate Change Fund (SCCF) operating under the Global Environment Facility, with expected commitments made in 2023-2024. Denmark is also joining the *Call to Action on SIDS Access to Finance* and will be a champion of more and faster access to climate finance for SIDS. Denmark will also initiate concrete support, in the range of USD1.3 million, targeted towards capacity building of SIDS in order to improve their access to global financing mechanisms, e.g. the Green Climate Fund (GCF).

Developing countries and LDCs:

Target countries include Ethiopia, Kenya, Rwanda, Uganda, as well as future members of the Africa Coalition Initiative. Besides being Danish priority countries for development cooperation, there are bilateral energy partnership programmes with Ethiopia and Kenya involving GtG cooperation with the Danish Energy Agency with which there can be specific synergies with the Contribution to IRENA.

Emerging economies:

India, Indonesia, South Africa, and Egypt: Similarly, these countries are Danish priority countries with bilateral GtG energy cooperation, and there are strong potentials for synergy with the Contribution to IRENA, also in the context of JET-P for South Africa, India, and Indonesia and [Egypt]; Denmark, as the only non-G7 country, has been invited to join the JET-Ps in these countries in light of the expertise stemming from the bilateral strategic energy sector cooperation.

Key documentation and sources used for the analysis:

IRENA World Energy Transitions Outlook (WETO) 2022: [link](#)

IRENA Renewable Power Generation Costs in 2021 (July 2022): [Link](#)

The Sustainable Development Goals Report 2022: [link](#)

IPCC Working Group II report, Climate Change 2022: Impacts, Adaptation and Vulnerability: [link](#)

IRENA Renewable Energy Market Analysis: Africa and its Regions (January 2022): [link](#)

IRENA Renewable Energy Outlook for ASEAN (2ns edition, September 2022): [link](#)

IRENA SIDS Lighthouses Initiative (LHI) Annual Progress Report (August 2022): [link](#)

Tracking SDG 7 - The Energy Progress Report (June 2022): [link](#)

The COP26 Just Transition Declaration: [link](#)

Energy Poverty: addressing the intersection of Sustainable Development Goal 7 (SDG7), development and resilience - Executive Note for the G20 Energy Transition Working Group and the G20 Climate Sustainability Working Group: [link](#)

Press Release on IRENA and IAEA to Help African Union Develop Continental Power Master Plan with EU support: [link](#)

Danish Energy Agency Global Cooperation: [link](#)

Press release on support to SIDS via SCCF: [link](#)

Are additional studies/analytic work needed? How and when will it be done?

No additional studies are needed before approval and start of implementation of this project, but the context for the just, inclusive, and equitable energy transition is highly dynamic and the annual WETO updates and other IRENA material should be closely monitored throughout Denmark's engagement with IRENA in this project on the overall challenges, opportunities and risks.

2. Political Economy and Stakeholder Analysis

Political economy:

IRENA is driven by demand from its Members, and demand orientation and partner ownership and commitment are key to IRENA's demand-driven advice and support. This also implies alignment to national objectives and Member partner strategies such as NDCs, and opportunities for working with other multilateral and bilateral development partners and multilaterals. The Agency's work programme is developed in direct consultation with its Membership, taking into consideration emerging topics and needs. IRENA has a list of government-level (Ministry) focal points, provided by its Members, which serve as a first point of contact for IRENA when undertaking work. Similarly, when it comes to implementing its programme of work, the Agency works hand in hand with its Member focal points to ensure that work undertaken aligns with country goals and needs, and to ensure that the right people at country and regional levels are involved ensuring ownership and long-term sustainability of results and processes created. This approach to work also builds-in a skills and knowledge transfer component that builds capacity at local, national, and regional levels – central to IRENA's way of working. A similar approach is taken in engagement with academia, civil society, and private sector. From a regional perspective, IRENA maintains strong connections and relations, including through its MOUs, with regional associations and other regional entities including through academia, legislature/parliamentarians, corporate sector, and youth. IRENA uses its convening power to bring together and engage actors across all facets of society to fill knowledge gaps, but also to learn from their expertise and experience at country level and internationally. In this way, best practice is exchanged across sectors and societies reaching those most relevant. A recent example of this is IRENA's [Collaborative Frameworks](#) that seek to facilitate global peer-to-

peer collaboration and knowledge exchange on key aspects of the energy transition. They also serve as multi-stakeholder platforms for cooperation and coordinated action, bringing public, private, inter-governmental and non-governmental actors together to support and accelerate the global energy transformation. The frameworks were established in response to requests from IRENA's Members during governing body meetings to facilitate targeted collaboration to seize opportunities and address challenges in areas of strategic importance.

With support from the project IRENA will engage with the key political economy drivers of change (at political decision-making level and among practitioners) and build upon ownership and commitment in partner countries. Many SIDS have very weak institutional structures, but they are collectively vocal on the international arena. IRENA Members have, over the years and as recently at the 10th and 11th Assembly sessions, requested IRENA to expand its work and facilitate targeted collaboration tailored to seize opportunities and address challenges associated with the continued deployment of renewables. In response to the Members' request, IRENA has established Collaborative Frameworks on Hydropower, Green Hydrogen, Geopolitics, Offshore Renewables/Oceans, Enhancing Dialogue on High Shares of Renewables in Energy Systems and Just and Inclusive Energy Transitions, which are serving as effective vehicles for dialogue, peer-to-peer collaboration and exchange of knowledge. The Collaborative Frameworks contribute to the achievement of the objectives defined in the work programme and MTS and serve as multi-stakeholder platforms for co-operation and co-ordinated action, bringing public, private, inter-governmental and non-governmental actors together to support and accelerate the global energy transformation, feeding into the on-going work of IRENA.

The [IEA/IRENA Breakthrough Agenda Report](#) 2022 (September 2022, with the UN Climate Change High Level Champions) is a new initiative focused on supporting stronger international collaboration to drive faster reductions in global greenhouse gas emissions. This is a first-of-its-kind series of annual progress reports, requested by world leaders at the UN Climate Change Conference COP26 in November 2021 as part of the launch of the Breakthrough Agenda. Denmark is one of the Breakthrough Agenda signatories. The Agenda covers more than two-thirds of the global economy, with endorsement from 45 world leaders, including those of the G7, China and India. The report is designed to inform policy makers, business leaders and civil society organisations of the most urgent ways to strengthen collaboration in and across major emitting sectors ahead of major international events including the UN Climate Change Conference COP27 in Sharm El-Sheikh, Egypt and beyond. The rationale for the initiative is that without international cooperation, the crucial global transition to net zero emissions could be delayed by decades, and the faster the transition advances, the faster it will deliver clean technologies at lower cost, making them available for all – which is all the more urgent in the context of recent sharp increases in energy and food prices around the world. Therefore, a process was established for continually tracking and strengthening collaboration over time, which is crucial for establishing and maintaining the cooperative structures to enable rapid progress to 2030 and beyond. This involves making a number of critical assessments: to distinguish between sharing information and aligning action; from side-events to sustained collaboration; and coalitions of first movers versus the critical mass that can shift global markets. Without such assessments, necessary changes are not made visible. Significant reductions in both the cost and the difficulty of transitions can be achieved when international collaboration is a major strategic focus within each of the emitting sectors of the global economy. The Breakthrough Agenda provides a global mandate to close the collaboration gap and opens a new pathway for accelerating progress. Among the Breakthrough goals is that *"Clean power is the most affordable and reliable option for all countries to meet their power needs efficiently by 2030."*

IRENA and Denmark will work to set up a broader donor coordination for the SIDS Lighthouses Initiative to increase efficiency and effectiveness of donors and reduce transaction costs on the side of IRENA.

An example – the Indonesia Energy Transition Outlook - will illustrate how IRENA engages with stakeholders at country level.

As a matter of practice, the Agency undertakes the following steps when conducting an outlook analysis:

- The Agency first has a kick-off meeting with country focal points. The point of this is to establish direct contacts with technical personnel and gain a more granular understanding of country goals, targets, and what capacity it has in place (and what capacity it does not), along with information on any additional support they may be receiving in the area from other institutions.
- Based on this the IRENA team start technical analysis. During this process the IRENA team would regularly reach out to country focal points and other relevant partners as necessary (for example the

local power utility, or regional bodies etc) to discuss findings. Once preliminary technical analysis is completed the IRENA team will hold workshops to review results and shape recommendations.

- Based on technical analysis results, IRENA starts the socio-economic analysis. When engaging with country focal points and other partners on the socio-economic elements, IRENA informs of the policies and economic datasets that IRENA is using for the analysis. Country and sector Stakeholders including from the government and local thinktanks (such as IESR) are consulted throughout the process of the draft development and their comments are incorporated on the socioeconomic impacts and policies.
- It is worth noting here that throughout this process internal discussions take place between the different teams to check assumptions.
- The IRENA team will hold a final workshop with all stakeholders including country focal points to discuss final results and key messages and focus of the report. Results from this consultation are then integrated into the final version of the analysis and the final version shared with country.
- Once the results are finalized, IRENA authors the report in discussion with experts. A preliminary draft is shared for country review and feedback in a review process. The report is then finalized and launched in the country at a dedicated launch event.
- Following the launch experts are invited to submit further questions or data requests. Scenario or other technical data is shared and further consultation is offered. This has been the case for Indonesia and is generally coordinated by the local Indonesian expert located in the country. Additionally, follow on workshops can be arranged provided funding is available (this is for example the case for Indonesia planned for mid-2023).
- Once the long-term roadmap is released, more details and specific requests can be considered as elaborated by IRENA teams with the technical know-how.
- For the Indonesia outlook specifically - the overall process followed involved a mixed approach of IRENA staff and a local Indonesian expert representing IRENA stationed at ASEAN-Centre for Energy (ACE). The in-country expert coordinated on the ground with various government ministries and the Utility (PLN) and MEMR as the focal point. There were also several visits/meetings in this context (in this case mostly held virtually due to COVID) to the MEMR and other ministries. Through this active working relationship, exchanges took place to agree on the methodology, reaffirm assumptions, collect and validate data and share preliminary results and solicit feedback at various stages throughout Outlook development.

Stakeholder analysis:

Table A.1.2 at the end of this annex provides a simplified overview of IRENA and other international organizations in energy transition and climate change mitigation, with indication of Denmark's support to these actors. Annex 9 to this Project Document contains a listing of IRENA collaborative linkages with other institutions and initiatives.

IRENA cultivates several different types of [partnerships](#):

- Multilateral initiatives: This includes hosting of initiatives including SIDS LHI, Global Geothermal Initiative, Youth and Parliamentary networks where IRENA uses its convening power to bring together stakeholders and knowledge on these common issues.
- Multilateral cooperation platforms: This includes Collaborative Framework; Coalition for Action; Energy Transition Accelerator Financing Platform; Climate Investment Platform; the Global Offshore Wind Alliance (GOWA) established by Denmark; IRENA and the Global Wind Energy Council (GWEC); and the International Off-grid Renewable Energy Conference (IOREC) where IRENA builds knowledge and brings stakeholders together on defined topics.
- Bilateral partnerships: This includes IRENA's specific bilateral engagement with private sector where information on current private sector partnerships are set with an aim to advance energy transformation.

Key documentation and sources used for the analysis:

The Breakthrough Agenda Report 2022 (September 2022 IRENA, IEA, UN Climate Change High Level Champions): [Link](#)

IRENA collaborative frameworks: [Link](#)

Extensive search on websites of international institutions and initiatives.
<p>Are additional studies/analytic work needed? How and when will it be done?</p> <p>No additional studies are foreseen in the preparation of this project but given the extremely dynamic context and the multitude of actors and initiatives, it will be important for IRENA to continuously monitor synergies and linkages with other initiative and ensure additionality and avoid any risk of duplication, and to keep the project Steering Committee informed in this regard – particularly to ensure synergies with other interventions supported by Denmark.</p>
3. Fragility, Conflict, Resilience, Migration
<p>As mentioned in the Table A.1.1 overview at the of this annex, priority countries for this project include countries in conflict and fragility. Thus 6 of the 38 SIDS that are part of the LHI initiative are classified as fragile and one of the Danish priority countries in Africa (Ethiopia) is in conflict; the same applies to one of the ODA eligible ASEAN countries (Myanmar).</p> <p>LDCs and SIDS bear a disproportionate cost of climate change-related impacts, despite contributing less than a 7% of global GHG emissions. More than 69% of deaths related to climate-related disasters globally were in these two groups of countries, which have also witnessed the displacement of millions of people, loss and damage of physical and natural resources, and worsening inequality. These countries are increasingly capitalising on RE sources to build resilience, mitigating their climate-induced vulnerabilities whilst ensuring energy security and sustainable socio-economic growth. Specific focus is placed on supporting SIDS in their energy transition under the SIDS LHI to strengthen resilience.</p> <p>Climate migrants are an increasing issue, including for SIDS. Building resilience to climate change includes more robust sustainable energy systems that can better guarantee energy security and support sustainable and resilient communities where water and food security are also improved through sustainable energy. Socio-economic benefits of RE deployment – which is a focus area of this project - are also a relevant factor in strengthening resilience and mitigating against conflicts over energy poverty and access, unemployment, and potentially it could also have a positive contribution toward stemming migration.</p>
<p>Key documentation and sources used for the analysis:</p> <p>OECD DAC list of ODA Recipients, effective for reporting on 2022 and 2023 flows.</p> <p>World Bank FY23 List of Institutionally and Socially Fragile and Conflict-affected Situations:</p> <p>Planetary pressures-adjusted Human Development Index, from the Human Development Report 2021/2022, Table 7</p> <p>Multi-dimensional Poverty Index, from the Human Development Report 2021/2022, Table 6</p>
<p>Are additional studies/analytic work needed? How and when will it be done?</p> <p>No additional studies are required as part of the preparation phase.</p>
4. Inequality, Gender, Youth and applying a Human Rights Based Approach
<p>Inequality and poverty: By focusing on access and on a just and equitable energy transition, the proposed project contributes to Danish development cooperation’s objectives of poverty reduction, (SDG 1 no poverty). Access to RE is one of the most important drivers of sustainable development at both household and national levels. Access has a direct impact on the multiple dimensions of poverty (resources; opportunities and choices; voice and influence; and personal security). It enables improved livelihoods via access to electricity including clean cooking; water provision; and food production, and it reduces air pollution and provides health improvements and income generation activities in small businesses.</p> <p>IRENA’s socio-economic work looks at how the energy transition can generate benefits beyond energy solutions, leading to policies able to deliver multiple advantages for society including for disadvantages population groups. This includes improving energy access, healthcare, gender equity and welfare, and providing wider economic and employment progress. The analysis extends into macro-economic benefits, the link between energy and jobs, gender and local value creation⁶⁰. Socio-economic footprint analysis delves into the implications of the energy transition, providing footprint measurement in terms of GDP, jobs and welfare. The</p>

⁶⁰ More information is available at www.irena.org/Energy-Transition/Socio-economic-impact.

need for holistic employment and just transition policies is highlighted by analysing the implications of the transition on whole-economy and energy sector jobs.

