

Strategic questions to the Programme Committee:

Q1: Does the proposed geographical focus sufficiently reflect Danish priorities taking IRENA's mandate and experience of previous Danish support to IRENA into consideration?

Q2: Does the proposed project sufficiently promote synergies between IRENA support, other multilateral and bilateral Danish energy engagements?

Q3: Is the proposed allocation and procedure for use of unallocated funds feasible?

Note: The proposed Process Action Plan is found in Annex 1 and the key abbreviations are listed in Annex 2.

1. Context, strategic considerations, rationale, and justification

1.1 Introduction and background

This note describes a proposed support through a voluntary contribution to the International Renewable Energy Agency (IRENA) to facilitate the rapid deployment of renewable energy (RE) in ODA eligible countries. Access to RE is central to energy transition and an important driver for achieving the Sustainable Development Goals, notably SDG7 on energy, and for reducing greenhouse gas emissions by 2030 to stay on the 1.5°C pathway in line with the Paris Agreement on climate change. The proposed financial contribution amounts to DKK 135 million for 2023 – 2027. This represents a slight increase compared to the DKK 90 million during 2018-2022 reflecting the development of a Strategic Partnership between Denmark and IRENA from 2020 that has broadened collaboration including with an increased focus on Africa.

IRENA is an intergovernmental organisation with a global mandate on renewable energy. 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 next draft medium-term strategy (MTS) for 2023 – 2027. It builds on the Strategic Partnership between Denmark and IRENA and integrates lessons learnt from previous Danish support to IRENA through the Long-term Planning programme and the SIDS Lighthouses programme as well as key points from an independent evaluation of IRENA in 2020. For more information on previous engagements please see section 1.5 below.

The support directly contributes to delivering on the priorities of the Danish Development Strategy *The World We Share*, and the Danish Government's long-term strategy for global climate action, *A Green and Sustainable World*. Furthermore, IRENA's data driven analysis will contribute to further qualify themes under the bilateral Danish strategic energy sector programmes and provide valuable input to Danish climate diplomacy and international processes supporting energy transition such as the Just Energy Transition Partnerships (JET-P).

1.2 Context, rationale, and justification

The rationale and justification for Danish support to IRENA is the Agency's centrality to addressing highly relevant contextual challenges listed below and presenting solutions to achieving sustainable, climate neutral, resilient, and equitable development pathways.

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. Recent reports of the Intergovernmental Panel on Climate Change (IPCC) indicate that anything short of radical and immediate action on both pace and scope of the global energy transition will diminish – and may possibly eliminate – the ability of countries to stay on the 1.5°C or even 2°C path.

Renewable energy (RE), energy efficiency (EE) and electrification combined may deliver around 90% of the necessary green-house-gas 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. Access to RE is a key driver of sustainable development both at household and national levels. It contributes to reducing multiple dimensions of poverty by improving livelihoods, health etc. 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.

Renewable based energy transition can increase adaptation and resilience while expanding access

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 mitigate their climate-induced vulnerabilities whilst ensuring energy security and sustainable socio-economic growth. IRENA engagements, with SIDS as well as in Uganda and Rwanda have revealed increasing country effort to link energy with adaptation measures across different SDGs including water, food, and jobs. The project will support realisation of these goals and advancement of their energy transitions and energy poverty reduction. Renewables in most countries are the cheapest option to expand energy supply for national development and household access. The benefits are clear. By 2030, the 1.5°C aligned energy transition promises the creation of close to 85 million additional energy transitions related jobs compared to 2019 and support a boost in global gross domestic product.

The geopolitical implications of energy transition

The required transformation of energy systems to combat climate change will have complex geo-political 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. IRENA is 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. 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 caused by eliminating subsidies for fossil fuels there is an increased focus on ensuring that transitions must be “just and equitable” within and between countries. While there is no international agreement on the definition of “a just and equitable transition”, it is understood that the Global North bears a responsibility for supporting energy transition in the Global South. In addition, transitions at country level need to be analysed and the potentially negative consequences for the poor and vulnerable and for people working in the fossil sector mitigated. IRENA is 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.

At 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. The exact modalities are still being negotiated. JET-Ps are now being developed¹ between G7 and India, Indonesia, and Vietnam to phase out coal. Denmark, as the only non-G7 country, has been invited to join the JET-Ps in all four countries in light of the expertise stemming from the bilateral strategic energy sector cooperation. IRENA’s data-based analysis can contribute valuable input to the partnerships on social-economic benefits and jobs and provide roadmaps for how to seize the opportunities of expanding RE supply including, where relevant, with production of PtX and green fuels such as green hydrogen for domestic consumption and export.

Energy policy has become security policy

Worldwide, the impact of COVID-19 and the current geopolitical situation are causing turmoil in the energy system. It has transformed energy policy into security policy with a focus on energy security and supply. It has demonstrated the vulnerabilities to energy security, supply, and costs of dependency on fossil fuels. The poor and most vulnerable are hit the hardest. More than ever, the current geo-political situation highlights the need for accelerated energy transition. Efficient grid-based and decentralised renewable technologies can create a system less prone to market shocks and improve resilience and energy security through the diversity of supply options and suppliers. The same resilience can be

¹ Senegal is also joining the list of countries negotiating a JET-P with G7.

embedded in the evolving global hydrogen market, which requires investment in the coming years to move away from fossil gas and build up the infrastructure needed for the long term, also creating opportunities in ODA-eligible countries.

