#### Danish Energy Partnership Programme (DEPP IV) with Brazil, India, Kenya 2025-2029

#### Key results:

- Long-term energy modelling in Brazil, India and Kenya have informed least cost and low-carbon energy sector plans as a key building block for providing affordable and reliable energy for citizens in the three countries.
- Improved transparent regulatory energy framework have supported efficient integration of more variable renewable energy to meet increasing energy demand and aligning with the Paris Agreement in the three countries.
- Large-scale offshore wind development in Brazil and India has been further enabled through improved regulatory frameworks, transparent tender processes and socio-economic and environmental safeguards.
- Energy efficiency improved through deployment of energy efficiency measures in Brazil and Kenya including for buildings, industries and grid infrastructure.

#### Justification for support:

- Energy is an enabler for sustainable socio-economic development, and a driver to achieve multiple SDG's.
- The programme will target a just and inclusive green energy transition (SDG7) which is aligned with Denmark's strategy "The World We Share" and related MFA How-to-Notes.
- The partner countries are chosen due to their policy priorities in green transition and experience and commitment from ongoing cooperation under Strategic Sector Cooperation (SSC) or Energy Partnership Programme.

#### Major risks and challenges:

- Resistance to energy transition due to the current structure and different political-economy interests in the energy sector.
- Global geopolitical tensions impacting energy planning and infrastructure investments.
- Capacity constraints in national partner institutions and limitation of sharing relevant data.
- Risk of insufficient coordination and synergies with other initiatives in complex and dynamic contexts.

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File No.		24/22853							
Country		Brazil, India, Kenya							
-	Responsible		Green Diplomacy and Climate (KLIMA)						
MFA Unit	<u>t                                      </u>	D							
		Energ							
Partner		Danish Energy Agency (DEA)							
DKK n	nillion	2024	2025	2026	2027	2028	2029	Total	
Commitment		124,2	95,8					220 <mark>*</mark>	
Projected disbursem	Projected disbursement		44	44	44	44	44	220	
Duration		2025-2029							
Previous		SSC Brazil DKK 10.0 million; SSC Kenya DKK 8.5							
grants		million; INDEP India, DKK 69.0 million.							
Finance Act code		06.34.01.70							
Head of unit		Anne Hougaard Jensen							
Desk offic	er	Morten Houmann Blomqvist							
Reviewed by CFO		Jan Hindhede Justsen							
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Affordable Clean Energy	Billow Decen Eco Gro	t Jobs,	Industry, Innovation Infrastructure	, Inequ	uced nalities	Sustainable Cities,	e Re	esponsible insumption	

#### Objective:

Contribute to a just and inclusive green energy transition in the three partnership countries through advancement of low carbon energy development and implementation of short and long-term climate goals under the Paris Agreement.

Climate

Life below Water

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)		[220.0] million		

#### Justification for choice of partners:

The Danish Energy Agency will build on its extensive expertise, experience and track record of implementing SSC in Brazil and Kenya and INDEP in India and its wider global cooperation portfolio comprising 24 bilateral government-to-government partnership programmes. National partners selected based on the mandates, interest, and commitment to the partnerships.

#### Summary:

Energy is a key enabler for socio-economic development and sustainable long-term growth for any modern economy today. The Danish government-to-government energy partnership programme with Brazil, India, and Kenya will support a green and just energy transition aligned with goals of the Paris agreement. It will support good governance and transparent long-term energy planning in the three countries, which will contribute to affordable and reliable access to renewable energy supporting long-term climate targets and national energy demand.

#### **Budget:**

Brazil	DKK 42.2 million
India	DKK 84.0 million
Kenya	DKK 60.8 million
Unallocated funds 9.7%	DKK 21.4 million
Programme support (administration and communication) 4.8%	DKK 10.6 million
Mandatory Mid-term Review (administered by MFA	DKK 1.0 million

Total DKK 220 million\*

\*Budget of DKK 220.0 million is subject to final coordination with the Ministry of Finance. Proposed budget of DKK 220.0 million is approved by MCEU. The level of programme activities and budgets will be reduced to DKK 180.0 million, as originally planned, if common agreement is not found.

Ministry of Foreign Affairs of Denmark (MFA) Ministry of Climate, Energy and Utilities of Denmark (MCEU) Danish Energy Agency (DEA)

# Danish Energy Partnership Programme (DEPP IV) with Brazil, India and Kenya

2025-2029

Early draft Framework Programme Document For the Danida Programme Committee

> Draft 28 May 2024

> > MFA file: Public 360 No. 24/22853

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## Key abbreviations and acronyms

AMG	Danida Aid Management Guidelines
ANEEL	The National Electricity Agency, Brazil
BOGA	Beyond Oil and Gas Alliance
CEA	Central Electricity Authority, India
CEBRI	The Brazilian Center for International Relations (independent think tank)
CEEW	Policy research institute and think tank, India
CERC	Central Electricity Regulatory Commission, India
CoE	Centre of Excellence (on offshore wind, India)
COP	Conference of the Parties (to the UNFCCC)
CO2	Carbon dioxide
CTU	Central Transmission Utility, India
DAC	OECD Development Assistance Committee
Danida	Danish International Development Cooperation
DEA	Danish Energy Agency
DEPP	Danish energy partnership programmes
DETI	The Danish Energy Transition Initiative
DKK	Danish kroner
DTU	Technical University of Denmark
EE	Energy efficiency
Energinet	Danish Transmission System Operator
EPRA	Energy and Petroleum Regulatory Authority, Kenya
ESCOs	Energy Service Companies
ESMAP	World Bank Energy Sector Management Assistance Program
EU	European Union
G20	Group of twenty largest economies
GDP	Gross domestic product
GOWA	Global Offshore Wind Alliance
Grid-India	National Load Dispatch Centre, India
GtG	Government to Government
GW	Gigawatt
HRBA	Human Rights Based Approach
IBAMA	The Environment Agency, Brazil (under MMA)
IEA	International Energy Agency
IIT Madras	Indian Insitute of Technology, Madras
IMF	International Monetary Fund
INDEP	India-Denmark Energy Partnership Programme
IRENA	International Renewable Energy Agency
KenGen	Kenya Electricity Generating Company, PLC
KETRACO	Kenya Electricity Transmission Company
KPLC	The Kenya Power and Lighting Company PLC (Kenya Power)
LNOB	Leaving no one behind
LTA	Long-term advisor
MCEU	Danish Ministry of Climate, Energy and Utilities
MFA	Ministry of Foreign Affairs of Denmark
MFA(KLIMA)	MFA Department for Green Diplomacy and Climate
MMA	Ministry of Environment and Climate of Brazil
MME	Ministry of Mines and Energy of Brazil
MNRE	Ministry of New and Renewable Energy of India
MOEP or MOE	Ministry of Energy and Petroleum of Kenya
MOP	Ministry of Power of India
MTR	Danida Mid-term Review
NDC	Nationally Determined Contribution under the UNFCCC
NIWE	National Insitute of Wind Energy, India

NTPC	National Thermal Power Corporation Limited, India		
OECD	Organisation for Economic Co-operation and Development		
PAG	Programme Advisory Group (for DEPP, consisting of the MFA, MCEU, and DEA		
	GC as the secretary)		
PANT	Human rigths principles of participation, accountability, non-discrimination, and		
	transparency		
RE	Renewable energy		
	Strategic Advisory Group (for DEPP, consisting of the MFA, MCEU, and DEA		
SAG	GC as the secretary)		
SDG7	Ensure access to affordable, reliable, sustainable and modern energy for all		
SDG13	Take urgent action to combat climate change and its impacts		
SMART	Specific, measurable, achievable, relevant and time-bound (indicators)		
SSC	Strategic sector cooperation		
ToC	Theory of change		
ToR	Terms of reference		
TSO	Transmission system operator		
UPR	Danish acronym for the Council for Development Policy		

## 1. Context, strategic considerations, rationale, and justification

#### 1.1 Introduction and background

The present early draft Programme Document (or "concept note") for the Danida Programme Committee outlines the background, justification, objectives, and management arrangements for Danish support under the proposed Danish Energy Partnership Programme IV (DEPP IV) with Brazil, India, and Kenya.