Human Rights Based Approach (HRBA) Principles: While access to energy is not a human right as such, access to affordable, reliable, sustainable, and modern energy for all is an SDG (#7). Given the role of clean and sustainable energy as a broader enabler of human and economic development, RE is strongly interconnected with basic rights such as the right to life, food, health, shelter, education, etc. In general, IRENA's work including its key role in improving data for more well-informed decisions contributes indirectly to the overall human rights principles of participation, accountability, non-discrimination, and transparency (PANT).

Gender: Access to RE has a direct positive bearing on the lives of women and girls, and IRENA includes gender-disaggregated data in its work where possible. For nearly a decade, IRENA has developed analysis and filled knowledge gaps on the role of gender in the energy transition including the socio-economic impacts of gender disparity in the renewable energy sector. This has included specific analysis on gender equity throughout the energy sector, data collection and targeted technology and sector specific analysis. For a full list of publications and data on gender-related topics please see [here](#). For the latest digital story, please see [here](#).

Youth: IRENA encourages youth to identify the role that they can play in shaping the energy transition within their communities and engages youth through capacity-building initiatives on governance, education and innovation. Young people are a major human resource for development and key agents for social change, economic growth, innovation and environmental protection. In recent years, youth have been increasingly involved in the sustainable development discourse, providing relevant contributions to shape the agenda of tomorrow.

Young people are particularly threatened by climate change, and, at the same time, are significant actors in raising awareness and providing ambitious and innovative solutions worldwide. They have thus become increasingly active in bringing urgency to the international public climate debate. Moreover, global attempts to achieve net zero emissions and limit global warming to 1.5°C by 2050 require joint effort. A holistic approach to this endeavour includes empowering young leaders in the energy transition. As such, IRENA continuously encourages youth to identify the role that they can play in shaping the energy transition within their communities, by proposing solutions that can foster education, improve healthcare services, mitigate the effects of climate change and build a fair, just and inclusive society.

At the same time that renewables have gained wide recognition as the most cost-effective tool to secure a climate-safe future and support countries' sustainable development, IRENA has been engaging youth through a number of capacity-building initiatives on topics including governance, education and innovation. The IRENA fourth Youth Forum: The New Generation of Decision Makers will convene on 13 January 2023 in Abu Dhabi, UAE at the margins of the thirteenth session of the IRENA Assembly, see [here](#):

Jobs: The ninth edition of IRENA's series, [Renewable Energy and Jobs: Annual review 2022](#), produced in collaboration with the International Labour Organization (ILO), provides the latest estimates of renewable energy employment globally. Based on a wide range of studies and reports the report surveys the global renewable energy employment landscape as of 2021. Key policy objectives include ensuring jobs are decent, and that equal employment opportunities exist for women, youth and minorities. The Report found that the renewable energy sector employed 12.7 million people, directly and indirectly, in 2021 and that the number continued to grow worldwide over the past decade, with most jobs in the solar photovoltaic (PV), bioenergy, hydropower and wind power industries. The Report mentions that IRENA is also working with a broad range of partners to ensure that the socio-economic impacts of the energy transition are understood. A working group on Sustainable Energy Jobs under the umbrella of IRENA's Coalition for Action brings together stakeholders from intergovernmental organisations, the private sector, organised labour and civil society, chaired by the ILO. The objectives of the working group include improving knowledge and understanding of key challenges and opportunities; sharing best practices, experiences and quality data; and strengthening capacity building with regard to the policies, regulations and approaches needed to effectively manage energy-employment interlinkages. IRENA has also established a collaborative framework on just and inclusive energy transitions – co-facilitated by the United States and South Africa – that seeks to facilitate both peer-to-peer engagement among countries on lessons learned from just transition efforts and multistakeholder exchanges.

Key documentation and sources used for the analysis:

IRENA with ILO: Renewable Energy and Jobs – Annual Review 2022: [link](#)

Publications and data on gender-related topics please see [here](#)

Approach Note on Fighting Poverty and Inequality link
Are additional studies/analytic work needed? How and when will it be done? No additional studies are required as part of the preparation phase.
5. Inclusive sustainable growth, climate change and environment
The key climate change considerations in the context for this support were mentioned in section 1 of this context analysis.
This project has a strong focus on sustainable growth and climate change mitigation. The inclusiveness is considered in the support of more well-informed energy planning and a holistic approach to the just inclusive and equitable energy transition that is the overall focus of IRENA's MTS 2023-2027 to which this project is directly aligned. Socio-economic benefits are explicitly the focus of the MTS/this project's outcome 4. Partnership among different stakeholder groups including the private sector is key to the project focus on decentralized renewable energy solutions for climate adaptation, including assessment of the energy-health, energy-water and energy-agri-food nexus, which has clear implications for the environment and natural resources.
There are no adverse potential risk and negative impacts related to environment and climate change from the proposed project.
With IRENA's mandate as a global leader on renewable energy and the project's focus on RE deployment, the environmental concern is paramount. Environmental Impact Assessments will be done as required by national legislation in SIDS partner countries for RE investments that will take place as spin-offs from this project, but the grant support is not intended for investment.
Key documentation and sources used for the analysis: See list above under section 1 of this context analysis.
Are additional studies/analytic work needed? How and when will it be done? No additional studies need to be carried out as part of the preparation phase, and inclusive sustainable growth, climate change and environment are integral parts of the project.
6. Capacity of public sector, public financial management and corruption
The project has a strong focus on capacity development of the public sector to strengthen the enabling environment for sustainable energy solutions in the just, inclusive and equitable energy transition and undertake more effective energy planning that is well-informed about the costs of the energy transition and its wider socio-economic benefits including its impact on job creation and energy end-use.
Denmark has a zero-tolerance concerning corruption. Denmark is satisfied that IRENA's financial management procedures are adequate to safeguard against corruption. No funds under the Contribution to IRENA will be channelled through recipient partner countries' financial management systems, but Table A.1 contains information on the Transparency International Corruption Perceptions Index (CPI) for the priority countries.
Key documentation and sources used for the analysis: Transparency International Corruption Perceptions Index (CPI)
Are additional studies/analytic work needed? How and when will it be done? No additional studies are required as part of the preparation phase. Targeted capacity development is a key activity under the project.
7. Matching with Danish strengths and interests, engaging Danish actors and seeking synergies
There are several concrete and potential synergies between the Danish development and policy instruments (ref also the Danida How To Note on Energy Transition and Emission Reductions in Developing Countries link) and the voluntary contribution to IRENA. Denmark's Strategy for Development Cooperation "The World We Share" in its objective 2 states that "Denmark must assume international leadership within reductions, green transition, and access to clean energy". More specifically, the Strategy prioritises that Denmark should: ensure access to clean and renewable energy for more people in Africa, to facilitate social and economic development as well as job creation; strengthen the Danish SDG 7 leadership and energy cooperation on green transition in developing countries, including

promoting renewable energy and energy efficiency; and promote ambitious national climate action plans that enable developing countries and growth economies to transition from fossil fuels to clean energy sources. Clearly the Contribution to IRENA is fully consistent with these priorities.

It is also noted that the Coalition for Action includes Danish companies such as Ørsted and Vestas, and that in recognition of the fact that scaling-up RE deployment depends on continuous public-private dialogue, IRENA facilitates discourse and dialogue between its Member States and the Coalition for Action. As a basis for such discussion, the Coalition puts forward action-oriented white papers building on participants' various perspectives and experiences. IRENA's annual pre-Assembly Public-Private Dialogue gathers around 250 multi-stakeholders each year. This has become a key platform for countries and the Coalition to exchange views on the latest renewable energy trends. Smaller roundtable discussions are also held between IRENA Member States and Coalition representatives.

Areas/sectors where Denmark has the most at stake – interests and values – and where Denmark can have influence through strategic use of positions of strengths, expertise and experience:

Denmark is a global leader in many aspects of the energy transition, including RE and EE. As the first country in the world, Denmark has decided to lead the transition and become entirely independent of fossil fuels by 2050. Denmark has a wide range of multilateral and bilateral collaborate partnerships related to the energy transition and climate action, as reflected in this Context Analysis. Denmark's interests and values are strong in this space and the project with IRENA will give excellent opportunities for influence, using positions of strength in the substantive cooperation with IRENA. Denmark as a Member also has a voice in the IRENA Assembly and Council to influence IRENA directions and priorities. The visibility of Danish values and expertise will also be increased through IRENA's reporting to the Council and Assembly on this cooperation.

The Danish Energy Agency (DEA) has strong competences based upon the Danish energy model. The foundation of the low-carbon transition in Denmark has been threefold: renewable energy, energy efficiency, and system integration including electrification. Focusing on broader interactions and systems and the enabling environment, as opposed to individual components and concepts, is an important aspect of the Danish energy model, which is characterized by a holistic view of energy planning and management, with emphasis on integration of for instance heat and power production and establishing synergies between taxation schemes and policy support frameworks for renewable energy.

Danish positions of strength are articulated in several ways, for example, the DEA Energy Technology Development and Demonstration Programme (EUDP) funds work by Danish enterprises and universities on demonstration of new green energy technologies and thus reflects key Danish strongholds in this space. This takes place in a number of promising projects, all of which support Denmark's goal of a 70% carbon reduction by 2030 and climate neutrality by 2050. Since its establishment in 2007, the EUDP has supported more than 1,000 innovative projects with about DKK 5,7 billion. The MFA website Denmark.dk also highlights Denmark as a pioneering nation in clean energy. The State of Green⁶¹ Energy Transition mentions that as the first country in the world, Denmark has decided to lead the transition and become entirely independent of fossil fuels by 2050 and it serves as a one-stop-shop to more than 600 Danish businesses, agencies, academic institutions, experts and researchers. The State of Green also shares Danish know-how via publications, digital showcases, at international conferences, by welcoming delegations, and through media engagements.

With relevance for SIDS, it is noted that: Denmark has itself championed sustainable energy solutions in islands (e.g. Samsø, Bornholm) that have been more ambitious than national plans. Given the strategic partnership with IRENA, Denmark and IRENA collaborate in a variety of international fora and processes and on a large number of agendas, themes and geographies to promote just energy transition worldwide to achieve the SDGs and net zero by 2050.

Potential for commercial engagement, investment, IFU and academia:

While the Contribution to IRENA is untied and thus not linked to any commercial opportunities, and while it is also important to note that IRENA is not an implementing agency, IRENA's business opportunities are announced through the IRENA procurement website. However, the energy transition and climate change mitigation in priority countries and regions provide many opportunities for commercial engagement for the Danish resource base, and the Danish Embassies in these countries may be able to advise on such opportunities.

⁶¹ State of Green is a not-for-profit, public-private partnership between the Danish government and the country's three leading business associations (Confederation of Danish Industry, Green Power Denmark, and the Danish Agriculture and Food Council).

The Danish Investment Fund for Developing Countries (IFU) has a range of financial instruments that support the energy transition, as does the Nordic Environment Finance Corporation (NEFCO) that is co-owned by Denmark.
Interests of Danish civil society organizations: There are strong interests in Danish NGOs and CSOs in supporting a just inclusive and equitable energy transition. As an example, 3F has knowledge of the Danish experience of the green transition and how it has created green jobs.
Donor landscape and coordination, and opportunities for Denmark to deliver results through partners including through multilaterals: See Table A1.2.
Key documentation and sources used for the analysis: The World We Share: link Danida AMG How-to-Note on Energy Transition and Emission Reductions in Developing Countries: link Danish Energy Agency Global Cooperation: link - Danish energy model: link State of Green - Energy Transition: link EUDP Strategy: link IRENA procurement: link IFU: link
Are additional studies/analytic work needed? How and when will it be done? Additional studies not be needed as part of the preparation phase, but during project implementation, MFA/GDK, MCEU, DEA and Danish Embassies in priority countries should work proactively to ensure that attention is given to matching with Danish strengths and interests, engaging Danish actors, and seeking synergies – and that such synergies are closely monitored and reported/communicated. This should include synergies with Denmark’s multilateral cooperation with other international actors in energy and climate action as well as linkages and synergies with Danish GtG energy partnership programmes in priority countries (see also Tables A1.1 and A1.2 as well as Annex 9).

Table A1.1 - Overview of selected country information for SIDS, ASEAN, and selected emerging economies.