A global mandate and context-specific responses

IRENA has a global mandate from its Membership with a strong convening power and over a decade of expertise in RE and energy transition pathways. Further, the Agency's analytical approach ensures that analysis and technical assistance/capacity building are tailor-made to the country or regional needs. The approach is 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.

African countries, African regions, and continent-wide support

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 investment in energy today. Universal access to energy is a cornerstone of a fair and green energy transition in those countries. Access to energy 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 and have the potential to help Africa achieve energy access and take advantage of the socio-economic benefits an energy transition has to offer, 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 energy supply, to avoid investments in fossil-based infrastructure that can become stranded assets.

Emerging Economies and the ASEAN region

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, ASEAN countries face a 50% rise in regional energy demand within the decade. Such growth will have implications for energy supply, affordability, 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. As regards the emerging economies, India accounts for 7.1% of global emissions, Indonesia for 2% and South Africa for 1.1%.

SIDS

SIDS bear the consequences of a disproportionate cost of climate change related impacts. The last 12 months have brought to the fore two main problems afflicting SIDS: 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. The COVID-19 pandemic has also dramatically exacerbated the problems faced by SIDS as they try to implement their energy transition plans. Both RE financing and capacity additions have slowed in the past couple of years after achieving record growth during the previous decade. In parallel to tackling the devastation from the COVID-19 pandemic, SIDS view climate resilience as an additional urgent focus of action and 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.

1.3 Alignment with Danish Policies and Priorities

Alignment with Danish policies

The proposed support through IRENA to accelerate access to renewable energy and energy transition will deliver directly on Priority 2 in *The World We Share* regarding Danish **international leadership** on 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 support will also align with Denmark's priorities in a *Green and Sustainable World*, the Danish Government's long-term strategy for global climate action. Increased analysis and awareness of the urgent need for upscaling RE will make Danish private sector solutions increasingly relevant. **In synthesis**, the proposed Danish support to IRENA is consistent with Danida priorities 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 and coherence between climate adaptation and mitigation; mobilisation of climate finance and reorientation of global and national financial flows.

Contributions to SDGs

The proposal contributes to SDG 7 (sustainable energy); SDG 13 (climate action) with focus on mitigation and renewable energy for adaptation; SDG 8 (decent work and economic growth), and SDG 9 (industry, innovation, and infrastructure). Importantly, by focusing on access and on energy transition, the proposal also 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 level. Access 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.

Access and the energy transition

Ensuring access is also at the centre of a just inclusive and equitable energy transition that addresses the political economy of the energy sector and as well as the wider economy. As noted above, in most countries, RE is the least cost option for expanding energy supply and ensure affordable energy - and when combined with energy efficiency, it reduces the investments needed for electricity production. Finally, energy transition also 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.

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 Group on the impact of the food, energy and finance crisis that the Danish prime Minister is Championing. The purpose is to raise ambition and implementation of renewable energy. To illustrate this point, IRENA, Denmark and the Global Energy Wind Council, GWEC, have launched a 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.

1.4 Independent evaluation of IRENA and lessons learnt

The proposal builds on lessons learnt from previous Denmark engagements with IRENA as well as the independent mid-term evaluation of IRENA's medium term strategy 2018-2022. Conducted by IOD PARC in 2020, the focus was on the reach, the effectiveness, and impact of IRENA's activities. Some of the key observations from the evaluation are listed below:

- IRENA performed effectively against its 2018-19 work programme and budget.

- IRENA's value addition is its convening power, the inclusive approach to collaboration and partnerships, the facilitation of networking and relationship building across the renewable sector.
- Generation of renewable related data and analysis is universally commended in light of the independence, objectivity and reliability of the Agency. Work on co-benefits and socio-economic outcomes and data on auctions, pricing and costs were singled out.
- IRENA's global membership and mandate and the exclusive focus on renewable energy are main comparative advantages as perceived from Members and partners.
- The size of the Agency enables flexibility, agility, and responsiveness.
- IRENA has an opportunity to address knowledge gaps on precisely 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, is important.
- Views differ amongst IRENA Members and partners on whether IRENA should engage at country level².
- There is room for improvement regarding documentation of results and impact to in addition to activities and output, and therefore, it is recommended to develop a more comprehensive results framework.

This proposal builds on the challenges and opportunities mentioned above under context and justification and on comparative advantages of IRENA as highlighted by the evaluation. The formulation of this proposal has informed the development of the Agency's Theory of Change and an attached results framework for IRENA as an agency in line with the evaluation recommendation. The objective is to strengthen IRENA's ability to monitor and report on results and impact in addition to activities and outputs across the MTS and to be able to use the results framework for reporting on this proposal.