The budget frame for DEPP IV is proposed to be a grant of DKK 220.0 million for the period between early 2025 to end 2029 as agreed between the Danish Energy Agency (DEA), the Danish Ministry of Climate, Energy and Utilities (MCEU), and the Ministry of Foreign Affairs of Denmark (MFA). Due adjusted budget frame, the amount of DKK 220.0 million is subject to final approval by the Ministry of Finance but is approved by the MCEU Deputy Permanent Secretary. If the full budget is not approved by the Ministry of Finance, the level of programme activities and budgets will be reduced to DKK 180.0 million (further details in chapter 5 under budget).

The Programme Document (PD) will be an Annex to the legal Agreement with the Danish Energy Agency as the implementing partner and constitutes an integral part hereof together with the documentation specified in the following. DEPP IV will consist of an overarching umbrella Framework Programme with three separate Country Programmes for Brazil, India and Kenya, respectively. DEPP IV documentation will consist of a Framework Project Document with three separate Country Project Documents, each consistent with Danida guidelines.

The proposed DEPP IV Programme builds on more than 10 years of the Danish Energy Agency's experience of sharing best practice through government-to-government (GtG) cooperation, currently with 24 partner countries¹. Based on the green transition of the Danish energy sector, DEA is sharing Danish learnings, know-how, technical solutions, and experience in developing enabling and regulatory frameworks. DEA's Global Cooperation (GC) is unique in its GtG, peer-to-peer approach based on mutual trust and partnership that enables a deeper and longer-term engagement in areas such as long-term energy modelling and planning and transparent framework conditions for increasing variable renewable energy in the energy mix. The DEA GtG cooperation has received strong interest from Brazil, India, and Kenya to increase the collaboration as these countries see electricity as a driver for socio-economic development and have plans for scaling uptake of variable renewable energy in their energy systems.

The proposed overall objective of the DEPP IV programme is to contribute to a just and inclusive green energy transition in the three partnership countries through advancement of low carbon energy development and implementation of short and long-term climate goals under the Paris Agreement.

DEPP IV will contribute to accelerate the transformation of the energy systems towards a low-carbon and least cost pathways, already taking place to some extent in both Brazil, India, and Kenya. It will enable partner countries to accelerate the transition and contribute to develop adequate planning tools to integrate a larger share of variable renewable energy in the energy mix. As such, DEPP IV will advance the partner countries' efforts to meet future energy demand from households and industries while also reaching their climate goals. The support to future-proof the energy system in

<sup>&</sup>lt;sup>1</sup> https://ens.dk/en/our-responsibilities/global-cooperation

the three countries will indirectly benefit more than 1.65 billion citizens depending on reliable and affordable electricity for improving their lives. This will contribute to reducing present and mitigating future global carbon emissions, strengthen geopolitical energy security, and have several social cobenefits such as new job creation, reduced air pollution and associated health risks, which today cause more than 6 million premature deaths globally. The programme will take into account the environmental and socio-economic risk factors associated with this transition.

Each of the three countries will have different targets and results frameworks guided by DEA- GC's core competency areas: long-term energy modelling, framework conditions for renewable energy, integration of variable renewable energy, and energy efficiency. The expected results from the programme will contribute to strengthened choice awareness in terms of least cost energy policies, and investment. It will increased institutional capacity in areas such as energy modelling and data processing for long-term planning, which is key for data-driven decision making for increased investments in green energy. It will also contribute to the adoption of new effective energy policies and regulations allowing transparent governance and management of the energy sector. In doing so, DEPP IV will contribute to a just, inclusive and sustainable development. It will specifically also address key cross-cutting issues of poverty and inequality, including sustainable growth, leaving no one behind (LNOB), gender equality, youth and job creation with application of a human rights-based approach to development (HRBA).

#### 1.2 Context

Green energy transition is the backbone of a sustainable development

Energy drives investments in emerging industries, fostering job creation and inclusive growth while also enabling social development and underpinning the achievement of several SDGs, e.g. access to energy, climate action, education, health, etc. Lack of reliable and affordable energy results in a decline in social welfare, hampers economic growth, often linked to economic recession, which can lead to increased risk of political instability. Higher energy prices and power shortages particularly affect the poorest and most vulnerable households, which cannot afford increased energy prices, back-up generators and are often in risk of losing their jobs during an economic recession. Therefore, securing an affordable and reliable energy supply is a high political priority for almost all governments including in Brazil, India, and Kenya.

About 85% of additional global electricity demand towards 2026 is set to come from outside economies in the global North. Particularly India, China, and Southeast Asia are experiencing rapid increases in electricity demands. But also Africa, with a growing population and urbanization, is expected to see a surge in the demand for electricity. Brazil has doubled its energy demand since 1990, mainly driven by increased demand for electricity, and the demand is expected to continue to grow by annual rate of 3.2 %.

The leaders declaration from the G20 summit in India in 2023 and the Global Stocktake at COP28 called for tripling of renewable energy and doubling of energy efficiency by 2030 to be consistent with limiting global temperature rise to 1.5°C. This global ambition requires unprecedented rapid deployment of renewable energy technologies, and even though positive trends are observed, the distribution of investments is unequal. Since 2021, more than 90% of the increase in clean energy investment has taken place in advanced economies and China, though both India and Brazil also have attracted significant investments. Attracting large-scale financing for deployment of renewable energy will require several overlapping elements focused on de-risking. Firstly, improved energy planning and modelling will lead to fact-based choice-awareness for decision makers increasing cost-

effectiveness of national plans and strategies. Secondly, policies and regulations for renewable energy technologies need to be clear, enabling and transparent to offer lower risk and stable environment for investors. Thirdly, for implementation there will be a need for technical expertise for constructing, maintaining and operating as well as an adequate grid infrastructure and operations capable of ensuring the use of electricity production from renewable energy. If these elements are not in place, investors are likely to continue investing in lower risk markets which will delay the green energy transition and not being able to meet the rapid increasing energy demands and climate mitigation targets set out in the Nationally Determined Contributions (NDCs) under the United Nations Framework Convention on Climate Change and the Paris Agreement on Climate Change. Finally, it is relevant to emphasise that clean energy will play a key role in adapting to the climate crisis including extreme weather events that cause flooding or droughts, preventing food loss from the agricultural sector through powering cold-chains, improving access to potable water or reducing the severe impacts from heat waves.

Lack of reliable and affordable energy can push millions of the most vulnerable people back into poverty as demonstrated by the recent global energy crisis. Renewable energy offers new possibilities for energy security at times of geopolitical instability, particularly for fuel-importing countries such as Kenya and India. Furthermore, it opens opportunities for job creation and to phase-out subsidies for fossil fuels, which IMF estimates exceeded USD 7 trillion in 2022 or 7.2 % of global GDP.

Transitioning towards green energy systems that deliver affordable, reliable, and renewable energy will be critical to achieving the SDGs, eradicate poverty, and maintain sustainable growth. Denmark's partnerships to further advance and accelerate a green energy transition in Brazil, India, and Kenya will contribute to strengthening the foundations of sustainable development while addressing the climate crisis. The Danish experience demonstrates that it is possible to increase variable renewable energy sources for electricity production and introduce market-based pricing mechanisms while having the highest energy security in the world. It also demonstrates that climate action and achieving the SDGs can go hand-in-hand. In fact, in many ways, the two agendas have synergies and mutually reinforcing impacts.