Note: All the listed countries are IRENA members except Montserrat, Niue, Myanmar, and Vietnam

Small Island Developing States (SIDS that are partners in the SIDS Lighthouses Initiative):										
#	SIDS partner in LHI	LDC ⁶²	ODA eligible	Fragile or in Conflict ⁶³	% in multi-dim.	PHDI ⁶⁵	Corruption 2021 ⁶⁶ score	Access to electricity % ⁶⁷	RE % of	CO ₂ t/capita/year ⁶⁹

⁶² According to OECD DAC list of ODA Recipients, effective for reporting on 2022 and 2023 flows. <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/DAC-List-of-ODA-Recipients-for-reporting-2022-23-flows.pdf>

⁶³ According to World Bank FY23 List of Institutionally and Socially Fragile and Conflict-affected Situations: <https://thedocs.worldbank.org/en/doc/69b1d088e3c48ebe2cdf451e30284f04-0090082022/original/FCSList-FY23.pdf>

⁶⁵ Multi-dimensional Poverty Index, from the Human Development Report 2021/2022, Table 6: https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf

⁶⁶ Transparency International Corruption Perceptions Index (CPI) <https://www.transparency.org/en/cpi/2021> - high score best.

⁶⁷ From IRENA country profiles <https://www.irena.org/Statistics/Statistical-Profiles>. Access has been reflected here as SDG#7 target 7.1.1 Access to electricity (% population).

⁶⁹ Tons of CO₂ emissions from production per year ref. UNDP: <https://hdr.undp.org/planetary-pressures-adjusted-human-development-index#/indicies/PHDI>

					poverty ⁶⁴				TFEC ⁶⁸	
1.	Antigua and Barbuda		No					100	1	
2.	Aruba		No					100	7	
3.	Bahamas		No			0.634	64	100	1	37.8
4.	Barbados		No				65	100	4	
5.	Belize		Yes		0.6	0.637		97	29	12.2
6.	British Virgin Islands		No					100	1	
7.	Cabo Verde		Yes				58	94	22	
8.	Comoros	LDC	Yes	Fragile	16.1		20	87	53	
9.	Cook Islands		No					100	4	
10.	Cuba		Yes			0.721	46	100	22	9.2
11.	Dominican Republic		Yes			0.719	30	100	14	9.5
12.	Fiji		Yes				55	100	26	
13.	Grenada		Yes				53	94	10	
14.	Guyana		Yes		0.2		39	93	11	
15.	Kiribati	LDC	Yes		3.5			92	41	
16.	Maldives		Yes		0.0		40	100	1	
17.	Marshall Islands		Yes	Fragile				99	12	
18.	Mauritius		Yes				54	100	9	
19.	Micronesia (Federated states of)		Yes	Fragile				83	2	
20.	Montserrat		Yes					-	-	
21.	Nauru		Yes ⁷⁰					100	1	
22.	New Caledonia		No					100	5	
23.	Niue		Yes					100	22	
24.	Palau		No					100	0	
25.	Papua New Guinea		Yes	Fragile	25.8	0.541	31	60	53	5.2
26.	Saint Kitts and Nevis		No					100	2	
27.	Saint Lucia		Yes		0.0		56	100	10	

⁶⁴ Planetary pressures-adjusted Human Development Index, from the Human Development Report 2021/2022, Table 7: https://hdr.undp.org/system/files/documents/global-report-document/hdr2021-22pdf_1.pdf

⁶⁸ From IRENA country profiles <https://www.irena.org/Statistics/Statistical-Profiles>. One indicator has been chosen here to reflect the status of renewable energy (RE): RE in total final energy consumption (TFEC) Information is given where a country profile is found. The country profiles include a wide range of other information including data and trends on: GDP, SDG# target 7.3.1 Energy intensity; target 7.1.2 Access to clean cooking (% population); 7.2.1 Renewable energy (% TFEC) – the information reflected above; SDG#7 indicator 7.a.1 Public flows to renewables; SDG#7 indicator 7.b.1 Per capita renewable capacity; air particulate matter; Total Energy Supply (TES) by source /RE/non-RE; RE Consumption (TFEC) by sector; electricity capacity (installed, by generation type and capacity utilization); information on latest policies, programmes, and legislation; CO2 emissions by sector; an RE resource potential.

⁷⁰ (but may graduate from list in 2023)

28.	Saint Vincent and the Grenadines		Yes				59	100	6	
29.	Samoa		Yes					100	34	
30.	Sao Tome and Principe	LDC	Yes				45	77	37	
31.	Seychelles		No				70	100	1	
32.	Singapore		No				85	100	1	
33.	Solomon Islands	LDC	Yes	Fragile			43	73	48	
34.	Tonga		Yes		0.0			100	2	
35.	Trinidad and Tobago		No			0.	41	100	0	
36.	Turks and Caicos		No					-	-	
37.	Tuvalu	LDC	Yes	Fragile				100	8	
38.	Vanuatu		Yes				45	67	32	
Selected African Countries:										
1	Ethiopia	LDC	Yes	Con- flict	41.9		39	51	89	0.5
2	Egypt		Yes		0.6	0.692	33	100	5	8.2
3	Kenya		Yes		12.4	0.561	30	71	68	4.6
4	Rwanda		Yes		22.2		53	47	78	2.0
5	Uganda	LDC	Yes		25.7		27	42	90	1.9
Emerging Economies:										
1	India		Yes		8.8		40	99	33	5.2
2	Indonesia		Yes		0.4		38	97	19	6.8
3	South Africa		Yes		0.9		44	87	11	7.6
ASEAN:										
1	Brunei		No			0.358		100	0	85.7
2	Cambodia	LDC	Yes			0.573	23	86	53	5.7
3	Indonesia		Yes		0.4	0.672	38	97	19	6.8
4	Myanmar	LDC	Yes	Con- flict	13.8	0.577	28	70	58	2.1
5	Laos	LDC	Yes		9.6	0.559	30	100	48	9.6
6	Malaysia		Yes			0.681	48	100	5	19.6
7	Philippines		Yes		1.3	0.664	33	97	27	8.8
8	Singapore		No				85	100	1	50.4
9	Thailand		Yes		0.0	0.735	35	100	24	11.8
10	Vietnam		Yes		0.7	0.662	39	100	19	8.5

Table A1.2: IRENA and other international organizations in energy transition and climate change mitigation

The international institutional architecture related to sustainable energy and climate action is complex and dynamic. Denmark supports many multilateral actors including UN agencies, intergovernmental agencies, multilateral development banks, think tanks and advocacy institutions. Denmark also supports numerous bilateral energy and climate partnership programmes and projects with developing countries and emerging economies through government-to-government (GtG) cooperation. This table presents an overview of IRENA and other actors within the sphere of sustainable energy and climate change mitigation. By necessity the overview is highly simplified, both in terms of the number of actors and the selected focus areas and types of support. Many of the institutions listed cover several focus areas to varying degrees, but only their perceived main focus is indicated, which inevitably leads to simplifications that will not fully capture their multifaceted range of support.

Main focus: Organisations:	Access	RE	EE	Global/regional/ country level data and analysis		Policy analysis and advice	Technical assistance and capacity development at country and regional levels	Project preparation and readiness support	Financing and physical investments	JET-P Coal phase out	Strong links and complemen- tarities with Danish GtG cooperation
				Technical	Socio- economic						
IRENA	√	√		√	√	√	√	√		(√)	√
BGFA (NEFCO)	√	√		√			√	√	√		
C40 cities						√	√				√
CEFIM (OECD)		√				√		√	√		√
CIF (MDBs)	√	√		√				√	√	√	√
ESMAP (WB)	√	√	√			√	√	√	√	√	
GCF	√	√	√					√	√		
GEF	√	√	√					√	√		
GGGI	√	√		√	√	√	√	√	√		
IEA		√	√	√	√	√	√				√
IISD GSI		√		√	√	√	√				√
NDC-P		√	√	√		√	√	√			(√)
NDF	√	√	√	√	√	√	√	√	√		√
SEFA (AfDB)	√	√	√	√			√	√	√	√	
SEforALL	√		√	√		√	√	√			
UNDP	√				√	√	√				
UNEP		√	√	√		√					
UNEP-CCC	√		√	√		√	√				√
WRI		√		√		√	√	√			
Denmark's GtG		√	√	√		√	√			√	√

Annex 2: Partner Assessment

This is the assessment from a Danish perspective of IRENA as implementing partner for the Voluntary Contribution (VC) 2023-2027.

IRENA is considered as the lead intergovernmental agency for global renewable energy (RE) and energy transformation that supports countries in their transition to a sustainable energy future and serves as the principal platform for international co-operation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on RE. Justification and information related to the choice of IRENA as implementing partner was given in the main text of this Project Document and will not be repeated here. The Danida standard template summarising key features of IRENA is found in Table A2.1 below. An organigram with information on IRENA core staffing is found in Figure A2.1 below, and further information on IRENA staffing is given after the Figure. The formulation of the present Project Document and the key liaison with Denmark concerning the Contribution is anchored in the IRENA Planning and Programme Support (PPS) unit that is part of the Office of the IRENA Director General.

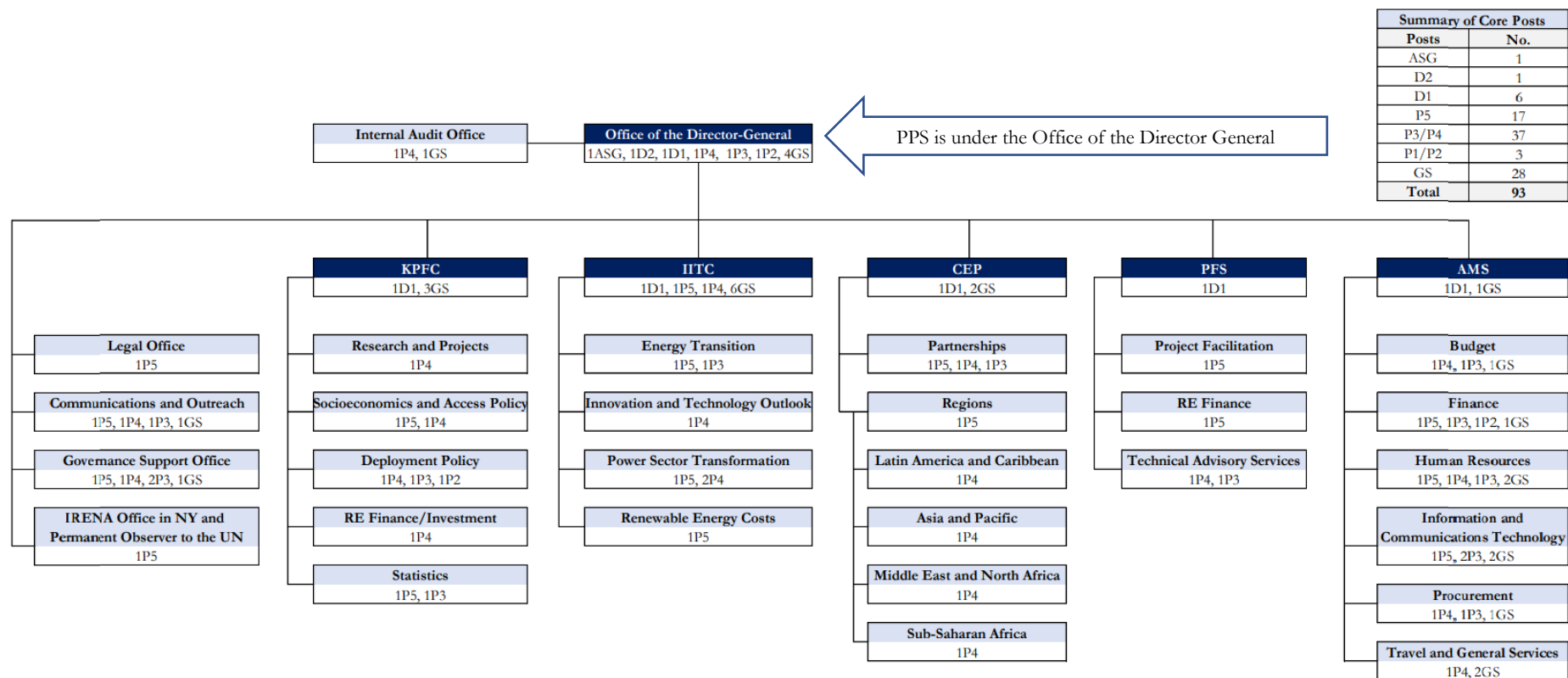
Table A2.1.: Key features of IRENA

Name of Partner	Core business <i>What is the main business, interest and goal of the partner?</i>	Importance <i>How important is the project for the partner's activity-level (Low, medium high)?</i>	Influence <i>How much influence does the partner have over the project (low, medium, high)?</i>	Contribution <i>What will be the partner's main contribution?</i>	Capacity What are the main issues emerging from the assessment of the partner's capacity?	Exit strategy <i>What is the strategy for exiting the partnership?</i>
The International Renewable Energy Agency (IRENA)	The key inter-governmental agency with a global mandate on renewable energy supporting the global energy transformation. Denmark is a ratifying member of IRENA.	Medium. IRENA's 2020-2021 biennium budget comprised assessed core funding contributions from Member countries (USD 44.4 million) and non-assessed core funding (USD 21.7 million) for a total core budget of USD 66.1 million. In addition, voluntary contributions	High.	Contribution in-kind of IRENA political influence in the priority countries and regions for this project, data provision and analytical capacity, and expertise in TA and capacity development, staff expertise and experience, tools, influence and credibility based on global position	The Evaluation of IRENA's MTS 2018-2022 found that there was a concern among stakeholders interviewed that IRENA could be spreading itself too thinly, supporting too many initiatives and delivering too many activities given its resources. However, the evaluation also found that being nimble, flexible and	An exit strategy for Danish support to IRENA 2023-2027 will be discussed at the mandatory Danida Mid-term Review based on suggestions by the MFA/MCEU/IRENA put forward to the MTR review team.