1.5 Results and lessons learned from previous Danish support to IRENA

This proposal has been informed by lessons learnt from previous Danish support to **Long-Term Planning** (2018-2021, with focus on the ASEAN region) and **SIDS Lighthouses Initiative** (2019-2022 with focus on SIDS) in several ways, including by a mid-term review of the LTP programme:

- To make the cooperation more strategic, reflect the Strategic Partnership, and reduce transaction costs, Denmark and IRENA have agreed to develop one project document as an umbrella, cutting across all the cooperation areas in the elaborated strategic partnership. The project document will therefore cover all 5 pillars under the new draft IRENA MTS.
- The secondment attached to the Long-Term Planning (LTP) project has enabled stronger synergies between LTP and the Danish strategic sector collaboration programme in Indonesia. It has also assisted in strengthening IRENA's results reporting. To support synergies and complementarities in this proposal three secondments have been included to cover SIDS, emerging economies, and GOWA areas of work. Secondments will specifically look to encourage collaboration across programmes in African countries (including South Africa), India and SIDS as well as synergies under Denmark's new contribution to the Special Climate Change Fund (SCCF) under The Global Environment Facility (GEF) that have a new primary strategic focus on SIDS.
- A close dialogue with the Danish Energy Agency (DEA) and sector advisors at the Danish Embassies is essential to create synergies and complementarity. Based on such a dialogue, in this proposal IRENA will give priority to socio-economic and job analysis in the countries where Denmark has strategic sector cooperation and their regions. In addition, DEA will be a member of the steering

² IRENA is not an implementing agency, but the issue of country level engagement remains open.

committee. Representatives from the relevant Danish embassies will be invited as observers, when relevant.

1.6 Choice of implementing partner and cooperation modalities

IRENA is an intergovernmental organisation with its Headquarters in Abu Dhabi, United Arab Emirates (UAE). The Agency currently has 168 Members³ of which 112 are ODA eligible countries. The agency serves as THE principal platform for international co-operation on renewables. No other Agency has a mandate fully focussed on renewables. 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 agencies⁴ for SDG 7 that jointly publish an extensive report on tracking progress on SDG7. IRENA also provides annually updated country profiles⁵ 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 (WETO)⁶, 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 Renewable Energy Outlook for ASEAN⁷ was released, produced with Danish support under current programme on LTP. In the 2023-2027 period IRENA will also be working on and releasing regional outlooks for Africa 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 and is well positioned given its global mandate to include and engage ODA-eligible countries in analysis and international collaboration on energy transition.

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 light of the climate ambitions and green transition of the Danish Government.

³ As of 15 September 2022

⁴ 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).

⁵ 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.

⁵ (but may graduate from list in 2023)

⁶ <https://irena.org/publications/2022/mar/world-energy-transitions-outlook-2022>

⁷ <https://irena.org/publications/2022/Sep/Renewable-Energy-Outlook-for-ASEAN-2nd-edition>

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 SDG's.

IRENA's Medium Term Strategy, mission, and comparative advantages

IRENA is developing its next Medium-term Strategy (MTS) setting the direction and priorities for the coming five-year period (2023-2027)⁸, building on the Agency's value added to continue to shape and accelerate the global energy transformation. Consulted IRENA Members noted the Agency should continue to take a comprehensive approach to the transition, focusing on practical application of its analyses, collecting best practices, sharing and catalysing action, and should consider both the benefits and costs of the energy transition to help manage trade-offs for optimal outcomes.

For the next five-year MTS period, IRENA's mission statement is:

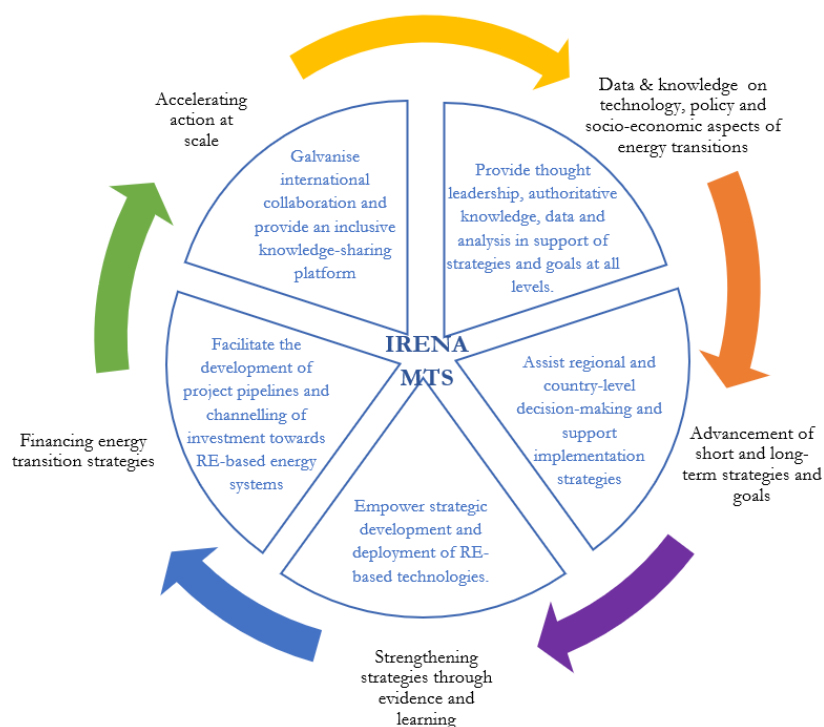
*"For the next five years, IRENA will take a leading role in accelerating the global, renewables-based energy transformation for people, planet and prosperity and drive systemic change toward universal access and energy equality, enhanced energy security, and resilient societies and economies."*⁹.