## Brief country contexts of Brazil, India, and Kenya

DEA-GC is partnering with a wide range of countries, including both some of the world's fastest growing economies and largest emitters and countries in Sub-Saharan Africa where more than half of the population still lack access to electricity. The proposed DEPP IV Programme has pooled together three very different countries when it comes to size, current energy mix, and expectations for the cooperation with DEA. However, all three countries have set out ambitious targets for renewables and already have considerable shares of green energy in their energy mix today. Yet, all of them are confronted with the challenges of diversifying their energy mix with variable renewable energy sources while meeting a growing energy demand and working to achieve international commitments expressed in their NDCs as well as achieving SDG targets. All three countries are in a critical stage of their energy transition where long-term energy planning will have an impact on needed additional energy capacity, improved and adequate grid systems, and development of clear regulations. All while ensuring transparency, reliability and affordability.

These three countries are strategically significant for Denmark's climate diplomacy. Brazil, as the current chair of the G20 and the host of COP30, plays a pivotal role. Kenya as a leading country to promote renewable energy transition in Africa, including the Accelerated Partnership for Renewables in Africa (APRA), and as a new member of the Beyond Oil and Gas Alliance (BOGA). Additionally,

the Green Strategic Partnership with India is of high priority for Denmark and India is third-largest consumer of energy in the world.

The political-economy context of three countries is important in developing the Danish peer-to-peer partnerships under DEPP IV. The ongoing engagements under strategic sector cooperation (SSC) in Brazil and Kenya and the India-Denmark Energy Partnership (INDEP) Programme in India already involve key sector institutions and have provided overview and understanding of key sector stakeholders. However, new partners will also be engaged under DEPP IV both at national and subnational levels. Each of the key partner institutions will be supported from a demand-driven approach based on assessment of their needs and priorities and the knowledge of DEA-GC. A preliminary assessment will be done during the final formulation (the formulation missions to Brazil and India will be undertaken in May and June 2024, while the mission to Kenya has just been completed) but also during the first year of DEPP IV implementation. Furthermore, an adaptive approach will be applied to shift advisory services and capacity development to new emerging needs and political circumstances. The following provides a brief overview of the political ambitions of renewable energy in the three DEPP IV partner countries.

### Brazil

Brazil has one of the greenest energy mixes in the world and is regional and global lead on issues related to green energy transition and climate action, which is clear in its current role as G20 chair and upcoming host for COP30. For electricity production, the country is heavily depending on hydropower. However, the dependency on hydropower makes the country vulnerable to climate change from more severe droughts and changes in rainfall patterns. In 2022, the share of hydropower production was 61.9% of the electricity mix from 53.4% the year before, which a critical year due to the water crisis. This resulted in an energy crisis where Brazil had to import electricity and increase energy powered by fossil fuels, resulting in consumer price increases. This particularly affected the 33 million people living below the poverty line in Brazil through less reliable and more expensive energy.

Brazil's energy demand is expected to continue to increase by 2.5-3.2% annually. The Brazilian government is seeing more forms of variable renewable energy complementing the strong dependency on hydropower and to meet the increasing demand. In 2021 wind and solar accounted for 17% of the installed capacity and is expected to reach 32% in 2031. Brazil also explores opportunities to invest in its unexploited offshore wind potential. This rapid deployment of variable renewable energy sources will require strengthened planning and modelling capacity, improved flexibility of the grid, the identification of additional investments in the grid and exploring the country's enormous offshore wind potential.

#### India

India is third-largest consumer of energy. With a population of 1.4 billion and the fastest growing economy in 2023, India has seen its energy demand increasing by 6-7 % per annum. It is foreseen that an increased growth in the energy demand between 2024 and 2026 is similar to the current energy consumption of United Kingdom.

The Government of India has made remarkable progress in providing access to electricity and India is currently ranked as fourth in the world in terms of installed renewable energy capacity (187 GW). However, more than 70 % of energy consumption remains covered by fossil fuels, especially coal. The coal industry continue to constitute a cornerstone of the Indian economy and the government

revenue generated from the coal industry plays a crucial role in fostering socioeconomic development and infrastructure enhancement in coal-producing regions. Furthermore, the coal sector provides large employment opportunities - especially in the largest coal-producing districts of Eastern states, where the sector sustains the livelihoods for thousands of families. India has set a number of ambitious climate and energy targets and aims to reach 500 GW of non-fossil based energy by 2030 and reach net zero greenhouse gas emissions by 2070.

Achieving India's ambitious climate and energy targets will require large investments in renewable energy. Here wind and solar can be cost-effective options and pave the way for a green transition as well as further increase the access to affordable electricity for India's poorest and most vulnerable people as well as the growing middle class. The unprecedented deployment of renewable energy necessary to transform India's energy system, will require looking into a completely changed energy system with new sources of energy (e.g. offshore wind), strengthened long term energy planning and modelling as well as a creating a strong framework for integrating high shares of renewable electricity into the grid.

#### Kenya

Kenya has set the ambitious target of being 100% powered by clean energy and achieve universal access to electricity by 2030. Kenya is in this context a frontrunner country in Sub-Saharan Africa, and one of the few countries progressing positively to achieve SDG7. Kenya was also leading launch of the Accelerated Partnership for Renewable in Africa (APRA) at COP28 which is to drive the renewable energy transition as a strategic solution to energy access, security, and green growth on the African continent.

Today Kenya's electricity consumption is powered by nearly 90% of renewable energy (primarily geothermal power and hydropower). Kenya has also made strong progress towards achieving universal access to electricity, doubling electricity access from 32% in 2013 to 75% in 2022. Electricity demand in Kenya has increased in the past few years, marked by a 9% increase in demand for electricity in 2021 and an increase in GDP of about 8%. The Kenya Vision 2030 sets out a long-term ambition of transforming Kenya into "a newly-industrialising, middle income country where access to sustainable energy infrastructure is a cornerstone to achieve this. Kenya is already frontrunner country in Africa when it comes to energy transition by utilizing its geothermal and hydropower, but also has a huge potential for wind and solar energy.

## 1.3 Rationale and justification for support

DEPP IV support will deepen and widen already ongoing energy partnerships in Brazil (under SSC since 2023), in India (INDEP) since 2020), and in Kenya (under SSC since 2022), thus building upon well-established partnerships with key national partners and responding to their needs and priorities for upscaled cooperation. Annex B provides summary information on the two SSC projects and INDEP and includes examples of results and lessons. Brazil, India, and Kenya all face significant growth in both observed and estimated energy demand, and securing reliable and affordable energy supply is a political top priority for all three countries, combined with clear ambitions to move towards low-carbon economies.

The DEA-GC shares best practice from Denmark through government-to-government cooperation to accelerate the speed of global green transition. Through peer-to-peer mutual learnings, experience sharing of best practices and qualified technical assistance, the DEA-GC supports partner countries in identifying and informing decision makers on the most cost-effective pathways to deliver affordable energy aligned with national targets set out in their NDCs – or beyond. Furthermore, the

GtG cooperation contributes to the reduction of poverty in a multifaceted understanding as energy is a key enabler for sustainable development with poverty reduction and in applying a human rights-based approach in the support of the just and inclusive green energy transition (see also Section 1.5).

DEA-GC's core areas of expertise (see also Annex A) will continue to guide the cooperation but are increasingly also including new topics based upon country requests that match the GC's core competencies and those of its Danish consortium partners. Denmark has demonstrated to have one of the most reliable electricity systems in the world, while being powered by 62% variable renewable energy. This knowledge and experience will be beneficial for the three partnership countries in the ongoing cooperation and in the widened and deepened partnerships proposed under DEPP IV.