		<p>totalled USD 21.3 million. Denmark's part of the multi-year voluntary contributions (VC) received by IRENA during 2020-2021 was approximately USD 3 million, which reflects Denmark as the third largest VC donor.</p>		<p>and centre of excellence, wide global membership and outreach.</p>	<p>responsive was seen as a source of comparative advantage, and IRENA's staff base and tight mandate was regularly identified as an advantage and seen to support a degree of nimbleness, flexibility and responsiveness that was not characteristic of other international and inter-governmental institutions.</p> <p>Denmark has funded dedicated project staff for the LTP and SIDS Lighthouses projects and it is proposed that as part of the new Contribution for 2023-2025 to fund 2 similar dedicated project staff positions, thus contributing to the capacity required for effective implementation.</p> <p>Concerning financial management capacity, it is noted that an MFA financial management capacity assessment will be undertaken at a time still to be agreed.</p>	
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Figure A2.1: IRENA organigram and staffing

IRENA Organisational Structure and Post Distribution for 2022-2023 Biennium



The organigram above is sourced from IRENA Document A/12/4, Annex I (amended to show PPS) and show core posts as per UN classification. IRENA has core staff and project staff. Core staff are funded from core resources. Project staff are funded from voluntary contributions and are responsible for delivery of the deliverables of the project through which they are funded, as specified in the project documentation. All IRENA staff, core and project, have a term limit. The core staff term limit is 7 years, with possibility for 2 additional years, and project staff terms are also limited by the duration of a specific project or resource availability. As per IRENA Statute (Article XII.A), IRENA is funded by three sources: mandatory contributions (as per UN scale of assessment), voluntary contributions; and other possible sources. As per the same Article, core resources must be used for administrative and management functions, thus more than 50 percent of core staff are working in these areas. Most of the programmatic work is funded by voluntary contributions, comparable to the way the UN system works.

[IRENA Document A/13/3](#), summarises key information on IRENA staffing as of 1 November 2022, as follows: Since 1 January 2022, 78 vacancies (core and project, including Interns and Associate Professionals) were announced and over 11,400 applications were received. Out of 93 core posts, 89 were filled or under recruitment (78 filled and 11 under active recruitment) and 4 were vacant. The 78 staff in core posts were from 50 nationalities out of which 45% were women and 55% were men. There were also 139 project posts that were filled or under recruitment (101 filled and 38 under active recruitment). Combined core and project posts amounted to a total of 179 staff, who came from 74 nationalities with 47% women and 53% men.

Annex 3: Theory of Change and key assumption and enablers

A short theory of change (ToC) narrative for the Danish Voluntary Contribution to IRENA was given in the main text. A short summary ToC responding to the 8 standard questions in the Danida guidelines is given here in Box A3.1, representing the Danish views.

Box A3.1: Brief ToC narrative for the Contribution to IRENA as per Danida AMG standard questions

1. What is the **political, economic, societal, and institutional context**?

Context information and analysis was provided in Annex 1. In summary, IRENA's World [Energy Transitions Outlook](#) (WETO) shows that progress across all energy uses has been woefully inadequate and is not on track to meet SDG7 targets. As reflected in the WETO it is estimated that USD 0.7 trillion in annual investments in fossil fuels should be redirected towards energy transition technologies. Measures to eliminate market distortions, coupled with incentives for energy transition solutions, will facilitate required changes in funding structures. Most of the additional capital is expected to come from the private sector. But public financing will also have to double to catalyse private finance and create an enabling environment for speedy transition with optimal socio-economic outcomes⁷¹. Enhanced NDCs and commitments made at COP26 showed a promising trend but still fell short of what is required. The United Nations High-Level Dialogue on Energy in 2021 and the Energy Progress report 2022 highlighted how far the world is from realising the pledge to ensure universal access to energy. And the dangers of pursuing false short-term solutions – such as turning back to coal, intensifying gas extraction, and engaging in new oil drilling – are real, not least given the current global security situation. Renewables are still the least cost option to expand energy supply for most countries. COVID 19 and the geo-political situation have increased interest amongst fossil fuel producing African countries to insist on exploiting existing and new fossil resources.

2. What is **the development problem or issue - and the desired transformation**?

The development challenge of promoting a just energy transition differs across contexts and geographies, notably between emerging economies and SIDS and LDCs which are all among the targets for Denmark's support. Governments shoulder the challenging task of tackling seemingly opposing agendas of energy security, resilience, and affordable energy for all. In the face of uncertainty, policy makers must be guided by the overarching goals of arresting climate change and ensuring sustainable development. And yet, analysis shows that only 6% of the G20's USD 15 trillion in recovery funding in 2020 and 2021 was channelled towards clean energy. IRENA [analysis](#) shows that a combination of renewable energy, energy efficiency and electrification represent a safe, reliable, affordable, and already deployable pathway capable of achieving over 90% of the energy-related CO₂ emission reductions needed to meet pledged climate goals, and that such a transformation constitutes the most effective strategy going forward. However, to be really impactful, this energy transformation requires a global approach, engaging all levels of society – from communities, regions, and governments to stakeholders from the public and private sectors. With Denmark's financial contribution, IRENA will provide knowledge, data and assistance that enables selected, ODA eligible developing countries to pursue a just, inclusive, and equitable energy transition and develop net-zero strategies that leave no one behind, and IRENA's capacity building and technical assistance will help implement these strategies in the longer-term. Ensuring access is also at the centre of a just inclusive and equitable energy transition that addresses the political economy of the energy sector as well as the wider economy. IRENA's methodology to evaluate the energy transition's social impact will be applied with data produced in the macroeconomic analysis to obtain a quantification of the impacts in the social system layers.

3. **Which are the main changes that will need to take place for this transformation to happen?**

IRENA analysis⁷² shows that the fastest path to emissions reduction, consistent with the 1.5°C goal, is through a holistic policy framework, large scale investment and international co-operation. With this approach, the energy transition can also support achievement of several SDGs and tackle policy priorities such as job creation and industrialization. Rapid deployment of renewable energy is the main avenue that will enable the achievement of SDG and climate goals and make the necessary emission reductions by 2030 for a chance to stay on the 1.5°C pathway. Efficiency and electrification will need to be primary drivers enabled by renewable power, green hydrogen, and sustainable modern bioenergy and decentralised renewable energy solutions must be scaled up

⁷¹ [IRENA World Energy Transition Outlook, 2022](#)

⁷² [IRENA World Energy Transition Outlook, 2022](#)

in a timely manner to reach the 2030 target of universal access. IRENA's holistic approach to the energy transition will be key to transforming the current energy system to one that is more predictable, resilient, inclusive, and sustainable, with areas such as job creation being an integral part of this approach.

4. Who – or which developments or factors - are the most important drivers of these changes?

The necessary scale-up referenced above will require bold, ambitious action lead by national and local governments in partnership and concerted action with local and international private sector, civil society, youth, and academia, as well as international development partners and financing institutions. The largest energy consumers and carbon emitters will have to implement the most ambitious plans and investments by 2030. This will require going beyond long-term decarbonization commitments and setting out concrete operational targets, plans and policies for the short and medium term. Denmark's support to IRENA for long-term planning and development of regional energy transition outlooks will be helpful in this regard, as will IRENA's knowledge and capacity development support for more well-informed decision making, including in SIDS and LDCs that have more limited institutional capacities. As an intergovernmental institution, IRENA is well placed to facilitate and support these changes, and as found by the 2020 Evaluation of IRENA's MTS, the Agency's value addition was its convening power, the inclusive approach to collaboration and partnerships, and the facilitation of networking and relationship building across the renewable sector. IRENA's global membership and mandate and the exclusive focus on renewable energy were also found by the Evaluation to be main comparative advantages, as perceived by Members and partners.

5. How and with which modalities and instruments will we contribute to the changes?

Denmark will contribute to the required changes through targeted and earmarked support to IRENA for developing enabling policies with renewable-energy centred solutions coupled with effective climate policy action and capacity development through IRENA. This support will help developing countries integrate energy investment roadmaps with wider socio-economic policies and values in a just and equitable energy transition that is the overall purpose of IRENA's work in the MTS 2023-2027. Denmark's targeted support for the Africa Coalition Initiative, NDC-P, GOWA, and SIDS Lighthouses will contribute to these changes in these highly prioritised geographic and thematic priority areas.

6. Why do we think that the changes will happen?

Denmark believes that acceleration of the energy transition is essential for long-term energy security, price stability and national resilience. Some 80% of the global population lives in countries that are net energy importers. With the abundance of renewable potential yet to be harnessed, this percentage can be dramatically reduced. Such a profound shift would make countries less dependent on energy imports through diversified supply options and help decouple economies from wide swings in the prices of fossil fuels. This path would also create jobs, reduce poverty, and advance the cause of an inclusive and climate-safe global economy⁷³. In supporting the transition through IRENA, Denmark considers data-based analysis of the socio-economic benefits of energy transition, including the job creation potential, to be an important driver. Evidence suggests that countries agree. Recent IRENA analysis⁷⁴ shows that 194 Parties of 193 countries that ratified the Paris Agreement have now submitted an NDC, and some 150 have included renewables as part of their strategies. Denmark's support for the energy aspects of NDCs through IRENA will build upon this momentum. Together with the new and updated NDCs, current and announced net zero pledges are projected to further reduce emissions by 2030, with the potential to limit warming to 2.1°C, avoiding a more catastrophic rise of above 2.8°C under the initial NDCs. This has been bolstered by a shift in the balance of competitiveness between renewables and incumbent fossil fuel and nuclear options. In 2021, the global weighted average LCOE of new utility-scale solar PV and hydropower was 11% lower than the cheapest new fossil fuel-fired power generation option and that of onshore wind 39% lower. The unprecedented extent of the fossil fuel price crisis in 2022 has overshadowed the fact, that without renewables, the situation for consumers, economies and the environment would be much worse⁷⁵. Indications are that as the gas crisis continues, the global North will double down on renewable energy which will impact markets globally. Renewables will reduce fossil import bills and average electricity system costs and lessen the damaging impacts of high electricity prices on consumers and industry.

7. Which are the main assumptions that will need to hold true for the changes to happen?

From a Danish perspective, key assumptions are summarised in Box A.3.2 below. It is also noted that in order to achieve impact through a just and inclusive energy transition that is at the heart of IRENA's MTS, countries

⁷³ [IRENA World Energy Transition Outlook, 2022](#)

⁷⁴ [IRENA NDCs and Renewable Energy Targets in 2021](#).

⁷⁵ [IRENA Renewable Power Generation Costs in 2021](#)

need to implement an energy strategy in line with the 2030 Agenda and the Paris Agreement. And while assumptions underpinning such transition relate to specific contexts, the transition requires data, context specific analysis, political will and sustained commitment, expertise and capacity, an enabling policy and regulatory framework, as well as public-private partnerships and public and private investments. For these elements to hold true, IRENA links its databased analytical work with capacity building, technical assistance and fosters best practice and peer to peer exchange. Understanding successes and failures of other countries with similar challenges can empower uptake of solutions and embolden countries in target and goal setting.

8. Which are the main risk factors?

Denmark's assessment of contextual, programmatic, and institutional risk factors is found in Annex 4: Risk Management. IRENA will monitor and report to the project Steering Committee on these risk factors and recommend any required adjustments.

Box A3.2: Key assumptions for Danish support to IRENA, enablers, and drivers

Key Assumptions:

From Danish Contribution inputs to activities:

- IRENA effectively and efficiently develops a results framework at output level with SMART indicators and annual results targets acceptable to the Steering Committee or which can be adjusted with SC comments.
- On this basis, IRENA develops annual work plans and budgets for the Danish Contribution consistent with the Danish project results framework and aligned to IRENA's agency results framework and two-year WPBs.
- IRENA effectively engages with Members, partners and stakeholders that are committed to engage, express needs, provide resources, and prioritise action.
- IRENA work planning in the form of two-year WPBs is timely and effective and resource allocation and use is efficient.
- IRENA is successful in mobilizing in a timely fashion other Member/non-Member funding necessary to implement agreed WPBs to which Denmark's support is aligned.
- IRENA is capable of retaining/recruiting qualified key staff, including the dedicated staff positions funded by Denmark related to i) GOWA; and ii) enhancing synergies between the bilateral energy cooperation programmes run by the Danish Energy Agency and IRENA.
- The Project Steering Committee set-up is effective in decision making on work planning and budgeting.
- IRENA takes effective remedial action when deviations from work plans occur or are needed.

From activities to outputs:

- Project beneficiary partners are willing and able to allocate resources for continued engagement.
- Project beneficiary partners have sustained motivation for effective uptake of knowledge and best practices through IRENA data-based analysis; policies recommendations; and technical assistance, capacity development, and tools.
- There is continuity in IRENA staffing of project activities.
- IRENA is able to deliver in the face of contextual or programmatic challenges such as recurrence of COVID-19 restrictions or similar programmatic risk factors.

From outputs to outcomes:

- IRENA has been able to engage effectively with champions of change in partner country political economy while understanding vested interests and reasons for scepticism among opponents of change.
- IRENA is successful in mobilizing in a timely fashion the Member/non-Member funding necessary to implement agreed WPBs to which Denmark's support is aligned.
- IRENA is capable of retaining/ recruiting qualified key staff.
- There is effective uptake of IRENA knowledge products, data, and analyses. IRENA has therefore been able to influence policy direction, as evidenced in concrete policy actions to which IRENA support has contributed or can be attributed.
- IRENA is able to ensure additionality and synergies in a field with many actors and initiatives.
- There is local and/or international potential for renewable energy investments and the cost-competitiveness of RE generation continues to be strong.