This mission is fully aligned with the 2030 Agenda for Sustainable Development and the Paris Agreement. The draft MTS has been developed in collaboration with IRENA Members in an MTS task force co-chaired by Denmark and Kenya and is expected to be approved by the 13th IRENA Assembly in January 2023.

IRENA's comparative advantages on energy transition are described in the five pillars of the new draft MTS (see Figure 1). By providing data-driven analysis and support for policymakers, IRENA facilitates deployment of renewables and financing for energy combining expertise from the five pillars. IRENA is addressing the contextual themes facilitating energy transition at country and regional level and thus to achieving the SDGs and the Paris agreement.

⁹ IRENA's mission for 2023-2027 is being refined to include critical aspects such as systemic change and just transition.

Figure 1 - IRENA draft MTS 2023-2027 illustration



The Agency's work is demand-driven by members and actors in the global energy and climate architecture and is context specific.

Country support is demand-driven, based on a close dialogue with national stakeholders and coordination with other partners. The same approach applies to support for regional organizations. IRENA does not have country presence and is not engaged in implementation.

At the global level, engagement in international events or initiatives are 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 topics including the geo-political

implications of energy transition, strategic critical materials for renewables, roadmaps for green hydrogen, and decentralized renewable energy solutions for climate adaptation, including assessment of the energy-health, energy-water and energy-agri-food nexus. At all levels, and depending on context, IRENA collaborates closely with partners such as IEA, NDC-P, SEforAll, UNEP, UNDP, and World Bank and Danish bilateral Strategic Sector Collaboration programmes on energy. An illustration of IRENA and other key institutions in the international energy and climate architecture is found in Annex 3, where Denmark's support to these institutions is also reflected.

IRENA, with its global mandate, strong technical expertise, and broad membership is well positioned to facilitate political ambition and decisions based on data-driven analysis as well as partnerships and multi-stakeholder coalitions that are required to accelerate energy transition around the world.

1.7 Geographic focus areas and target groups

Geographic focus areas

The selection of ODA eligible countries is based on country-demand and political buy-in, as well as Danish geographic priorities. Indicatively focus will be on:

- Small Island Developing States (SIDS) – a continued focus as Denmark supports the SIDS LHI Programme.
- Emerging economies: Indonesia, India, South Africa (priority countries for Danish bilateral energy cooperation and also Just Energy Transition Partnership countries)
- Africa: [Ethiopia], Egypt, Kenya, Rwanda, Uganda
- Africa region: Southern Africa, Central Africa, West Africa, East Africa; North Africa
- ASEAN region – a continued focus as Denmark has supported the Long-Term Planning initiative in this region.

Full country selection will be decided by the Steering Committee.

Target groups

The Danish support through IRENA will target decision makers at various levels in ODA eligible governments, including sector experts, bilateral donors, multi-stakeholder coalitions, private sector actors

and civil society as well as academia, regional institutions, and international organisations. IRENA will base support for policy reforms at country level on Agency expertise, IRENA's Memoranda of Understanding (MOUs) with countries (e.g. Indonesia and India) and on international coalitions such as the G7-based Just Energy Transition Partnership (JET-P), and/or Danish strategic sector cooperation programmes. Danish embassies acknowledge that IRENA can provide valuable complementary and neutral expertise at country level in Indonesia and South Africa.

Project results will provide insights and recommendations for national-level policymakers and stakeholders that will facilitate decision-making. It will shed light on the intimate connections between the national and regional energy systems and the economy, helping countries and regions design concrete energy policies to address issues of the ecosystems and poverty and human wellbeing. As part of its focus on regional work, highlighted by IRENA Members as one of the Agency's comparative advantages, IRENA has commenced to translate its World Energy Transitions Outlook to regions. The project will contribute to this work and bring additional value through enabling sharing of best practice between countries in similar contexts.

Thematic focus on support for energy-requests from developing countries through the NDC Partnership

IRENA is responding to most of the energy requests that come from developing countries through the NDC Partnership. To reduce transaction costs of applying for resources from the NDC Partnership, a budget is allocated for such responses. It will strengthen synergies between IRENA and the NDC Partnership and improve the energy parts of NDCs.