Meeting future energy demand will require data and solid models that can inform the development of long-term and cost-efficient pathways for the energy sector. The analysis of the least-cost scenarios includes forecasting of energy demand and supply, deployment of new technologies, and effects of energy prices, investment costs and policies. When sharing experience and building capacity on long-term energy modelling, the partners will be more informed in the formulation of political plans for the energy sector and definition of the climate targets. Both in terms of the components of different development pathways of the energy sector, their benefits and disadvantages, and the needed actions to materialize these pathways (where, how, what). Furthermore, development of technology catalogues is at the core of long-term energy planning. The catalogues are developed in cooperation with stakeholders and industry and provides information to compare and evaluate different technologies. As such, long-term energy modelling increases the transparency of the development plans, which contribute with more certainty for investors and inform needs to consult local stakeholders (e.g. location of new transmission lines, wind parks or impacts on jobs).

Furthermore, DEPP IV will share experiences, learnings, modelling tools, which can strengthen capabilities of partners on regulations and operations to integrate higher shares of variable energy sources in the energy mix, which is critical for securing reliable low carbon energy systems. The technical advisory is among other things on designing and improving electricity markets with the right incentives for producing and using renewable energy. Furthermore, it can be on formulating grid codes that informs the system operator of the transmission grid on how to operate and maintain the infrastructure, for an example on how to connect a new and variable energy source into the grid or how to balance supply and demand. As such, DEPP IV contributes to ensure the availability of energy, which is at the core of giving individuals the chance to develop and/or utilise resource with a view to escaping poverty.

It will also share Danish experience and approaches on how to deploy more renewable energy through transparent, competitive and non-discriminatory public tenders and thereby mobilise more private capital to the energy sector through stakeholder dialogue and de-risking measures. This can for an example be by introducing the concept of one-stop shops in which all the administrative procedures for deploying renewable energy is gathered in one authority. Furthermore, DEPP IV will share experience on planning of renewable energy with involvement of local communities, environmental assessments and cost-efficiency to improve transparency, non-discrimination and accountability.

The combination of good governance and technical capabilities will be critical in order to deliver reliable and affordable electricity to more than 1.6 billion people while transitioning towards a low-carbon economy. As further discussed in Sections 1.4 and 1.5, key cross-cutting concerns including a poverty orientation, gender equality, the human rights-based approach (HRBA) and the human

rights principles of Participation, Accountability, Non-discrimination, and Transparency (PANT) underpin many activities, as further explained in DEA's "forståelsespapir" (se Annex D, in Danish), e.g. consultation of local communities, transparent access to information, etc. DEA is currently introducing a more systematic approach to work on these cross-cutting areas which will be integrated in this DEPP IV.

In addition to being closely aligned with the national partner institutions' strategies, DEA-GC partnerships also take into account the synergies with other international engagements by a variety of different donors and multilateral agencies in each country, such as the International Renewable Energy Agency (IRENA), the International Energy Agency (IEA), the World Bank, Asian Development Bank and UNEP. These synergies also include the potential in applying policy advice and build upon knowledge products developed by multilateral agencies that are also supported by Denmark. Furthermore, synergies between DEPP IV and Danish supported initiatives such as APRA, BOGA, Global Offshore Wind Alliance (GOWA) and Group of Negative Emitters (GONE) will also be explored and pursued.

DEA will concretely engage with different stakeholders in each country depending on the context. Close partnerships exist with both IEA and IRENA when it comes to support energy modelling, offshore wind (GOWA), energy efficiency and accelerating deployment of renewable energy. DEA's long-term engagement with national partner institutions and long-term advisors based in the countries are often an asset for collaboration with the two international energy agencies. Bilateral donor collaboration are also of importance, particular EU-related donor coordination. Furthermore, as long-term energy planning is moving towards implementation the Multilateral Development Bank and private investors will become more important stakeholders which is already observed in India where closer dialogue with the World Bank and private investors have been established in order to finance infrastructure investment related to offshore wind.

The justification for DEPP IV against the OECD DAC criteria of relevance, coherence, effectiveness, efficiency, impact, and sustainability is summarised in Annex C. The alignment with Denmark's policy priorities is addressed in Section 1.5.

#### 1.4 Results and lessons learned from previous support

In Kenya and Brazil, based on the SSC experience, the potential for widening and deepening the cooperation, and posting Long Term Advisors (LTAs) in both countries is considered high. In India, well-established partnerships and a continuously growing demand for Danish assistance from key partner institutions means that there is ample opportunity to upscale, widen and deepen the current engagement.

The results from the three countries and DEPP partnerships have been able to contribute to transformative change in the long-term energy planning in some largest emerging economies. However, it is important to underline that in it is a long-term transformational process – not a quick fix – but with high impacts. The engagement with India is the most mature of the three countries and demonstrate the positive impact of the Danish GtG support. The Danish support has contributed to first public tender of 4 GW offshore wind, informed India's long-term energy planning and contributed to a range of technical measures than can be applied in order to integrate renewable energy efficiently into the electricity system.

There are also strong links with the Danish climate diplomacy in all three countries. For example, at COP28 in 2023, Brazil joined the GOWA initiated by Denmark, which was a sign of the importance

of offshore wind for the energy transition. In Kenya, the SSC project has served as a platform to discuss Kenya's dependency on fossil fuels in certain sectors, ultimately contributing to Kenya's decision to join the BOGA as the first African country and as a leading partner to APRA. In India, the INDEP programme constitutes a cornerstone of the broader Green Strategic Partnership between India and Denmark and has played an important role in strengthening the bilateral relationship between India and Denmark. Selected results from ongoing cooperation are mentioned in Annex B.

In 2023 two mid-term reviews (MTRs) were undertaken: i) MTR of the India-Denmark Energy Partnership (INDEP) programme and the Indonesia-Denmark Energy Partnership Project (INDODEPP); and ii) MTR of the Danish Energy Partnership Programme (DEPP III) with China, Vietnam, South Africa, and Mexico. The findings and lessons learnt from these reviews inform the ongoing formulation of the proposed DEPP IV programme. Some observations and recommendations from both reviews are summarised here. The DEPP III MTR found the modality of combining GtG cooperation programmes and climate diplomacy valuable. Also, a good balance was found between the DEPP III and private sector activities in exchanging information without jeopardizing the integrity of DEPP III among partners as a GtG partnership.

The MTR's emphasise that the DEPP programmes are at their core capacity development2 programmes, and the budgets are almost solely spent on technical assistance and training. However, the MTRs found that support would benefit from more systematic yet simple institutional capacity assessments of key partners with the objective of introducing agreed capacity development with clear outputs and outcomes. This would enhance assessing the extent to which institutionalisation and system change occurs. DEPP IV will therefore apply a more structured approach to capacity development by employing a variety of tools, all tailored to partner needs and promoting institutionalization of capacity development. This include, peer-to-peer exchange, twinning of specialists, expert training, learning events and workshops, training courses, delegation visits to Denmark, study Tours, south-south cooperation, building on DEA extensive network and partnerships with international agencies and donors. Capacity development activities and tools will be carefully planned, selected and monitored so that progress and results can be identified and reported. Capacity needs assessment will be conducted with key partner institutions in the initial implementation phase in order to agree on needs, relevant tools, targets and sustainable institutional uptake of the new technical capabilities. Baselines will be defined as well as clear and realistic targets based on partners' objectives will be defined. These targets will be integrated in the results framework indicators. Furthermore, the use of the produced knowledge and capabilities will be sought to become systemically integrated in more policy-oriented processes and institutions to maximize the use and uptake of the new data, modelling and learnings.

The MTRs found that systematic joint work planning and progress reporting guided by nationally based steering committees should be foreseen in all countries. The importance of solid management and accountability structures in partner countries was emphasised also to mitigate risks of centralised, ad-hoc, or in-transparent planning processes. The establishment of technical working groups on e.g. outcome level with formal tasks will ensure that broader considerations are included in the centralised governance structure in each country.

<sup>&</sup>lt;sup>2</sup> Capacity development could be understood as: "The process by which individual's groups, organizations, institutions and societies increase their abilities: to perform functions solve problems and achieve objectives; to understand and deal with their development needs in a broader context and in a sustainable way.