From outcomes to impact:

- There is continued wide Member, beneficiary partner and stakeholder support for SDGs and NDCs.

- There is continued market competitiveness and penetration of RE technologies, also despite needs for energy security as a spill-over effect from the war in Ukraine.
- Effective methodology and tools for GHG emission reduction assessment are applied to verify impact.
- The transition is just, and affected people are able to adapt to alternative job situations.

Enablers and impact drivers:

- Proactive use of a just, inclusive, and equitable approach to the energy transition – which is the overall theme of IRENA’s MTS 2023-2027.
- Effective Member involvement and partnerships.
- Continued effective IRENA and partner engagement in key international fora. Renewable energy as an enabler of social and economic development rather than a “sector”.
- Stable and predictable IRENA resource base., in addition to Denmark’s support.
- Innovation, dynamism, using the “power of the example” and impact stories, and a “360-degree approach” learning from feedback loops, drawing on IRENA’s work and expertise on the whole energy transition cycle to enable Members to benefit from diverse experiences, latest innovations, and best practices.
- Effective monitoring of assumptions and risk factors and timely remedial action when required.
- Continued emphasis on facilitating peer-to-peer, South-South, and triangular cooperation for replication and upscaling.
- Effective strategic and targeted IRENA internal and external communications with decision makers and stakeholder groups using a range of means of communication most relevant to target groups.
- Value added through continued attention to synergies and avoidance of duplication of effort based on effective partnerships and coordination between IRENA and other actors in the international institutional architecture and an extremely dynamic context.

Annex 4: Risk Management

This annex is formulated from a Danish perspective, in line with current Danida AMG guidance for Annex 4⁷⁶ (September 2022, with further reference to the general Danida Guidelines for Risk Management, as updated in May 2022).

IRENA presently does not have an explicit institutional risk management strategy or guidelines, but the risk factors and responses in the table below have been reviewed by IRENA and are in line with established IRENA practice.

The Steering Committee (SC) will monitor risks and mitigation of risks, based on IRENA progress reporting to the SC that will explicitly address the continued relevance/any required changes to the risk factors listed below. This gives opportunity also for Denmark's representatives in the SC to influence risk management during project implementation. The continued attention to risks and assumptions is also part of learning and adaptive management in the project and could imply updates of the risk management matrix in case of major developments in risk factors during the project's 5-year implementation period. The Danida Mid-term Review will also review risk management.

Contextual risks⁷⁷:					
Risk Factor	Likelihood⁷⁸	Impact⁷⁹	Risk response	Residual risk	Background to assessment
Political:					
Insufficient political buy-in for a just inclusive and equitable energy transition.	Unlikely	Major	Focus project interventions on countries and regions where there is buy-in and commitment. Strengthen momentum in the transition by concerted action among IRENA members and in international fora and processes demonstrating the benefits of the transition also for socio-economic development. Make use of project enablers and impact drivers.	Minor	The energy transition requires strong political buy-in that can be challenges in the current geopolitical situation with energy, finance, and food security crises.
Economic:					
Vested interests and fossil fuels subsidy regimes that hamper	Likely	Significant	Through awareness-raising and capacity development, support the momentum toward the green energy transition demonstrating the cost-	Minor	The price of fossil-fuels based energy is an important factor in in promoting and uptake of RE and EE. There is

⁷⁶ Danida AMG also contains an EXCEL template with even further details, which has not been used here.

⁷⁷ This category covers the range of potential adverse outcomes that may arise in a particular context. As required by Danida guidelines, these risk factors are subdivided into Political, Economic, Societal, Environment, and Security.

⁷⁸ The standard Danida categories for likelihood are used: Very unlikely, Unlikely, Likely, Almost certain.

⁷⁹ For impact and residual risk, the Danida standard categories are used: Insignificant, Minor, Major, Significant.

efforts to ensure a level playing field and increase the level of ambition in the energy transition including uptake of RE.			competitiveness and socio-economic benefits of RE deployment and the avoidance of fossil-based stranded assets, etc.		growing recognition of the negative consequences of fossil fuels subsidies, but this is controversial and changes in subsidy schemes have led to social unrest in many countries and there are strong vested interests.
Societal:					
If the energy transition is seen to adversely affect jobs related to current energy sources, it can fail to receive political and societal support.	Likely	Major	Demonstrate the socio-economic benefits of the transition ensuring a focus on inclusiveness, equality and RE-related job creation, as well as other benefits e.g. in health.	Major, but this is a core focus of the project	If the energy transition is not perceived as just, inclusive and equitable, there are risks of societal opposition.
Apprehension among local residents and advocacy groups to the deployment of RE could delay the energy transition.	Likely	Minor (for the project)	Strengthen partner capacity and awareness on the importance of ensuring early engagement of stakeholders and local communities and facilitate learning from examples of successful acceptance of RE technologies.	Insignificant	The “not-in-my-backyard” (NIMBY) is an issue in many countries when planning deploying RE such as wind and solar PV.
Environmental:					
Severe climate change-related disasters could affect the project, e.g. in vulnerable SIDS.	Likely	Minor	Build capacity and resilience for the transition by furthering the deployment of RE thus limiting fossil-dependent energy supply and strengthening energy security.	Minor	Climate disasters and environmental crises could affect the project by placing stress on vulnerable countries particularly SIDS, affecting partner capacities and priorities related to the energy transition.
Security-related:					
Project progress and results could be affected by political instability or unrest, leading to lack of engagement and commitment with stakeholders and potential danger to project participants.	Unlikely	Minor	The careful selection of partners, is key, building on expressed commitment and demand by participating countries. Capacity development and peer pressures through regional focus, platforms for exchanges, exposure in international workshops/fora for showcasing of results and impact stories will reinforce this.	Minor	Some target countries are fragile and/or in conflict, but target countries are committed at senior levels to cooperation with IRENA.

Programmatic Risks⁸⁰:					
Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
Limited capacity of local partners can impede implementation progress and results.	Likely	Major	Selection of committed and engaged partners who know IRENA and see value of sustained engagement is important. Capacity development/technical assistance through the project should focus on institutional capacity development rather than only training individuals, thus building lasting capacity.	Medium	Developing the capacity of political decisionmakers and practitioners is important but low capacity and staff changes in partner institutions can affect progress and results.
Continued and/or recurring restrictions related to COVID-19 or similar disease outbreaks could impact the project.	Likely	Minor	IRENA has during the COVID-19 crisis been able to adjust its operations also in cases where physical travel was not possible. This has provided valuable experience and working modalities that could be employed if the COVID-19 pandemic were to recur.	Minor	COVID-19 has adversely affected IRENA's work including abilities to travel.
Lack of data and/or inadequate quality of data can affect IRENA analyses.	Likely	Major	IRENA will rely on its expertise and other regional or similar data in cases where local data may not be available or inadequate.	Minor	Data is key to IRENA's work.
Insufficient uptake of IRENA's capacity building and technical assistance activities related to the provision of policy recommendations at country and regional level.	Likely	Major	These risks are mitigated through the Agency's extensive and regular demand-driven dialogue with countries and outreach to the different groups of stakeholders, and through effective and targeted communications.	Medium	Uptake of capacity development support and technical assistance is often difficult to measure and report.
Environmental concerns and societal acceptance of RE projects.	Likely	Medium	These issues need to be addressed in IRENA's publications, communications and learning opportunities etc.	Minor (to the project, as it is not implementing)	While IRENA does not implement project on the ground, large-scale RE projects will have environmental impacts. Also, the not-in-my backyard (NIMBY) syndrome related to solar

⁸⁰ This category covers include two kinds of risk: (1) the potential for a project to fail to achieve its objectives; and (2) the potential for the project to cause harm in the external environment. With regard to (1), the risk factors for project failure include many of the contextual risks outlined above, as well as institutional and political factors.

				on the ground)	and wind projects are well-known in many countries.
An energy transition that does not take sufficient account of socio-economic aspects will not be sustainable.	Unlikely	Major	This risk (also alluded to above under contextual risks) is mitigated by IRENA's overall attention to the just and equitable transition that is the overall theme of its MTS 2023-2027. Moreover, the 2020 Evaluation of IRENA's MTR found that IRENA's conceptualisation (and pursuit) of energy as a means to delivering higher-level socio-economic and climate goals, rather than energy as an end in itself, was important.	Minor (for this project)	An energy transition that is narrowly focused on energy as a "sector" and does not take the socio-economic aspects into account, is not likely to succeed.
Insufficient IRENA	Unlikely	Major	This risk is to some extent mitigated by the Danish Contribution funding of two dedicated project staff positions but will need to be closely monitored during implementation.	Minor	The Evaluation in 2020 of the IRENA MTS found that the <i>"organisational leanness also introduces a level of risk given the scope of IRENA's mandate and the number of initiatives and activities."</i> and <i>"The major risk the evaluation team see that IRENA need to manage is the potential of trying to do too much with finite resources and potentially a) over-reach, leading to a staff team that become overstretched and less effective and b) become perceived as undertaking work which is either outside their core comparative advantage or undermines where that value comes from"</i> .
Institutional risks⁸¹:					
Risk Factor	Likelihood	Impact	Risk response	Residual risk	Background to assessment
If the project fails to deliver its expected results it will reflect negatively on IRENA, MFA and MCEU.	Unlikely	Major	The results framework to be developed during the Inception Phase must have SMART indicators designed with realistic and measurable targets A communication strategy (Annex 7) will ensure that results and achievements are communicated effectively to key audiences, and impact drivers will be used proactively.	Minor but needs to be closely monitored by the SC	This project is strategic and high-profiled, and the project partners' reputation is important in setting realistic targets.

⁸¹ Also sometimes referred to as "political risk", this category includes "internal" risk from the perspective of the donor or its implementing partner. It includes the range of ways in which an organisation and its staff or stakeholders may be adversely affected by interventions and comprises operational security risks, financial and fiduciary risks, and political and reputational risks.

The project could risk duplicating activities and and/or fail to recognise interfaces and potential synergies with other initiatives in a crowded arena.	Likely	Major	IRENA's global mandate and membership and its many collaborative partnerships with other development institutions provide good opportunities for synergy and avoidance of overlap. This will be facilitated by IRENA's MTS-mandated function as a global centre of excellence for energy transformation. Also, the Agency's role as global voice of renewables helps shape the global discourse on energy transformation by providing relevant timely, high-quality information and access to data on renewable energy. And IRENA's role as a global network hub provides an inclusive platform for all stakeholders to foster action, convergence of efforts and knowledge sharing for impact on the ground. Continued attention to synergy and coordination will be needed during project implementation.	Major	The project will operate in a crowded and extremely dynamic field with many development partners and initiatives, and the incentives for coordination and synergy may not always be effective.
Small RE projects in SIDS make it more difficult to attract investors and finance.	Likely	Major	Use experience from the IRENA SIDS marketplace. Consider bundling of potential small RE projects to achieve economies of scale and better financial terms for follow-up investments. Close dialogue with financial institutions.	Minor	SIDS are small and geographically scattered, and in many cases have weak institutions. This can make it more difficult to attract investors and finance, thus limiting project impact.
If parties external to IRENA engage in fraud, corruption or misconduct under activities funded by the project, this could entail reputational risk.	Unlikely	Minor	The project will follow IRENA's financial rules, and this risk is considered unlikely.	Insignificant	Any corruption related to project activities could negatively affect IRENA as the implementing agency and the Danish MFA and MCEU

Annex 5: Key results and lessons learned from the Danish voluntary contributions for SIDS LHI and LTP

Box A5.1: Key results and lessons learned from the Danish Contribution for SIDS LHI 2.0:

The SIDS LHI 2.0 Project (2019-2023, DKK 50 million) contributes to IRENA's support to SIDS that participate in the SIDS Lighthouses Initiative and are ODA eligible. The Project objective is: Participating SIDS are assisted in the green energy transition that will mitigate greenhouse gas emissions and strengthen resilience in SIDS' adaptation to climate change and improve energy security, thus contributing to SIDS meeting their set NDC targets and contributing to the achievement of the SDGs. The four intended Outcomes are: 1. Knowledge on renewable energy in SIDS created and shared; 2. Institutional and technical capacity increased leading to an improved enabling environment for renewables in SIDS; 3. More robust and sustainable renewables sector development, with support to project development and facilitation of access to finance for renewable energy projects; 4. Partnerships within SIDS and with development partners and global energy initiatives strengthened.

Key results highlighted by IRENA:

- IRENA's analysis of SIDS' NDC submissions revealed that they would entail additional renewable capacity additions of 6.8 GW, which would allow SIDS to achieve 10 GW of installed renewable energy capacity by 2030. This would be equivalent to a quadrupling of the average capacity growth observed in the past seven years.
- Through joint collaborations and partnerships, 23 SIDS continue to lead by example in submitting their second NDCs to the United Nations Framework Convention on Climate Change (UNFCCC)⁸².
- The initial LHI targets for 2020⁸³ and 2023⁸⁴ have been met and exceeded ahead of schedule. The partners of the Initiative have now agreed to a new target of having installed renewable energy capacity of 10 gigawatts (GW) by 2030. IRENA provided NDC enhancement and implementation support through 36 activities to 18 SIDS, which represent 50% of the total number of SIDS that are LHI partners.
- Strategic engagements have been established with the Alliance of Small Island States (AOSIS), that represents the interests of 39 SIDS in international climate change, sustainable development negotiations and processes. A joint energy compact was submitted to the UN to support the NDC implementation of all SIDS. A Memorandum of Understanding (MOU) between IRENA and AOSIS was also signed in the margins of COP26, which further increases the visibility of the work undertaken through the SIDS LHI.
- With support from the Danida project, IRENA has expanded its [Solar City Simulator](#) a web-platform that supports countries in assessing their cities' potential for rooftop solar PV installations by testing installation scenarios, policy instruments, and incentives schemes.
- With partial Danida support IRENA has operationalised its Climate Investment Platform ([CIP](#)) that now has over 3339 partners and 340 projects that facilitate the scaling-up of RE technologies through tailored technical assistance for projects to gain commercial feasibility readiness and matchmaking these with registered financial institutions.
- The report, [Offshore Renewables: An Action Agenda for Deployment – a contribution to the G20 Presidency](#), released in July 2021, is an example of high level support informing G20 Ministerial discussions, including how to support the deployment of RE technologies in islands.