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

IRENA is one of the founders of GOWA. The Agency can provide demand-driven data, analysis, capacity building and technical assistance in support of accelerating offshore wind under the GOWA umbrella in ODA eligible countries. IRENA can also create synergies between GOWA's work streams and country demand for links to PtX and green hydrogen opportunities and roadmaps. Finally, IRENA - given its mandate and expertise - has a strong convening power to include offshore wind in international, regional and national high level energy transition and climate diplomatic dialogue. Therefore, a budget is allocated for targeted work by IRENA through GOWA, as well as for a secondee focused on GOWA, including synergies with bilateral programmes such as the Danish GtG on energy.

2. Project objective and outline content

The project objective is:

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.

The project will support ODA-eligible countries and organisations. Activities and outputs align with the IRENA draft MTS¹⁰ outcomes of the Agency draft Theory of Change¹¹.

3. Theory of change and key assumptions

In parallel to the draft MTS, IRENA is developing a Theory of Change and a 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 for future engagement. The below preliminary Theory of Change (ToC) will guide the support. Please note that this ToC is highly simplified. Activities and outputs combined contribute to the five outcomes, underpinned by many interlinkages between streams of activity at the output and outcome levels. These interlinkages will be explained in the Project Document.

¹⁰ [Note of the Director-General – Draft Framework for the Medium-term Strategy 2023-2027 \(C/23/3\)](#)

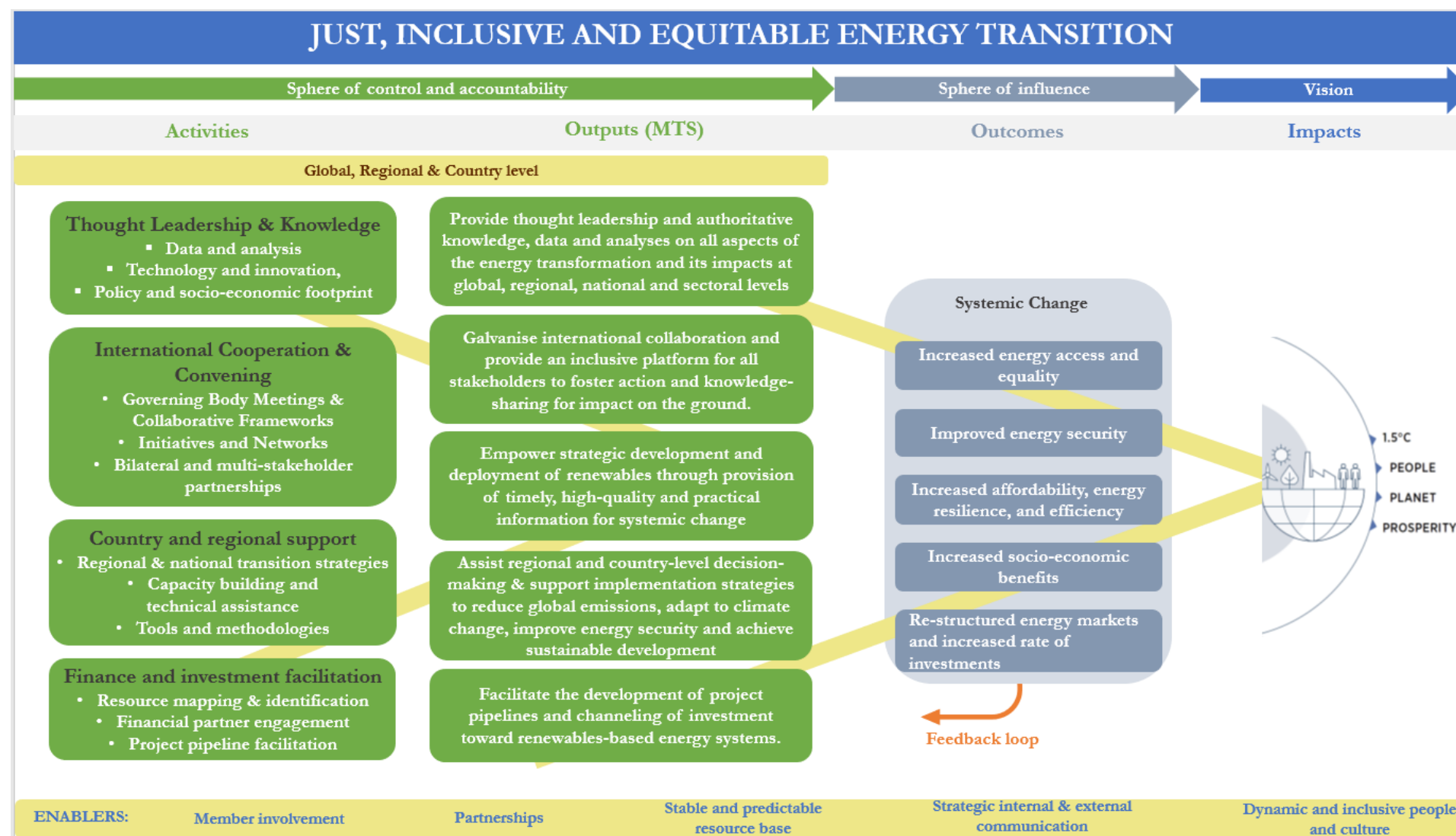
¹¹ Theory of Change is currently in draft form subject to change prior to its approval in January 2023 by the IRENA 13th Assembly.