DEA has taken important steps to address cross-cutting and socio-economic issues in their programmes and developed a position paper on poverty orientation and HRBA (Annex D) in cooperation with the MFA in 2022. The two MTRs found indications that the position paper should be more systematically integrated into the programmes, since cross-cutting issues, in particular gender equality, were not addressed in work planning and progress reporting. The DEA is thus currently converting the thoughts behind the position paper into dedicated workshops and implementation principles on "faggruppe" level. The objective is to ensure that the DEA experts, LTAs and energy sector counsellors, within each thematic energy area, systematically operationalise principles around HRBA and poverty alleviation analysis into the planned activities. This work is ongoing in 2024 and will be reflected in DEPP IV programming.

Both MTRs also found a need for DEA to internalise the critical importance of strengthening the political-economy assessment approach, e.g by establishing a DEA lighthouse<sup>3</sup> or a network with expertise in broader development issues including political economy and capacity development to improve the cooperation on these issues. As a response, DEA has established the specific lighthouse position and has started an internal project to further develop its approaches and knowledge base, which will guide engagements on cross-cutting and socio-economic topics. As part of DEPP IV formulation, targeted workshops were held to further address these issues.

A strategic consideration resulting from the MTRs was also the increasing need for moving focus towards implementation rather than mainly planning and strengthening the enabling framework. In Brazil and India new directions towards building partnerships at State level for offshore wind development is reflecting DEA's focus on this issue. The DEPP III MTR found that increased use of local expertise and South-South cooperation as well as support to civil society organizations, knowledge centres, curriculum development at universities for modelling etc. could be initiated to broaden the support and meet the challenge of the transition process. This will be taken into account in each country context, and the engagement of knowledge partners, think tanks and academic institutions such as CEEW and IIT Madras in India or CEBRI in Brazil are examples of this.

# 1.5 Alignment with Danish priorities, strategic considerations, and cross-cutting concerns

DEPP IV is fully in line with Danish priorities, policies, and strategies as articulated in Denmark's Strategy for Development, which outlines that Denmark will contribute to accelerate a green energy transition in developing countries, mobilize private financing for renewable energy and improve national green energy planning. More specifically, the Strategy states that "Danish authorities have decades of experience in creating the framework for successful green transition, and Danish companies, knowledge institutions and other stakeholders are at the very front in developing and implementing green solutions within renewable energy, district heating, energy efficiency..." "Denmark should be the little green cogwheel that sets the larger ones in motion. This happens when we inspire major CO2 emitters to take ambitious climate action, through international cooperation on renewable energy and energy efficiency, or through government-to-government strategic sector cooperation with other countries"; "Denmark must assume international leadership within reductions, green transition, and access to clean energy"; "Denmark will promote ambitious national climate action plans that enable developing countries and growth economies to transition from fossil fuels to clean energy sources...". "Denmark will 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. The international cooperation on energy under the strategic sector cooperation will lie at the heart of the efforts to promote green transition and underpin Danish climate diplomacy".

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<sup>&</sup>lt;sup>3</sup> GC already has so-called Lighthouses within technical areas to maintain cutting-edge expertise.

DEPP IV will contribute to accelerating progress towards the implementation of SDG7 (affordable clean energy) and SDG 13 (climate action) as well as the Paris Agreement on Climate Change. Furthermore, providing reliable, affordable and sustainable energy is also an enabler and catalyst for achieving most of the other SDGs such as SDG1 (no poverty), SDG3 (good health), SDG6 (clean water), SDG12 (sustainable consumption and production) and SDG 17 (partnerships for the goals).

Addressing cross-cutting issues of poverty and inequality with application of a HRBA to development will also be a contribution of DEPP IV within the four core expertise areas: long-term energy modelling, framework conditions for renewable energy, integration of variable renewable energy, and energy efficiency.

Long-term energy modelling provides support to illustrate the different cost-efficient development pathways for the energy sector. In relation to cross-cutting issues, long-term energy modelling contributes to introducing principles of good governance in the green transition by building on principles of transparency in the planning of the energy sector and enhances the accountability of the authorities. With a least-cost approach, DEPP IV contributes to a non-discriminatory approach to energy planning. Ensuring that the analysis and data is public available with inclusion of relevant stakeholders in the process, further advance the transparency and inclusion of different groups. In developing the development pathways of the energy system, estimation of the externality of low air quality resulting from emissions of air pollutants can also be included. By estimating this cost in the energy system modelling, the DEPP IV addresses the aspect of personal security in the partner country as high pollution lead to severe health consequences.

When cooperating on framework conditions for renewable energy with the partner country, DEPP IV contributes to objective planning and location of renewable energy and provides transparency in the tendering process by introducing stakeholder dialogue and one-stop-shops. As such, inclusion of stakeholders and local communities in developing the framework and deployment of renewable energy gives vulnerable groups voice and influence to articulate one's needs and rights collectively and to ensure a non-discriminatory green transition.

When sharing Danish experience on integrating variable renewable energy into the energy system for example by formulating guidelines that operators of the grid infrastructures should follow to operate, maintain and develop the transmission system, the contribution to improve the security of supply in the partner country will benefit poor and vulnerable groups. This in terms of improved access to essential services as hospitals, while creating jobs as economic activity is reliant on secure energy supplies. This also applies for the ability to operate small enterprises and enable them to grow which stimulates local economies. Furthermore, it can underpin the transition to clean cooking as reliable and available energy is essentials for creating the incentives or target specific energy poor areas of the countries.

In sharing experiences on regulation and incentives for improving the energy efficiency in industry and buildings, DEPP IV contributes to address increased opportunities and resources for individuals in the green transition by re-skilling the work force and meet the educational demand in the green transition. This gives the people the agency to realise a good and dignified life within the structure of the society.

Box 1.1. summarises information and selected examples of how the programme will address a poverty orientation and other cross-cutting concerns.

#### Box 1.1 – Addressing cross-cutting concerns

In addressing the key cross-cutting issues of poverty and inequality, inclusive sustainable growth, leaving no one behind (LNOB), gender equality, youth and job creation, a human rights-based approach to development (HRBA), and environmental concerns, DEPP IV will operationalise the DEA approach to these issues as they are articulated in the above-mentioned "forståelsespapir"/concept note which has been agreed with the MFA in 2022. This note, which is presently only in Danish, is included in this document as Annex D. Briefly, the note takes as a point of departure, the multi-dimensional understanding of poverty, exemplifies how human rights principles can be operationalised e.g. through ensuring that access to electricity is benefitting also disadvantaged communities, public consultation and transparency on data and procurement, long term planning and modelling based on least-cost options with technology catalogues and outlooks developed with involvement of broad range of stakeholders, emphasis on socio-economic aspects of the energy transition including co-benefits such as improved employment opportunities in green energy and energy efficiency solutions, improved health outcomes, etc.

Furthermore, the Danida How-to-Notes (link), particularly the Approach note-Fighting Poverty and Inequality; and the How to – Note on Energy transition and Emission Reductions in Developing Countries, will also guide how the programme addresses these concerns. Thus, emphasis is placed on the multi-dimensional definition of poverty that is also an integral part of DEA's "forståelsespapir", special attention to those groups who are the most vulnerable and lag the furthest behind in having their needs and rights fulfilled, the principle that Denmark's engagement must not directly or indirectly harm poor or vulnerable groups, identifying and assisting groups that could lose out from the energy transition, ensuring a focus on the needs of local communities, providing increasing transparency in energy planning and modelling, tender processes, etc.