Key lessons highlighted by IRENA:

- SIDS bear the consequences of a disproportionate cost of climate change related impacts, and two main problems afflicting SIDS have been accentuated by recent development: the economic devastation resulting from the COVID-19 pandemic and the intensification of climate disasters and phenomena. Vital economic sectors such as tourism were hard-hit by the collapse of international travel. Fuel supply chains were subject to sudden constraints, which proved to be particularly damaging for fossil-fuels and import-dependent nations such as SIDS. This has also impacted the implementation of their energy transition plans. Both RE

⁸² Antigua and Barbuda, Barbados, Belize, Cabo Verde, Comoros, Cuba, Dominican Republic, Fiji, Grenada, Jamaica, Maldives, Marshall Islands, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Samoa, São Tomé and Príncipe, Seychelles, Singapore, Solomon Islands, Suriname, Tonga, and Vanuatu.

⁸³ The initial SIDS LHI targets set in 2014 to be achieved by 2020 were: i) USD 500 million mobilised; ii) 120 megawatts (MW) of new renewable energy generation of which: new solar PV (100 MW), new wind (20 MW), significant quantities of small hydro, geothermal, and marine technology; iii) All participating SIDS develop renewable energy roadmaps.

⁸⁴ The target set in 2018 was 10 GW of total renewable energy installed capacity in all SIDS by 2023.

financing and RE capacity additions have slowed in the past couple of years after achieving record growth during the previous decade. SIDS are looking at ways to address issues pertaining to financing for adaptation measures, as well as the role of the energy-climate nexus and how it can foster resilience and decentralised RE solutions to “build back different” after climate disasters.

- While there is willingness by governments and partners to undertake implementation in SIDS, the availability of platforms with the preferred form of financing (grants), do not meet existing demand.
- It is important to continuously pursue and tailor financing mechanisms and their criteria to ensure appropriateness to SIDS and their unique contexts and socio-economic vulnerabilities.
- SIDS still consider the process to access grant and concessional loan financing burdensome and bureaucratic.
- While grants may still play an important role in specific contexts and for emerging markets and technologies, RE development approaches which are exclusively based on grants may crowd out business models and investment cases by local private sector.

Box A5.2: Key results and lessons learned from the Danish Contribution for LTP.

The LTP Project (2018-December 2022, after no-cost-extension, DKK 40 million) had the objective of supporting partner countries (particularly members states of the Association of Southeast Asian Nations (ASEAN), but also wider South-South cooperation including with African Countries) in their efforts to achieve low-carbon development, implement the Paris Agreement on Climate Change, realize NDCs, and meet SDG7 target 7.2: by 2030, increase substantially the share of RE in the global energy mix; and target 7.3 double the global rate of improvement in EE, as well as SDG13 target 13.2: Integrate climate change measures into national policies, strategies and planning. Project outcomes were in 5 areas: Regional analysis and energy transition system dynamics; 2. Socio-economic benefits of RE deployment; 3. Enhanced South-South cooperation; 4. Wider adoption of long-term model-based energy scenarios in G20 countries promoted by the Clean Energy Ministerial campaign; 5. The Clean Energy Investment Coalition had contributed to the UN Secretary-General’s Climate Summit and increased commitments to clean energy investment.

Key results highlighted by IRENA:

- South-South cooperation and best practice exchange was supported through IRENA webinars and events with participants noting the importance of such gatherings. See for example [Long-term Energy Scenarios \(LTES\) webinar series outcome report](#) or [G20 Investment Forum on Energy Transitions](#).
- The project produced key institutional knowledge products for its Members including [2nd Renewable Energy Outlook for ASEAN: Towards a regional energy transition](#); an [Indonesia Energy Transition Outlook](#); and contributed to a publication called [Scenarios for the Energy Transition: Experiences and good practices in Latin America and the Caribbean](#)
- The African Continental Power Systems Master Plan (CMP), an ongoing initiative led by the African Union Development Agency (AUDA-NEPAD), aims to establish a long-term continent-wide planning process for power generation and transmission involving all five African power pools. IRENA together with the International Atomic Energy Agency (IAEA) supported this initiative as officially endorsed modelling partners. As one example, IRENA supported the government of Cameroon to enhance energy planning capacity within national institutions on long-term planning and the development of energy scenarios. Cameroon amongst others noted that the training empowered Cameroon to develop an Energy Masterplan as well as design of the national planning infrastructure.
- Another example is that recommendations emerging from an Egypt report on socio-economic impacts informed COP input provided to Egypt in their COP27 (2022) Presidency role.

Key lessons learned highlighted by IRENA:

- The COVID-19 pandemic caused a shifting of priorities by governments which delayed some plans. IRENA mitigated this by leveraging its networks. The COVID-19 pandemic also had consequences for the hosting of physical events during 2020-2021. To mitigate, IRENA held sessions, events, and other forms of consultations virtually. This allowed work to continue but slowed progress due to the shifting of plans and the necessity to hold more sessions etc., with fewer people, based on time-zones restrictions.
- Given the complexity of analysis undertaken, it was concluded to be easier to engage with policy makers and counterparts in physical meetings/workshops/roundtables.
- Finally, an increased interest from Member States put some strain on the Agency’s human resources. Many requests have been received for further work. This is the case for example for socio-economic impact

assessments and LTES related activities. IRENA continues to engage with countries to support them with socioeconomic impact assessment for informed policy making.

Key MFA MTR conclusions and lessons:

- The Contribution was from the outset highly relevant to and directly aligned with the emerging key international energy and climate policies, in particular the priorities to RE under the Paris Agreement and in the SDGs – and in general the project was coherent and compatible with interventions by other international organizations.
- IRENA's comparative advantage was confirmed by stakeholders to be its global and regional approach and outreach, its generally holistic approach and its outlook as international energy organisation. Also, its capacity to perform socio-economic analyses e.g. in end use sectors/hard abatement sectors were considered relevant and attractive. Countries and stakeholders also emphasised IRENA's legitimacy as an intergovernmental organisation.
- There were synergies and complementarities that should be further exploited and supported, e.g. by matching IRENAs regional (ASEAN) perspective with the Danish Energy Partnership Programme (DEPP) country and provincial perspective on long term planning, and on IRENAs socio-economic impact analysis and enabling policy frameworks that could be very useful to DEPP supported activities at the provincial and local level.
- Several similarities were found between the DEA managed GtG programmes and the IRENA Contribution on LTP, in particular in activities on long term energy planning and scenario development. Given the opportunities for synergies and the risks for duplication, this called for closer coordination, as was found to be the case in Indonesia.
- Covid-19 disrupted workstreams making it difficult to engage countries through in-person meetings and workshops and also resulting in delays on the recipient countries side.
- Evidence was not found of the draft annual work plans and the risk management monitoring/updates called for in the Project Document, and it was found difficult to assess the available budget versus the output targets and the current stage of implementation. Reports to the Steering Committee (SC) and the SC minutes lacked specific details that could improve the oversight by the SC. Therefore, it was suggested to produce a more consolidated work plan ahead of each year's activities with a breakdown into semesters and identification of relevant milestones linked to intermediate milestone indicators, and progress reporting should pay more attention to the target and output level, also to allow for better reporting on the achievement of the overall outcome of the project.

Annex 6: List of Supplementary Materials

Document title	Source	Internet Links
Decision on Medium-Term Strategy 2023-2027 (IRENA Official Document A/13/DC/1)	IRENA	Link
Report of the Director-General - Medium-Term Strategy 2023-2027 (IRENA Official Document A/13/4)	IRENA	Link
Background Note High-level session on World Energy Transition – The Global Stocktake	IRENA	Link
African Continental Power Systems Master Plan (CMP) - Establishing continent wide planning process	IRENA	Link
Global Offshore Wind Alliance: Offshore Wind as a Key Solution to the Climate and Energy Security Crises (background note, Assembly 13 side event)	IRENA	Link
SIDS Ministerial - Climate Pledges to Action: Amplifying Energy Transition for Sustainable Development in Small Island Developing States	IRENA	Link
Project Progress report to the Steering Committee for the Danish Voluntary Contribution to SIDS Lighthouses (1 December 2022)	IRENA	N/A
Project Progress reports to the Steering Committee for the Danish Voluntary Contribution to Long Term Planning (25 March 2022 and 24 November 2022)	IRENA	N/A
IRENA new information and press releases in connection with COP 27	IRENA	Link
Renewable Energy Targets in 2022 - A guide to design (November 2022)	IRENA	Link
Conclusions from the Danida Programme Committee meeting on 25 October 2022 (MFA/ELK, dated 11 November 2022)	MFA/ELK	N/A
Annual Report of the Director-General on the Implementation of the Work Programme and Budget for 2022-2023 (IRENA Document C_24_2)	IRENA	Link
Draft Medium-term Strategy 2023-2027 (IRENA Document C_24_3)	IRENA	Link
The Breakthrough Agenda Report 2022 (September 2022)	IRENA, IEA, UN Climate Change High Level Champions	Link
IRENA Renewable Energy Outlook for ASEAN (2nd edition, September 2022)	IRENA	Link
Tracking SDG 7 - The Energy Progress Report (June 2022)	IRENA with other custodian agencies	Link
Renewable Power Generation Costs in 2021 (July 2022)	IRENA	Link
The Sustainable Development Goals Report 2022	UN	Link
SIDS Lighthouses Initiative, Progress and Way Forward, Progress Report for 2021 (August 2022)	IRENA/SIDS LHI	Link
IPCC Working Group II report, Climate Change 2022: Impacts, Adaptation and Vulnerability	IPCC	Link
NDCs and Renewable Energy Targets in 2021 (January 2022)	IRENA	Link
Draft Framework for the Medium-Term Strategy for 2023-2027 (Document C/23/3, 25 April 2022)	IRENA	Link
World Energy Transitions Outlook: 1.5°C Pathway (2nd edition, March 2022)	IRENA	Link
Renewable Energy Market Analysis: Africa and its Regions (January 2022)	IRENA in collaboration with AfDB	Link
Danida Mid-term Review of the Long-Term Planning Project (December 2021)	MFA	N/A

Report of the Director-General - Work Programme and Budget for 2022-2023 (Document A/12/4, 14 December 2021)	IRENA	Link
The COP26 Just Transition Declaration	Signatory governments	Link
Renewable Energy and Jobs – Annual Review 2022	IRENA in association with ILO	Link
Overview of IRENA’s NDC Support in Small Island Developing States	IRENA	N/A
Medium-term Strategy 2018-2022 - Report of the Director-General (Document A/8/11, 13 January 2018)	IRENA	Link
Note by the Director-General - External Evaluation: Midterm Evaluation of IRENA’s Medium Term Strategy 2018-2022, Summary Report (Document A/11/13, 18 December 2020)	IRENA/ IOC Parc	Link
IRENA Financial Procedures (14 December 2011)	IRENA	Link
Press Release on IRENA and IAEA to Help African Union Develop Continental Power Master Plan with EU support	IRENA	Link
Energy Poverty: addressing the intersection of Sustainable Development Goal 7 (SDG7), development and resilience - Executive Note for the G20 Energy Transition Working Group and the G20 Climate Sustainability Working Group (2021):	G20/ SEforALL	Link
Denmark’s strategy for development cooperation “The World We Share” (August 2021)	Ministry of Foreign Affairs of Denmark,	Link
Danish Energy Agency Global Cooperation	DEA	Link
Approach Note on Fighting Poverty and Inequality	MFA/Danida	Link
How To Note on Energy Transition and Emission Reductions in Developing Countries	MFA/Danida	Link

Annex 7: Plan for Communication of Results

What? (the message)	When? (the timing)	How? (the mechanism)	Audience(s)	Responsible
<p>Voluntary contribution from Denmark to IRENA 2023-2027 approved.</p> <p>Data, analysis, best practice exchange, and knowledge transfer build capacity among decision-makers, leading to increased access to clean energy for disadvantaged population groups and CO₂ emission reductions.</p> <p>Increased share of RE in the energy mix leads to increased energy security and diversification of fuel sources and supply chains.</p> <p>Increased competitiveness of RE technologies leads to reduced electricity generation costs and improved affordability for consumers, particularly the more disadvantaged groups.</p> <p>Socio-economic footprint analysis along the energy ladder, analysis on inclusive and gender sensitive transitions, and related capacity development lead to increased employment from RE deployment.</p> <p>Analysis on regulation and policies, technical assistance, and convening activities for the development of green hydrogen and offshore wind, lead to increased public and private investment in these RE technologies.</p> <p>Impact stories based on partner country examples.</p>	<p>When donor agreement signed.</p> <p>As soon as the project has generated new information and evidence of results.</p> <p>At major IRENA events, including Council and Assembly meetings.</p> <p>At COPs and other global events.</p>	<p>IRENA website and newsletter, as well as partner websites (concerning joint events etc).</p> <p>IRENA social media content and innovative campaigns.</p> <p>IRENA governing body documents.</p> <p>Danida project Steering Committee reports.</p>	<p>IRENA Members and partners.</p> <p>Political decision makers and practitioners.</p> <p>The RE professional community.</p> <p>The general public.</p> <p>Danida Steering Committee members.</p>	IRENA
Denmark contributes to IRENA 2023-2027 to support African and Asian developing countries and emerging economies to achieve their	From the approval of the project and throughout the	MCEU website. State of Green. Danish Energy Agency.	Danish resource base and Danish taxpayers. International development partners.	MCEU