- *If Denmark provides a contribution to IRENA's implementation of its Medium-term Strategy that promotes increased energy access and equality (Outcome 1).*
 - *Then IRENA will provide data and analysis on energy access, livelihoods, and jobs with specific analysis on direct and indirect job creation for distributed renewable energy solutions; renewable energy and clean water in remote communities.*
 - *Then IRENA will support best practice exchange and knowledge transfer activities to build capacity among decision-makers on access policies and regulations, leading to concrete policy decisions and actions to improve access in an equitable manner consistent with the just inclusive and equitable energy transition.*
 - *Then IRENA will provide targeted support to countries in their NDC revisions and implementation. And finally, IRENA will provide technical assistance and targeted capacity development activities and support peer-to-peers exchanges and learning on good practice to help achieve these outcomes in a sustainable manner.*
 - *And then the numbers of people in African, ASEAN and SIDS countries, with access to electricity will increase.*
- *And if Denmark provides a contribution to IRENA's implementation of its Medium-term Strategy that supports improved energy security (Outcome 2).*
 - *Then IRENA will provide targeted support for member countries in long-term planning and strategies as well as analysis on the regional dimensions of the geopolitical effects of renewables-based energy transformation. IRENA technical assistance and targeted capacity development activities as well as support for peer-to-peers exchanges and learning on good practice will serve as drivers in support of this transition.*
 - *And then the targeted African, ASEAN, and SIDS countries and regions will have increased share of renewables in electricity generation leading to increased energy security and diversification of fuel sources and supply chains.*
- *And if Denmark provides a contribution to IRENA's implementation of its Medium-term Strategy that supports increased energy affordability, resilience, and efficiency (Outcome 3).*
 - *Then IRENA will provide analyses on decentralized renewable energy solutions for climate adaptation with assessments on energy-health, energy-water and energy-agri-food. IRENA will also provide a comprehensive set of technology, policy, planning, and finance analyses for Africa including on socio-economic development, industrialization, social welfare, and sustainable use and management of the continent's natural environment, leading to strengthened resilience and affordability. Specific focus will also be placed on supporting SIDS in their energy transition under the SIDS Lighthouses Initiative to strengthen resilience.*
 - *And then African ASEAN and SIDS countries will record increased competitiveness of renewable energy technologies, reflected in increased installed RE as measured by the costs of this installed capacity.*
- *And if Denmark provides a contribution to IRENA's implementation of its Medium-term Strategy that contributes to increased socio-economic benefits (Outcome 4).*
 - *Then IRENA will provide socio-economic footprint analysis that reviews progress along the energy ladder, and evaluation of socioeconomic impacts, jobs, and welfare; and analysis on inclusive transitions notably gender considerations as well as related targeted technical assistance, capacity building and facilitation of peer-to-peer learning.*
 - *And then the targeted countries and regions will see increased rate of employment.*
- *And if Denmark provides a contribution to IRENA's implementation of its Medium-term Strategy that supports re-structured energy markets and increased rate of investments (Outcome 5).*
 - *Then IRENA will provide hydrogen roadmaps for selected countries including analysis on regulation and policies for the development of green hydrogen as well as analyses, technical assistance and convening activities to drive the deployment of offshore wind under the Global Offshore Alliance (GOWA). Technical assistance will also be provided to developing countries to facilitate the development of bankable projects for renewable energy.*

- *And then* International financial flows to developing countries in support of clean energy research and development and renewable energy will increase and public and private investments in renewables will be increased in the countries and regions.
- *And then* ODA eligible countries will be supported to facilitate the rapid deployment of renewables 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. (Project objective)

The main assumptions and enablers include IRENA Member involvement and continued commitment to the just energy transition, effective partnerships, a stable and predictable resource base, strategic internal and external communications including the use of “the power of the example”, and innovation, dynamism and inclusiveness.

Figure 2: IRENA Draft Theory of Change (to be approved as part of the Agency's MTS 2023-2027)¹²



¹² Theory of Change is currently in draft form subject to change prior to its approval in January 2023 by the IRENA 13th Assembly.

4. Draft results at outcome level

Table 1 below lists the draft results framework at outcome level. Project outcomes align with the IRENA Theory of Change and the IRENA Agency level outcomes.

Outcome indicators are preliminary and will be revisited during the drafting of the full Project Document.