## A few examples:

- 1. For Brazil, it is important to note that DEPP IV can directly contribute to a just and inclusive energy transition, as this is an explicit key policy goal of the Brazilian Government. The social dimension is key in this transition, which must focus on delivering affordable energy for all, keeping electricity prices low, in a way that must not lead to loss of jobs but rather contribute to a re-industrialisation of Brazil.
- 2. In India, the new outcome on offshore wind development in Tamil Nadu State will address the issue of benefit-sharing with local communities and groups affected by the offshore wind development through stakeholder dialogue, workshops and sparring on best practices of engaging with local communities, aiming to foster local acceptance of offshore wind farms and co-existence between offshore wind and other interests at sea (e.g. the role of local fishermen). Support for offshore wind development in Tamil Nadu will also consider the development of offshore wind industry, including looking into issues of job creation and upskilling.
- 3. Kenya is actively pursuing an electrification strategy aimed at powering all sectors, including lighting, cooling, cooking, and transportation, with green electricity. In this context, DEPP IV's support in areas such as least-cost planning and reliable power supply can greatly bolster the Government of Kenya's strategy implementation, ensuring both the affordability and accessibility of power.

DEPP IV is an ODA-funded GtG partnership cooperation based upon mutual trust, often working on policy issues and sensitive data and information. DEPP IV can implicitly facilitate opportunities for Danish commercial interests by supporting a green transition in areas such as offshore wind, integration of variable renewable energy and energy efficiency where Danish commercial capabilities and interests are strong. While DEPP IV indeed will seek mutual information sharing with private sector activities to facilitate synergies, it is necessary also being able to keep a clear divide with Danish commercial interests (which are handled by the Trade Council at the Danish Embassies and other avenues) in order to maintain the integrity of DEPP IV among partners.

## 2. DEPP IV objective and outline content

#### 2.1 Framework Programme objective and structure

The overall long-term and strategic objective of the DEPP IV Programme is to contribute to a just and inclusive green energy transition in the three partnership countries through advancement of low carbon energy development and implementation of short and long-term climate goals under the Paris Agreement.

It is underlined that the Kenya formulation mission has just been completed and that the India and Brazil formulations missions are planned for late May and late June, respectively (see the Process Action Plan in Annex D) and that therefore country programme outcomes and other information provided is preliminary and subject to further consultations and agreement with national partners.

## 2.2 Brazil Country Programme objective and outline content

The DEPP IV programme will build on the first two years of the partnership with Brazil under the SSC project, which is further described in Annex B. The Just and Inclusive Energy Transition is an important priority for the Brazilian government, which has introduced numerous programmes, initiatives, and strategies for supporting the transition. Denmark's continued and expanded partnership under DEPP IV is intended to support this transformative change process.

The great potential for offshore wind and the interest from the private developers (more than 70 projects totalling 200 GW) is currently putting pressure on the government to approve the regulatory bill for offshore wind, which is awaiting approval in Senate. A transparent and stable regulatory framework must be in place to fulfil the offshore wind potential and to attract and retain the interested developers. At the same time, sound long term energy planning is necessary for a cost-efficient development of the energy sector. The Brazilian partners already have strong modelling and planning capabilities, but with increased share of variable renewable energy entering the system in the future, there is a need for analysing how the integration of variable renewable energy can be done efficiently and create security of supply. The long-term energy planning must further be linked to the concrete policy making to ensure progress on ambitions and coupling across sectors, including a focus on socio-economic development to comply with the government's Just and Inclusive Energy Transition priority.

LTAs will play important roles in taking the cooperation forward. They will be critical for strengthening relation building, increased understanding of the country context, and for being able to respond in an agile manner to requests from the partners.

The identification and formulation process for DEPP IV has been ongoing since Q1 2024 and the status is reflected in the form of the present draft document for the Programme Committee. DEA missions under the SSC (including a high-level DEA mission in April 2024) and discussion are ongoing regarding how the SSC programme will transition to the DEPP IV.

The design of DEPP IV responds to the key lessons (see Annex B) from ongoing cooperation by building on the established, strong partnership and mutual trust developed with key national partners including Ministry of Mines and Energy (MME) as the leading authority. The substantive rationale for the proposed outcomes also builds strongly on the thematic/technical focus areas in the SSC work programme. Key issues that are planned to be further discussed during the formulation mission to Brazil in June, include:

1. How best to respond to the demand from partners on supporting the development of Brazil's offshore wind sector, links to GOWA and engage more directly with the state level on

- offshore wind pilot projects, including on job creation, consultation with fisheries and communities. Explorative discussions are ongoing with the states of Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, and Ceará, who are expected to be the first locations for offshore wind pilot projects.
- 2. How to use the window of opportunity for Denmark to contribute to Brazil's climate plan by responding to the request the Brazilian Ministry of Environment and Climate (MMA).
- 3. How to explore the inclusion of a work track on Energy Efficiency (EE) by including an initial phase in the first year of the DEPP IV implementation while expanding the partnership with MME and the National Electricity Agency (ANEEL).
- 4. How best to ensure flexibility in the DEPP IV design, including through adaptive management, how to assess needs for national partner capacity development in a manner that the equal partnership approach, and how to assess and engage with potential new partners during the early phase of DEPP IV implementation, etc.

Therefore, the following structure for DEPP IV results framework for Brazil is suggested as some area will be covered by the SSC:

#### Proposed DEPP IV Country Programme Objective:

Brazil's just and inclusive energy transition and climate action supported through a strengthened partnership between Brazil and Denmark for an enabling framework for renewable energy, the effective integration of variable renewable energy, the development of the offshore wind sector, and energy efficiency measures.

# Preliminary considerations on DEPP IV outcomes (as new and additional to current SSC Outcomes, which will run until completion of the SSC in August 2026):

- 1. Offshore wind development further enabled through improved regulatory framework conditions based on environmental and socio-economic aspects.
- 2. Strengthened long-term planning has informed least-cost, low-carbon development of the energy sector and enhanced climate change mitigation.
- 3. Energy intensity has been reduced due to further deployment of energy efficiency measures.

## Poverty orientation, climate change and other cross-cutting issues:

- O Cross-cutting issues were addressed in more general terms in Section 1.5 in the foregoing. Specifically for Brazil, it is important to note that DEPP IV can directly contribute to a just and inclusive energy transition, as this is a key policy goal of the Brazilian Government. The aim is to decrease dependency on hydropower (which in 2022 accounted for 62% of the electricity mix, but which has been affected by droughts and has led to increasing electricity prices), and increasingly rely on intermittent sources, such as wind and solar energy. The social dimension is key in this transition, which must focus on delivering affordable energy for all, keeping electricity prices low, in a way that must not lead to loss of jobs but rather contribute to a re-industrialisation of Brazil. Furthermore, Danish lesson learned regarding consultative processes with local communities and inclusive development approaches will be relevant.
- O Concerning climate action, Brazil updated its NDC in September 2023, with the long-term objective of being climate neutral in 2050. Emissions must be reduced by 48% by 2025 and 53% by 2030 in relation to 2005 emissions. The NDC is being reassessed by the government in cooperation with civil society and there are voices advocating climate neutrality by 2045. Brazil's hosting of COP 30 in 2025 is a strong driver for climate action. The Danish modelling expertise

- with variable renewable energy sources can be relevant to ensure data-driven planning and implementation, including where best to add more renewable energy and infrastructure investments engaging with the Ministry of Environment and Climate (MMA).
- o Brazil is active in South-South cooperation, and triangular cooperation could be an area of support under DEPP IV, including potentially with India and Kenya and other countries in the DEA portfolio such as the SSC with Colombia. This was also recommended in the MTR as a potential of the DEA GC and is highly relevant in Brazil's role towards COP30.

#### Governance and management:

The governance structure is expected to be based on a Steering Committee with the MME as main partner with underlying Technical Working Groups under each outcome with relevant institutions.

#### Country level coordination:

After the change of government in Brazil in January 2023, many development partners are interested in partnerships with Brazil in its green transition, so coordination is a key issue. Denmark's strong partnership with the leading authority, the MME, is a strength in this regard, as is Denmark's government-to-government partnership and peer-to-peer cooperation modality, and the Danish Embassy is engaged in relevant coordination fora. Other development partners active in the same thematic areas as Denmark, include the World Bank Group, EU, GIZ Germany, UK, Netherlands, and USA and the Japan International Cooperation Agency.