<p>Sustainable Development Goals and to make the necessary emission reductions by 2030 to stay on the 1.5C pathway consistent with the Paris Agreement on Climate Change and Danish policies and strategies for development cooperation.</p> <p>Substantive messages as above for IRENA.</p> <p>Examples of synergies between Danish support to IRENA and bilateral cooperation.</p>	project duration and beyond.			
Key summary project information, results targets and results updates against targets.	When project approved updated regularly/annually	Danida Open Aid	The Danish resource base and taxpayers.	MFA/GDK
<p>Support from Denmark to IRENA 2023-2027 approved.</p> <p>Substantive messages as above for IRENA.</p> <p>Results and impact stories with country examples.</p>	<p>When donor agreement signed.</p> <p>During implementation as soon as available.</p>	<p>MFA/Danida website and newsletters.</p> <p>World's Best News campaign.</p> <p>Websites of Embassies of Denmark in priority countries for IRENA support.</p> <p>Danida Open Aid.</p>	The Danish resource base and taxpayers.	MFA/GDK
Impact stories, replicable examples of good practice.	During implementation as soon as available.	Websites, newsletters, seminars.	Decision makers and the professional community in public and private sectors and academia.	Beneficiary institutions in partner countries and regions

Annex 8: Process Action Plan (PAP)

Activity	Timing/deadline	Responsible
Identification Note	June 2022	GDK with MCEU and DEA inputs
Concept Note	30 September	GDK with IRENA and MCEU and consultant inputs
Programme Committee meeting	25 October	ELK
Formal Conclusions from the Programme Committee	11 November	ELK
Draft Project Document submitted to appraisal team	16 December 2022	GDK
Approval of IRENA MTS 2023-2027 at the thirteenth session of the IRENA Assembly	14-15 January 2023	IRENA
Appraisal	January/early February	ELK
Draft appraisal report	9 February	ELK
Final appraisal report	14 April	ELK
Finalisation of Project Document based on appraisal recommendations	March-April	Consultant with GDK and MCEU based on IRENA substantive inputs
Final Project Document submitted to the secretariat for the Council for Development Policy	21 April	GDK
Meeting of the Council for Development Policy	11 May	ELK
Approval by the Danish Minister for Development Cooperation	May	Minister
Approval by the Finance Committee of the Danish Parliament	June	Finance Committee
Signing of Contribution Agreement with IRENA	July	GDK
Inception phase	July-December 2023	IRENA
Stocktaking on IRENA's development of its Agency Results Framework	IRENA Council meeting fall 2023	IRENA /GDK/ MCEU
Inception Review	Late 2023	ELK
MFA financial management capacity assessment of IRENA	tbd	MFA
In-person Steering Committee meeting to agree on follow-up to the MFA Inception Review, and to discuss and approve IRENA's Inception Report, including first year work plan and budget for the Danish Contribution and its alignment to the IRENA Agency results framework.	By end of Inception Period	IRENA /GDK/ MCEU
Meetings two times a year of the IRENA/Denmark Steering Committee: i) after the IRENA Assembly in January; and ii) around the IRENA Council in September/October.	As per schedule	IRENA /GDK/ MCEU
Project implementation	Q3 2023-end Q4 2027	IRENA
Mandatory Mid-Term Review (MTR)	Mid-2025	ELK
End of project implementation	End of 2027	IRENA
Final reporting and closure	Early 2028	IRENA and GDK

Preparation process for the proposed Danish Contribution

As a supplement to the PAP above, the preparation process for this Contribution is briefly summarised here; it has been undertaken in parallel with the development of IRENA's now approved MTS 2023-2027, ensuring alignment of support to priorities decided by IRENA Membership including Denmark. The formulation has been done in close cooperation between MFA GDK and IRENA in liaison with

MCEU and with the support of an external process consultant. Inputs from the Danish Energy Agency and feedback from Danish Embassies in South Africa, Kenya, and Indonesia were considered in the process. A Concept Note was presented to the Danida Programme Committee (PC) on 25 October 2022 after a public consultation process and detailed review and quality assurance by management and staff of GDK, MCEU, and IRENA. Detailed comments on the Concept Note from six MFA departments were also considered, and the formal PC Conclusions⁸⁵ made available on 11 November 2022 were taken into account before presenting a draft Project Document (PD) for appraisal on 12 December 2022. The Danish general election on 1 November 2022 and the process of forming a new Danish Government influenced the preparatory process timeline. Following the MFA's appraisal in January-early February 2023 and the final Appraisal Report in mid-April, the PD was finalised in March/April in response to the appraisal recommendations and also informed by the outcomes of the IRENA 13th Assembly held in Abu Dhabi during 14-15 January and attended by GDK and MCEU.

⁸⁵ The key PC comments and conclusions included that: the PD should further elaborate on results and lessons learned from previous/ongoing Danish support to IRENA; further information on the complementarities/potential overlaps between support to IRENA and Danish support to other related institutions and projects should be provided; the PD should further define Danish focus areas including how support would be provided to African countries, and to NDC-P and GOWA and realistic results related to IRENA's activities should be defined with more information on drivers and assumptions; how the Danish Steering Committee will be linked to IRENA's risk management system should be described; a financial management capacity assessments should be included and ODA eligibility should be monitored. It should be described how the Steering Committee linked to IRENA's planning cycle. More information on IRENA's analytical work on the socio-economic implications of the energy transition outside the energy sector could also be provided and the poverty orientation would be further addressed.

Annex 9: IRENA Collaboration and Linkages with other International Development Institutions

The international institutional architecture on sustainable energy and climate action is complex and dynamic. IRENA is engaged in a wide range of partnerships and collaborative efforts with other actors. The Denmark-IRENA Strategic Partnership agreement signed on 26 September 2020 includes as one of its priority areas *“Strengthening of synergies and collaboration between stakeholders in the international climate/energy architecture based on comparative advantages and to ensure higher ambitions and faster implementation of NDCs at the country level”*.

This annex contains a list of selected organisations and actors in the international institutional architecture and their collaboration with IRENA. Main emphasis is on institutions relevant for this project’s geographic priorities in Africa and Asia and on institutions that are also supported by Denmark.

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
African Development Bank (AfDB)	Regional development bank, with the overarching objective to spur sustainable economic development and social progress in its regional member countries (RMCs), thus contributing to poverty reduction. The Sustainable Energy Fund for Africa (SEFA) is multi-donor Special Fund managed by AfDB that provides catalytic finance to unlock private sector investments in renewable energy and energy efficiency.	Under a Declaration of Intent, IRENA and AfDB collaborate on supporting Africa’s energy transition, including co-organising RE investment forums as part of IRENA’s contribution to the Climate Investment Platform, and collaboration on AfDB’s annual Africa Investment Forum. Concrete support for enhancing the role of RE in NDCs and sustainable development objectives and to working closely to advance RE across the continent to bolster Africa’s response to Covid-19 focusing on innovative solutions to drive the development of RE including decentralised systems, and to increase access to energy across the continent. The 2022 IRENA report (in cooperation with AfDB) <i>“Renewable Energy Market Analysis: Africa and its Regions”</i> shows that Africa is prospering significantly from development enabled by RE while greatly improving energy access and offering profound welfare and environmental benefits.	Yes
African Union Commission (AUC)	Secretariat of the African Union that includes an Infrastructure and Energy Department. Implements Agenda 2063. The African Continental Power Systems Master Plan (CMP) is an ongoing initiative led by the AUC’s Development Agency (AUDA-NEPAD).	IRENA’s CMP support is a multi-year program under which the agency will assist AUDA-NEPAD and the five Power Pools with model building, data sharing and knowledge transfer to enable the creation of a smart power systems master plan that promotes access to affordable, reliable and sustainable electricity supplies across the continent.	Yes

⁸⁶ Direct or indirect support in sustainable energy and climate change mitigation/adaptation.

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark⁸⁶
Alliance of Small Island States (AOSIS)	AOSIS is an intergovernmental advocacy and negotiating organisation representing the interests of 39 small island and low-lying coastal developing states in international climate change, sustainable development negotiations and processes.	As the LHI's co-ordinator, IRENA facilitates and enhances dialogue at all levels, including through the operationalisation of the initiatives led by AOSIS. An IRENA-AOSIS Energy Compact was launched at the High-level Dialogue on Energy in September 2021. Through this Energy Compact, the two organisations re-affirmed the SIDS Climate Action Summit Package, which includes ambitious political action to support the achievement of as much as 100% RE and EE targets in the power sector by 2030. IRENA and AOSIS further strengthened their collaboration by signing of the MOU on the margins of COP26. that will strengthen collaboration to mobilise climate finance and to advance the deployment of RE in SIDS including information and knowledge exchange, tailored capacity building activities, and the publication of technical papers on energy transition and climate action.	Only through SIDS LHI
Association of Southeast Asian Nations (ASEAN)	ASEAN is an intergovernmental organization of ten Southeast Asian Member States: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. The ASEAN Centre for Energy (ACE) is an intergovernmental organisation within the ASEAN structure that represents the 10 ASEAN Member States' interests in the energy sector.	IRENA has worked closely with ACE and ASEAN's ten member states to find ways to accelerate RE deployment. In 2016 IRENA/ACE produced the Renewable Energy Outlook for ASEAN. An IRENA/ASEAN MoU was signed in 2018 on support for the realisation of the ASEAN Plan of Action on Energy Cooperation (APAEC) 2016-2025 and to facilitate the scaling-up of RE in ASEAN as a joint action plan under the Renewable Energy Sub-sector Network (RE-SSN). Cooperation has included a virtual event entitled 'Accelerating the Southeast Asian Energy Transformation hosted by IRENA and ACE. Denmark's VC to IRENA for the Long-Term Planning Project (2018-2021) had a strong focus on the ASEAN region and outputs included power system model and long-term scenario-based planning approach applied in ASEAN countries and increased RE targets.	No
C40 cities	C40 is a network of mayors of nearly 100 world-leading cities collaborating to deliver the urgent action needed to confront the climate crisis, deploying a science-based and collaborative approach to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities.	The IRENA 2021 publication "Renewable Energy Policies for Cities" makes several references to C40 including its Fossil Fuel-Free Streets Declaration.	Yes
Climate Investment Funds (CIF)	CIF is one of the world's largest and most ambitious multilateral climate finance mechanisms for	Under MoU signed in October 2021, CIF and IRENA are joining forces to accelerate investment in clean energy globally, facilitate knowledge	Yes

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
	developing countries seeking to shift to low carbon and climate resilient development, and to accelerate climate action. In partnership with governments, private sector, civil society, local communities, and six major multilateral development banks (MDBs), CIF provides competitive financing that reduces risk for investors, lowering barriers to piloting new technologies, scaling up proven solutions, opening up sustainable markets, and mobilizing private sector capital.	sharing on energy transitions to promote climate smart development, and joint analytical activities foster evidence-based investment and policymaking on energy transition in cooperation with governments, the private sector, civil society, local communities and major multilateral development banks.	
Clean Energy Ministerial (CEM)	CEM is a high-level global forum to promote policies and programmes that advance clean energy technology, to share lessons learned and best practices, and to encourage the transition to a global clean energy economy.	The Global Atlas, launched jointly by IRENA and CEM, is the largest ever initiative undertaken to assess RE potentials on a global scale, initially covering wind and solar and to progressively extend to other RE resources.	Yes
Climate Technology Centre and Network (CTCN)	CTCN is the operational arm of the UNFCCC Technology Mechanism, hosted by the United Nations Environment Programme (UNEP) and the UN Industrial Development Organization (UNIDO).	A CTCN/IRENA Webinar was held in 2019 on innovations for the power sector transformation, with focus on blockchain technology and based on the IRENA Innovation Landscape Report “The evolving role of Blockchain in the power sector”.	Yes
Coalition for Action	Over 120 members, including private sector companies, industry associations, civil society, research institutes and intergovernmental organisations	Country-specific papers with recommendations to enable the scaling up of renewable energy investments. recommendations to policy makers in order to successfully establish tracking systems for green hydrogen based on internationally accepted standards.	No
Energy Transition Council (ETC)	Established in the process leading up to COP 26 in Glasgow in 2021 ETC aims to make clean and sustainable power the most affordable and reliable option for countries to meet their power needs efficiently and accelerate their clean energy transition – moving away from coal and other fossil fuels – while ensuring a just transition and improved energy access for all. ETC continues after COP26, at least until COP30 in 2025.	IRENA is member of ETC.	Yes