Table 1: Preliminary results framework at outcome level

Project		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 keep 1.5°C within reach.	
Impact Indicator			
Outcome 1		Increased energy access and equality	
Outcome indicator		Proportion of population with access to electricity ¹³	
Baseline	Year	2022	In ODA African countries, XX million people were without access to electricity. In ODA ASEAN countries, XX million people were without access to electricity. In ODA SIDS, XX million people were without access to electricity.
Target	Year	2027	
Outcome 2		Improved energy security	
Outcome indicator		Increased renewable energy share in the global energy mix ¹⁴	
Baseline	Year	2022	In ODA African countries, XX% renewable share of generation. In ODA ASEAN countries, XX% renewable share of generation. In ODA SIDS, XX% renewable share of generation.
Target	Year	2027	
Outcome 3		Increased affordability, resilience, and efficiency	
Outcome indicator		Total installed costs ¹⁵	
Baseline	Year	2022	In ODA African countries, total installed costs were XX In ODA ASEAN countries, total installed costs were XX In ODA SIDS, total installed costs were XX
Target	Year	2027	
Outcome 4		Increased socio-economic benefits	
Outcome indicator		Increased rate of employment ¹⁶	
Baseline	Year	2022	In ODA African countries, XX million RE jobs In ODA ASEAN countries, XX million RE jobs In ODA SIDS, XX million RE jobs
Target	Year	2027	
Outcome 5		Re-structured energy markets and increased rate of investments	
Outcome indicator		International financial flows to developing countries in support of clean energy research and development and renewable energy. ¹⁷	
Baseline	Year	2022	In ODA African countries, USD XX billion public investment in renewables In ODA ASEAN countries, USD XX billion public investment in renewables In ODA SIDS, USD XX billion public investment in renewables
Target	Year	2027	

¹³ [SDG7 Tracking report](#)

¹⁴ [Renewable Energy Statistics 2022](#)

¹⁵ [Renewable Energy Costs, 2021](#) <https://irena.org/publications/2022/Jul/Renewable-Power-Generation-Costs-in-2021>

¹⁶ [Renewable Energy and Jobs – Annual Review 2021](#)

¹⁷ [SDG7 Energy Progress Report 2022](#)

5. Inputs/budget

Denmark will support IRENA with an earmarked grant amounting to DKK 135 million covering the period 2023-2027. DKK 27 million (20%) is set aside as unallocated funds to provide for agility and flexibility to respond to unforeseen events and needs during the five-year implementation period. Within this reserve, the use of unallocated funds will be decided by the Steering Committee. Budget changes and reallocations exceeding 10% should be discussed and approved by the Steering Committee and confirmed by the MFA. DKK 250,000 is allocated for a Mid-term Review (MTR) to be conducted by the MFA in collaboration with the Ministry for Climate, Energy and Utilities. (MCEU). IRENA's standard administrative charge Programme Support Cost (PSC) is 7%.

The Danish contribution is allocated at outcome level as indicated in Table 3.

Table 3: Danish voluntary contribution budget

Budget item	Total DKK	% of total
Outcomes:		
1. Increased energy access and equality	13,744,150	10%
2. Improved energy security	16,889,950	12%
3. Increased energy affordability, resilience, and efficiency	15,129,800	11%
4. Increased socio-economic benefits	13,556,900	10%
5. Re-structured energy markets and increased rate of investment	15,548,050	12%
Allocation for IRENA response on energy via the NDC partnership	9,774,450	7%
Allocation for offshore wind support (GOWA)	7,490,000	6%
Three secondments for SIDS, emerging economies, and GOWA, respectively	10,980,340	8%
Mid-term review (administered by the MFA)	250,000	0%
Unallocated (17%)	22,236,360	17%
IRENA PSC ¹⁸ (7%)	9,400,000	7%
Total	135,000,000	100%

The funds will be disbursed annually and administered under a Donor Agreement between IRENA and the Danish MFA. Financial management will be in accordance with IRENA's Financial Regulations, which are considered adequate in the light of experience from cooperation on the LTP and SIDS LHI projects.

IRENA's ODA-eligible co-efficient is 66%. Through the selected country focus and earmarking, the Danish grant will fulfil the specific requirement for 100% ODA compliance.

Budget allocations for the MTS outcomes and outputs according to the work programme will be decided when the MTS is finalised. 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 funding¹⁹ (USD 21.7 million) for a total core budget of USD 66.1 million. In addition, voluntary contributions totalled USD 21.3 million²⁰. 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

¹⁸ 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.

¹⁹ Funding from UAE and Germany for IRENA headquarters/offices.

²⁰ [Annual Report of the DG on the Implementation of the Work Programme and Budget for 2020-2021 \(A/12/3\)](#)

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 128,314²¹. The current project is a voluntary contribution additional to the Assessed Danish contribution.

A budget overview and an overview of donor commitments for different outcomes and outputs will be provided in the project document.

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 are in line with IRENA's MTS and approved Work Programme, activities will benefit from additional in-kind and financial support.

6. Institutional and management arrangement and reporting

IRENA has three principal organs:

- 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 is 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 Framework for all IRENA members and private sector actors on "Offshore Wind", 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 Presidency.

Denmark has funded two secondments, one for the Long-Term Planning programme (LTP), and one for the SIDS Lighthouses programme. The aim has been to promote results and as regards LTP strengthen coordination with the Danish Energy Agency on the bilateral Danish energy sector programmes.

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.

A Steering Committee (SC) consisting of the MFA, the MCEU and the Danish Energy Agency – and when deemed relevant Denmark embassies - as well as IRENA will meet twice a year to agree on the work programme and budget for the coming year as well as to discuss progress and allocation of unallocated 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 and will call for the meetings and prepare progress reports two weeks in advance of the meeting.