## 2.3 India Country Programme objective and outline content

DEPP IV will be focusing on the same thematic core areas as INDEP, namely offshore wind, energy planning and modelling, and the integration of variable renewable energy. This alignment stems from the program's established strong partnerships. DEPP IV will leverage existing collaborations with key stakeholders such as the Ministry of New and Renewable Energy (MNRE), the Ministry of Power (MOP), and relevant agencies and institutions. In addition, the new program will start new engagement at the state level with the Government of Tamil Nadu. Further exploration of these opportunities to strengthen the socio-economic focus areas will take place during the formulation mission scheduled between 22 May and 1 June 2024.

Regarding offshore wind, the announcement of the first offshore wind tender in India in February 2024 means that there is a need to adapt the offshore wind program in DEPP IV towards a focus on implementation, including partners on a state level and addressing new issues such as strategies to effectively integrate electricity from offshore wind, optimizing renewable energy integration and utilisation. There will be a need for DEA to engage in strengthening collaboration and dialogue between the different agencies and ministries which will be done through workshops and joint studies. Potential work streams have been identified as:

- Supporting India with de-risking and executing offshore wind tenders with the ambition of meeting the 37 GW Government target through open and transparent tender processes.
- Supporting on technical and environmental analyses, strengthening the planning for efficient and sustainable use of India's offshore wind resources.
- Support on developing policy measures and technical solutions aiming to minimize risks related to grid infrastructure and supply chain obstacles to accelerate offshore wind deployment.

Furthermore, the proposed engagement with Tamil Nadu will aim to support the implementation of the offshore wind strategy on a State level, also emphasizing topics such as supply chain development, job creation and upskilling of the local workforce. Furthermore, the partnership will address socioeconomic issues related to possible resistance to offshore wind from local fishermen, paying a

particular focus on ways of enhancing local consultation, benefit sharing and acceptance of offshore wind and promote co-existence between offshore wind and other interests at sea.

In energy planning and modelling, DEPP IV will continue collaborating with the Central Electricity Authority (CEA) on energy system planning and modelling as well as look into the opportunity for further collaboration with MOP and other stakeholders to support policy development initiatives and enhance dissemination channels for research findings. Further consultations with partners are necessary to advance the overall program of work and identify avenues for bridging technical analysis with policy decisions. Potential work streams have been identified as:

- Supporting the development and consolidation of the Indian Power Outlook, strengthening partner capacity within energy system planning and modelling as well as look into ways of updating the model in order to enhance focus on environmental and socioeconomic issues
- Supporting the development and update of technology catalogues on green technologies in close cooperation relevant stakeholders from e.g. academia and civil society.
- Support for a strengthened policy dialogue for a low-carbon trajectory

Regarding the integration of variable renewable energy, DEPP IV is seeking to establish new partnership between Grid-India (the Indian Independent System Operator) and Energinet (the Danish Transmission System Operator) in order to share the best practices from Denmark on power system operation and balancing of the electricity system. Further there is a focus on strengthen the work with key actors in the Indian power sector. Potential work streams have been identified as:

- Establishment of a new partnership between Grid-India and Energinet for peer-to-peer knowledge sharing on power system operation.
- Support on policy measures and technical solutions to enhance flexibility and market development in the power sector.
- Support on policy measures and technical solutions to enhance security of supply and forecasting of renewables.
- A new cooperation area on distributed generation, supporting the governance and management of distributed generation.

Furthermore, for all three outcomes, DEA is actively seeking to strengthen the engagement with CEEW and IIT Madras, involving both as key knowledge partners in DEPP IV.

#### Proposed DEPP IV Country Programme Objective:

India implements targets and measures for a sustainable and low-carbon energy mix in line with the Paris Agreement with focus on a just and inclusive transition to renewable energy.

#### Preliminary considerations on DEPP IV outcomes:

- 1. A transparent regulatory and institutional framework lead to a timely and efficient implementation of India's offshore wind strategy.
- 2. Scenario-based modelling and long-term energy planning is used to inform decision-making and guide energy policies in India towards a low-carbon energy pathway.
- 3. A transparent regulatory framework for efficient, secure, and market-based integration of variable renewable energy is implemented to secure affordable and reliable low-carbon energy
- 4. The partnership with the State Government of Tamil Nadu is supporting the local implementation of India's offshore wind strategy with a particular focus on paving the way for a sustainable and just energy transition in Tamil Nadu.

## Poverty orientation, other cross-cutting issues, climate change:

Cross-cutting issues were generally addressed in Section 1.5 in the foregoing. For INDEP specifically, the MTR found that despite requirements in the Programme Document, poverty, HRBA, and gender equality were not systematically addressed, and that e.g. distributional aspects were not included in modelling work. The MTR found however, that the DEA "Forståelsespapir" and the Danida Howto-notes (developed after INDEP was formulated) now provide good guidance to DEA in addressing these issues. The proposed engagement with Tamil Nadu on offshore wind and involving new national knowledge partners will open new opportunities to address more cross cutting socioeconomic topics, which will be strengthened further to ensure a holistic approach with focus on increased engagement at the state level with local stakeholders.

Climate: India strengthened the intensity and non-fossil capacity targets as part of its 2022 NDC update, going from 33-35% to 45% for the intensity target and from 40% to 50% for the non-fossil capacity target. The carbon sink target was unchanged. The Danish embassy is a Climate Front Post and there is emphasis in the INDEP Programme Document on the climate angle and the NDC. There is strong potential for DEPP IV to contribute to India's current and future NDC mitigation target.

#### Governance and management:

An outcome-based governance structure is envisioned with three steering committees, one for each partner. The steering committees are expected be co-chaired by high level participants from the Danish Embassy in Delhi, DEA, and the Indian partner ministry, and will meet once a year.

In addition to the steering committees, four implementation working groups will be formed (one for each outcome) with working level participation from DEA and Indian partners. The main task of the advisory groups is to oversee and coordinate the implementation of the activities under each outcome and prepare the meetings in the steering committees. The advisory groups will meet at least every six months.

#### Country level coordination:

The INDEP 2023 Progress Report states that "it has been a continuous focus area for the INDEP to increase coordination with other donors in India — especially within offshore wind - in order to explore possible synergies, avoid duplication of activities and support partner institutions in using donor resources most efficiently. This has resulted in numerous meetings with e.g. the USAID, Norway, World Bank, ADB and the EU and strengthened donor coordination will continue a priority for 2024. Donor coordination is done in close coordination by DEA, the Energy Counsellor and the Investment Counsellor at the Embassy and the General Consulate in Bangalore.

#### 2.4 Kenya Country Programme objective and outline content

The first phase of the SSC with Kenya is ending in December 2024, and as such the transition into DEPP IV starting early 2025 will act as a continued but enhanced partnership between Denmark and Kenya. DEPP IV will maintain existing partnership structures with the Ministry of Energy (MoE). The Kenyan government aims to pursue least cost power development and here the challenge is not transitioning away from fossil resources but rather ensuring that new resources are objectively included in the long-term energy planning and procured in a competitive and transparent manner. Furthermore, support will be directed towards the completion of the unbundling as determined by the Energy Act 2019 as well as increased transparency in the planning, procurement and

implementation processes. This will lower risks for the sector as a whole and support the strategic goal of having a reliable and affordable electricity supply.