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark⁸⁶
European Union (EU)/European Commission (EC)	The EU has 27 member countries. The European Green Deal aims to make Europe the world's first climate-neutral continent, in part by developing cleaner sources of energy and green technologies. The 'Fit for 55' package includes the RE directive and the EE directive. The EC through policy dialogue and investment in renewable energy, assists partner developing countries transition towards modern, safe, and sustainable energy systems, to increase access to energy services and boost their economy, while contributing to the global fight against climate change.	In energy compact launched in connection with the UN connection with the 2021 UN High-Level Dialogue on Energy. Together with the European Commission, IRENA with EU committed to preparing Regional Energy Transition Outlooks for Africa, Latin America and the Caribbean and Europe including concrete policy recommendations to achieve SDG7 in line with the 1.5 degree Paris objective.	Denmark is EU member state
G7	G7 is an inter-governmental political forum consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States. In addition, the European Union is a "non-enumerated member".	The G7 Climate, Energy and Environment Ministers' Communiqué (Berlin, May 2022) specifically mentions IRENA with regard to follow-up on gender equality and diversity in the energy sector and on the central role of low-carbon and renewable hydrogen and its derivatives such as ammonia for achieving net zero emissions and an energy-secure future.	Yes
G20	G20 is an intergovernmental forum comprising 19 countries and the European Union (EU). It works to address major issues related to the global economy, such as international financial stability, climate change mitigation, and sustainable development	G20 has previously adopted the IRENA "Toolkit of Voluntary Options for Renewable Energy Deployment", under which one of five focus areas is the development of roadmaps for RE deployment in the G20. The G20 Investment Forum 2022 (31 August to 1 September) was co-hosted by IRENA and the G20 Presidency of Indonesia.	
Green Climate Fund (GCF)	(GCF) is the world's largest climate fund and a critical element of the Paris Agreement, mandated to support developing countries raise and realise their NDC ambitions towards low emissions, climate-resilient pathways.	The Climate Investment Platform (CIP) is a joint initiative of IRENA, UNDP, and SEforALL, in collaboration GCF. CIP's mandate is to increase capital mobilisation and RE impact investing in developing countries. CIP implementation modalities include Regional Investment Forums.	Yes
Global Green Growth Institute (GGGI)	Based in Seoul, South Korea, GGGI is a treaty-based international, inter-governmental organization dedicated to supporting and promoting strong, inclusive and sustainable economic growth in developing countries and emerging economies.	Memorandum of Understanding (MoU) signed in March 2019 to cooperate on advancing renewable energy in pursuit of green growth, sustainable development and a climate-resilient low-carbon future, jointly carrying out analytical projects on renewable energy-based solutions for green growth; disseminating and sharing green growth and renewable energy knowledge through hosting joint events and forums; and collaborating on the implementation of programmatic activities. The collaborative work will help build capacity and provide	Yes

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
		advisory services to support the deployment of renewable energy and energy transformation for green growth. GGGI and IRENA have co-hosted several knowledge events and workshops.	
NDC Partnership (NDC-P)	The NDC Partnership brings together more than 200 members, including more than 115 countries, developed and developing, and more than 80 institutions to create and deliver on ambitious climate action that helps achieve the Paris Agreement and the Sustainable Development Goals (SDGs).	IRENA is responding to most of the energy requests that come from developing countries through the NDC-P. To reduce transaction costs of applying for resources from the NDC Partnership, a budget is allocated for such responses in this proposed project, which will strengthen synergies between IRENA and the NDC-P and improve the energy parts of NDCs. Also, NDC-P support for the development of the publication “NDCs and Renewable Energy Targets in 2021” under the Climate Action Enhancement Package (CAEP).	Yes
Intergovernmental Panel on Climate Change (IPCC)	The IPCC is the UN body for assessing the science related to climate change. It provides regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation	IRENA and IPCC signed an MoU to work together to promote the widespread and increased adoption and sustainable use of all forms of renewable energy through dialogues, expert meetings and workshops in coordination with the relevant IPCC Working Groups/Task Force Bureau	
International Energy Agency (IEA)	IEA is the global energy agency playing a leading role in the ecosystem of international organisations addressing clean energy transitions in emerging economies.	Support for the COP27 Presidency Meeting about energy sector climate resilience, energy sector climate resilience brief profiles for MENA countries, coordination meeting with RETA partners, analysis resulting from RETA work, energy sector climate resilience brief profiles for MENA countries and climate resilience in MENA	Yes
International Institute for Sustainable Development (IISD)	The IISD Global Subsidies Initiative (GSI) supports international processes, national governments, and civil society organizations to align subsidies with sustainable development.	It is stated in IISD GSI's website that IRENA is among institutions “we work with” – but no details are given.	Yes
International Labour Organisation (ILO)	ILO works to promote rights at work, encourage decent employment opportunities, enhance social protection and strengthen dialogue on work-related issues. ILO's unique tripartite structure gives an equal voice to workers, employers and governments.	IRENA and ILO have in October 2021 signed an agreement to reinforce their cooperation, to promote employment and decent jobs for women and men in an energy transition that leaves no one behind. Both organisations already collaborate on a number of joint initiatives, such as the “Sustainable Energy and Jobs Platform (SEJP)” under IRENA's Coalition for Action, ILO's Just Transition and Green Job	

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
		Initiatives based on the ILO Tripartite Guidelines for a Just Transition Towards Environmentally Sustainable Economies and Societies for All, and IRENA's Collaborative Framework on Just and Inclusive Energy Transition. The eighth edition of "Renewable Energy and Jobs: Annual Review 2021" was released in October 2021 by the IRENA in collaboration with ILO at a high-level opening of IRENA's Collaborative Framework on Just and Inclusive Transitions.	
Sustainable Energy for All (SEforALL)	SEforALL is an international organization that works in partnership with the United Nations and leaders in government, the private sector, financial institutions, civil society and philanthropies to drive faster action towards the achievement of SDG7.	A joint initiative of IRENA, UNDP, and SEforALL, in collaboration GCF is the Climate Investment Platform (CIP) that increases capital mobilisation and RE impact by investing in developing countries. CIP implementation modalities include Regional Investment Forums. IRENA-SEforALL Energy Compact launched in connection with the 2021 UN High-Level Dialogue on Energy.	Yes
UNDP	As the UN's development agency, UNDP plays a critical role in helping countries achieve the SDGs. UNDP provides financial and technical support to countries to design and implement NDCs under the Paris Agreement.	UNDP and IRENA in 2019 announced a global partnership to accelerate low-carbon energy transition and offer concrete steps to achieve sustainable development, including joint initiatives aimed at accelerating the implementation of Agenda 2030, and stimulating RE investments in developing countries. The Climate Investment Platform: A joint initiative of IRENA, UNDP, and SEforALL, in collaboration GCF. CIP's mandate is to increase capital mobilisation and RE impact investing in developing countries. CIP implementation modalities include Regional Investment Forums.	Yes
UNDESA	The United Nations High-level Political Forum on Sustainable Development (HLPF) is the central United Nations platform for the follow-up and review of the 2030 Agenda for Sustainable Development and the SDGs. UNDESA, as the secretariat for HLPF, through its Division for Sustainable Development Goals, has convened a multi-stakeholder Technical Advisory Group on Sustainable Development Goal 7 (SDG7-TAG).	IRENA is a member of SDG7-TAG. IRENA energy compacts were launched in connection with the 2021 UN High-Level Dialogue on Energy.	Yes
United Nations Environment Programme (UNEP)	UNEP is the global authority that sets the environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for	Together with UNEP and UN ESCAP, IRENA took the lead in an inter-agency working group to accelerate energy transition, and the theme report "Towards the Achievement of SDG7 and net-zero emissions" This report was prepared in support of the High-level	Yes

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
	the global environment. UNEP promotes EE and the use of energy from renewable sources.	Dialogue on Energy convened by the UN Secretary-General under the auspices of the UN General Assembly in September 2021.	
UNEP Copenhagen Climate Centre (UNEP-CCC) – formerly the UNEP DTU Partnership (UDP)	UNEP-CCC is a leading international advisory institution on energy, climate, and sustainable development, assisting developing countries and emerging economies transition towards more low carbon development paths, and supports integration of climate-resilience in national development.	To better understand the implications for policy making, a 2015 study by IRENA and the then Copenhagen Centre on Energy Efficiency (C2E2) mapped the potential magnitude of the synergies between renewable energy and energy efficiency. IRENA also cooperated with UDP in the above-cited theme report “Towards the Achievement of SDG7 and net-zero emissions”.	Yes
UN Climate Change (UNFCCC)	UN Climate Change is the Secretariat of the UN Framework Convention on Climate Change (UNFCCC).	IRENA and UN Climate Change in 2019 signed an MoU to step up the exchange of knowledge on the energy transition, collaborate more closely at expert meetings, increase capacity building to promote renewables and undertake joint outreach activities. IRENA is also one of the biggest supporters of the UNFCCC’s Global Climate Action work and the cooperation includes expert meetings and publications, as well as jointly provided capacity building on renewable energy through training sessions, for example to several African countries.	Yes
World Bank	The World Bank Group (WBG) is one of the world’s largest sources of funding and knowledge for developing countries. Its five institutions (IBRD, IDA, IFC, MIGA, ICSID) share a commitment to reducing poverty, increasing shared prosperity, and promoting sustainable development. The World Bank Energy Sector Management Assistance Program (ESMAP) is a partnership between the World Bank and 22 partners to help low- and middle-income countries reduce poverty and boost growth through sustainable energy solutions. ESMAP’s analytical and advisory services are fully integrated within the World Bank’s country financing and policy dialogue in the energy sector. WBG, ESMAP works to accelerate the energy transition required to achieve SDG7.	IRENA and World Bank are - together with IEA, the United Nations Statistics Division (UNSD), and the World Health Organization (WHO) - the custodian agencies of annual joint The Energy Progress Report that tracks progress toward SDG 7 on energy, to guide international co-operation and policy making to achieve universal, sustainable energy access by 2030.	Yes

Institution	Brief description and focus in relation to RE and green energy transition	Areas/modalities of collaboration with IRENA	Supported by Denmark ⁸⁶
World Meteorological Organization (WMO)	WMO is a specialized agency dedicated to cooperation and coordination on the state and behaviour of the Earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces, and the resulting distribution of water resources.	IRENA and WMO signed a MoU at COP27 to formalise collaboration on the promotion of energy access and climate sustainability by harnessing climate and meteorological data, products, and services.	
World Resources Institute (WRI)	WRI is a global non-profit organization that works with leaders in government, business and civil society to research, design, and carry out practical solutions that simultaneously improve people's lives and ensure nature can thrive. WRI works with large energy buyers, utilities, policymakers, development institutions and urban leaders worldwide to accelerate the transition to clean, affordable energy.	A policy brief co-authored by IIRENA WRI found (2018) that increasing the share of renewables, in particular solar photovoltaic (PV) and wind, in India's power mix, and implementing changes in cooling technologies mandated for thermal power plants would not only lower carbon emissions intensity, but also substantially reduce water withdrawal and consumption intensity of power generation.	Yes

Annex 10: Draft TOR for the Steering Committee (SC)

Membership:

- Ministry of Foreign Affairs of Denmark (MFA), represented by the task manager or team leader in the Department for Green Diplomacy and Climate (GDK).
- Danish Ministry of Climate and Energy (MCEU), represented by the task manager or team leader in the Centre for International Climate and Energy.
- IRENA, represented by the Director of Planning and Programme Support (PPS) unit within the Office of the Director General. IRENA technical colleagues from any other units will be invited as necessary to discuss project work plans and results/progress.
- Representative(s) of Danish Embassies in relevant country(ies) may participate as observers, if deemed relevant by the MFA.
- A Representative of the Danish Energy Agency (DEA), Centre for Global Cooperation may participate observer, as deemed relevant by MCEU.

Duties and obligations:

- Decide on the final composition and TOR for its work based on the present draft.
- Decide on follow-up to the MFA Inception Review recommendations.
- Approve the IRENA Inception Report with results framework at output level for the Danish Voluntary Contribution. Pay attention to the risk analysis when the full results framework has been developed.
- Approve the work plan and budget for the Danish contribution for the coming year.
- Critically review, comment on, and approve project progress and results reports.
- Approve project accounts.
- Monitor assumptions underpinning the Danish support and update these if needed.
- Monitor IRENA's use of enablers and impact drivers.
- Monitor risk factors as well as IRENA's mitigation of risks, as per the risk management matrix in the PD and any updates of risk factors.
- Monitor/consider how best to maximise synergies between the Contribution to IRENA and other Danish multilateral and bilateral support for the energy transition and climate action.
- Monitor synergies and additionality of the Danish support with support to IRENA from other contributors.
- Decide on follow-up to the mandatory MFA Mid-term Review (MTR), based on MFA recommendations on follow-up.
- Consider in due time before completion of the Project, the exit of Danish Contribution and how sustainability of outcomes and impact achieved can be maximised. This will be based on a draft exit strategy for Danish support to IRENA 2023-2027 suggested by the MFA/MCEU/IRENA and put forward to the MTR review team.

Meetings:

Twice a year: i) in the spring (after the annual IRENA Assembly in January); ii) in the fall (around the time of the Council meeting in October). Meetings can be on a virtual platform or in-person.

Secretariat:

IRENA, PPS, who will:

- Consult other SC members well in advance of each meeting, invite the meeting on a virtual platform or in-person at least four weeks in advance.
- Circulate an agenda at least two weeks in advance of each meeting.
- Circulate work plans with budgets and progress reports with financial information at least two weeks in advance of each meeting.

- Prepare short minutes of each meeting to be circulated at the latest one week after the meeting. The minutes will record key issues discussed and decisions made in a format suitable for monitoring and recording follow-up on decisions made.

Reporting by IRENA:

- To the SC meeting held in the Spring: Yearly project progress report to Denmark (reporting to the SC on substantive and financial progress during the past year and issues, risk monitoring and mitigation, and impact achieved).
- To the SC meeting held in the Spring: Proposed work plans for the coming year and identification/updating of issues and risks anticipated for year to come.
- To the SC meeting held in the fall: Yearly stock take report to Denmark (a shorter, high-level report to address any emerging issues and proposals).

The MFA and MCEU will provide short written feedback on the progress and results report prior to the SC meetings.

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