²¹ [Annual Report of the DG on the Implementation of the Work Programme and Budget for 2020-2021 \(A/12/3\)](#)

IRENA will also prepare and circulate the summary reports of the Steering Committee meetings. IRENA will be represented by the Director of Planning and Programme Support unit within the Office of the Director General. The Danish side will be represented by the MFA/GDK and MCEU task managers.

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 transactions accosts on the side of IRENA.

Reporting

Each year, IRENA provides its Members with an update of its work in annual reports (1/year) and progress reports (2/year) as well as audited financial statements (1/year). These documents can be accessed [here](#). Other reporting requirements and management arrangements specific to this project outcomes will be further discussed and specified during the drafting of the project document.

7. Risk Management

Key risks and mitigation measures include the following:

Contextual risks

- Implications of the **geo-political situation** and particularly elements of the current energy, finance, and food security crisis,
- Vested interests and fossil fuels subsidies that undermine a level playing field for renewable energy. IRENA's way of working depends on **strong political buy-in** to achieve project impact. The Agency works closely with its Members and partners to ensure this, and selects countries and case studies with this in mind.
- Implications of **severe climate change** (heatwaves, floods, fires) and related stress on national systems and associated short term priorities.

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 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.

Institutional risks

- **Potential overlap with other organisations and initiatives:** IRENA works closely with its partners and countries to ensure no overlap of project activities occurs.
- The project is framed around IRENA **draft MTS**, which will only be approved by its Membership in January 2023. While the goals identified in the project will not be affected it is possible that changes to wording and nuance may be required.

Annex 1: Process Action Plan

Activity	Timing/deadline	Responsible
Identification Note	June 2022	GDK with MCEU and DEA inputs
Consultations with IRENA	July-September 2022	GDK with MCEU and consultant
Formulation of presentation to the Danida Programme Committee	July-29 September 2022	GDK with MCEU and consultant based on IRENA substantive inputs
Public consultation phase based on Presentation to the Danida Programme Committee	7-20 October	GDK
Programme Committee meeting	25 October 2022	ELK (has it been changed to 27 October ref website?)
Drafting of Project Document	September-November 2022	Consultant with GDK and MCEU based on IRENA substantive inputs
Draft Project Document submitted to appraisal team	15 November 2022	GDK
Appraisal	Late November-December 2022	ELK
Finalisation of Project Document based on appraisal recommendations	Early January 2023	Consultant with GDK and MCEU based on IRENA substantive inputs
Approval of IRENA MTS 2023-2027 at the thirteenth session of the IRENA Assembly	14-15 January 2023	IRENA
Final Project Document submitted to the secretariat for the Council for Development Policy	January 2023	GDK
Meeting of the Council for Development Policy	Late January/early February 2023 (date tbc)	ELK
Approval by the Danish Minister for Development Cooperation	February 2023	Minister
Approval by the Finance Committee of the Danish Parliament	March 2023	Finance Committee
Signing of Contribution Agreement with IRENA	March 2023	GDK
Meetings two times a year of the IRENA/Denmark Steering Committee: i) Once in the margins of the IRENA Assembly in January; and ii) one in September	As per schedule	IRENA /GDK/ MCEU
Project implementation	Q2 2023-Q4 2027	IRENA
Mandatory Mid-Term Review (MTR)	Mid-2025	ELK
End of project implementation	End of 2027	IRENA

Annex 2: Key abbreviations

AMG	MFA/Danida Aid Management Guidelines
ASEAN	The Association of Southeast Asian Nations
BECCS	Bioenergy combined with carbon capture and storage
BGFA	Beyond the Grid Fund for Africa
C40	C40 Cities Climate Leadership Group
CEFIM	OECD Clean Energy Finance & Investment Mobilisation
CIF	Climate Investment Funds
CMP	Continental Master Plan
COP	Conference of the parties (under the UNFCCC)
CO2	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
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	Green House Gas
GOWA	Global Offshore Wind Alliance
GtG	Government-to-Government
GW	Gigawatt
GWEC	Global Wind Energy Council
IEA	International Energy Agency
IRENA	The International Renewable Energy Agency
IISD GSI	International Institute for Sustainable Development Global Subsidies Initiative
JETP	Just Energy Transition Partnership
LHI	Lighthouses Initiative
LDC	Least Developed Country
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
NDF	Nordic Development Fund
NEFCO	Nordic Environment Finance Corporation
NGO	Non-Governmental Organization
ODA	Official development assistance, as defined by OECD DAC

OECD	Organisation for Economic Co-operation and Development
PC	Programme Committee
PSC	Project support cost
PtX	Power to X
PV	Photovoltaic
RE	Renewable energy
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)
TFEC	Total final energy consumption
ToC	Theory of Change
UAE	United Arab Emirates
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP-CCC	UNEP Copenhagen Climate Centre
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollar
VC	Voluntary contribution
WB	World Bank
WETO	World Energy Transitions Outlook
WRI	World Resources Institute

Annex 3: 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		√	√	√		√	√			√	√