Under the SSC, online training sessions, in-person capacity building workshops, intensive modelling courses in Denmark has involved the group of around 40 government staff responsible for the national power sector plan – the Least Cost Power Sector Development Plan. A core group of 15 staff from the various government institutions has been set up and a Kenya specific power sector model has been built together with the Kenyan partners using their own data and input for scenarios. These efforts have laid a solid foundation for continued collaboration and support under DEPP IV, with opportunities to further enhance and scale-up capacity-building activities by placing a LTA at MoE. MoE is mandated by the Energy Act 2019 to lead the national planning efforts, but due to lack of internal capacity it is necessary to rely on key staff in other government institutions to drive the process. A LTA would be able to assist and advice on a daily basis as well as highlight the need for establishing a permanent planning unit under the directorate for renewable energy. Under DEPP IV, there are opportunities to continue and expand upon the modelling efforts, ensuring that key stakeholders are equipped with the necessary tools and capacity for effective planning which can be used to inform political decision-making.

As a result of the Kenyan partners showing willingness to share their existing modelling data early in the project, it was deemed that using their own data for building a new Kenyan Balmorel model would increase trust in using the model. Thus, the activities for the development of a technology catalogue adapted to the Kenyan context were not prioritized, but now there is a renewed opportunity to pursue this initiative under DEPP IV. Developing a technology catalogue with the specific needs and contexts of Kenya, DEPP IV can enhance the input for energy sector modelling as well as create a common understanding between government, private sector, universities and civil society of projected costs and adoption of energy solutions that address the country's unique challenges and opportunities.

Strategic engagement towards political decision-making and stakeholder engagement, although partially delivered during the SSC, remains a crucial aspect of advancing a least-cost low-carbon development of the Kenya energy sector. DEPP IV will continue to prioritise and strengthen these efforts, leveraging strategic partnerships and engagement strategies to influence policy decisions and foster collaboration among key stakeholders. Currently there is an opportunity to anchor a LTA in the State House with the President's climate staff. This could lift and link the technical work in the MoE to a higher political level and ensure high-level support based on feasibility, socio-economic impacts, and wider climate diplomacy.

In the activities under the SSC, efforts were concentrated on helping the regulator (EPRA) in defining a joint vision for the establishment of a Kenyan power market as well as providing reviews and input on draft regulations prepared by the Kenyan side. With the transition to DEPP IV, there is a significant opportunity to expand upon these initial efforts and advance the definition and development of a clear roadmap for introducing a market reform in Kenya. Specifically, DEPP IV will provide input transparent regulatory framework, in line with international standards, for efficient, secure, and market-based integration of variable RE generation. By drawing on best practices and lessons learned from both domestic and international contexts, DEPP IV aims to contribute to the development of comprehensive regulations that are responsive to the evolving needs of the energy sector in Kenya, encouraging investment and innovation but ultimately also has the potential to provide improved power system operations through markets e.g. capacity and ancillary markets.

Moreover, under the SSC, an assessment of power system operations and a preventive approach to outages were conducted based on partner demand. DEPP IV will continue the engagement will relevant stakeholders, through long term advisory services to facilitate capacity development on

optimization of power system operations and grid management. To this effect, a third LTA will be embedded within the State Department for Energy at MOE, but expected to be working significantly with Kenya Power and Kenya Electricity Transmission Company (KETRACO).

Finally, DEPP IV will consider opportunities to open to new partners and areas, such as energy efficiency, including reducing the high system losses, support to demand-side management and sector-coupling (electrification of other sectors) i.e. eCooking, electric vehicles, industrial processes, agriculture, green hydrogen, etc.

## Proposed DEPP IV Country Programme Objective:

Kenya's just and inclusive green energy transition supported through strengthened partnership between Kenya and Denmark for an enabling framework for a cost-efficient electricity system with increased affordability, reliability and security of supply and reduced energy intensity.

## Preliminary considerations on DEPP IV outcomes:

- Ministry of Energy has robust systems and procedures for planning least-cost low-carbon energy pathways and effective regulations to increase the share of variable renewable energy in the energy mix to deliver universal access to reliable and affordable energy.
- Transparent regulatory framework, in line with international standards, for efficient, secure, and market-based integration of variable renewable energy generation adopted.
- Data-driven energy efficiency and demand-side management strategies are in process of being approved, paving the way for stronger policies and regulations, reduced grid loss, and impactful energy saving measures across sectors.

## Poverty orientation, other cross-cutting issues, climate change:

Access to affordable energy is a cornerstone for poverty reduction in Kenya. While the government has undertaken commendable initiatives for rural electrification and promoting clean cooking solutions, persistent challenges such as affordability and gender disparities persist. Even though Kenya has made great progress for access to electricity. It is crucial that there is improvements in the security of supply, reliability and affordability in order to reap all the development benefits from providing connections. In essence, electrification ensures the physical access but as the Kenyan partners highlight it is not useful until there is reliable power at an affordable price. Throughout the programme activities, it is crucial that these aspects are considered with partners to ensure, that energy reaches those most in need, empowering them and contributing significantly to poverty alleviation.

Kenya is actively pursuing an electrification strategy aimed at powering all sectors, including lighting, cooling, cooking, and transportation, with green electricity. In this context, DEPP IV's support in areas such as least-cost planning and efficient power supply can greatly bolster the Government of Kenya's strategy implementation, ensuring both the affordability and accessibility of power, with a view on how this impacts marginalized and vulnerable groups. DEPP IV will collaborate with the MoE to incorporate long-term planning for the power sector, with the overarching goal of providing affordable, and reliable electricity. All in all, affordability of electricity for electricity consumption is intended to be impacted by all three outcomes i.e. modelling to ensure optimal balance between supply and demand using least cost energy sources and grid expansion, operations of an efficient grid system, market based electricity prices based on lowest production costs and competitive tendering for new capacity.

Despite progress, gender disparities persist within the MoE. Where relevant, the DEPP IV team will propose actions that maximize opportunities for gender equality, in alignment with the MoE's gender policy objectives. DEPP IV will integrate gender considerations into its activities and engagements

with partners. This entails ensuring that initiatives aimed at improving the energy framework thoroughly examine and address gender-related issues.

DEPP IV support to Kenya's shift towards renewable energy could also lead to job creation. A study<sup>4</sup> estimates an average of 344,000 green jobs that could be generated by 2040, if Kenya advances its objective of 100% green energy. However, capitalizing on this potential requires addressing two key areas: skills development to equip the workforce and streamlining policies to support implementation of renewable energy projects.

In addition to promoting renewable energy, DEPP IV will assist Kenya in its low-carbon pathway and the implementation of its NDC targets. A key aspect of DEPP IV will be to support transparency in the power sector and make information available where possible. Competitive tendering and auction frameworks for renewable energy projects will lead to more transparent tendering processes where all bidders will have access to the same information, clear award criteria and guidelines for complaints. Preparation of tendering utilizing relevant aspects of Danish experiences on how to derisk projects incl. spatial planning, stakeholder dialogues etc. are key to ensure that HRBA is followed.

## Governance and management:

The governance structure is expected to be based on a Steering Committee with MoE as the main partner and three underlying Technical Working Groups, one for each outcome.

## Country level coordination:

Many development partners are engaged in Kenya energy sector and have been instrumental in the development of policies and regulatory frameworks, power planning and investments in renewable energy projects. Some of the development partners that are working or have plans to support within these areas include the African Development Bank, the World Bank, GIZ, The European Union, IRENA, the International Energy Agency, and the World Resources Institute.

Coordination with other development partners will be essential, particularly in a context of high risk for low absorption capacities. To date there is no formal government-led coordination group, but there is a group with AfDB leading and calling for meetings together with MoE. Though the EU initiated a team Europe sector working group, for which the last meeting was held by Denmark. Furthermore, Denmark will programme a new five year country-level support programme for the years 2026 – 2030 and the Kenya Energy Partnership will seek to ensure alignment to by seeking synergies with the overall country engagement.

## 3. Theory of change and key assumptions

The narrative Theory of Change (ToC) can be summarised as:

If Denmark contributes grant funds to DEPP IV for Brazil, India, and Kenya;

**And if** the DEA serves as an effective and efficient implementing partner for this cooperation;

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<sup>&</sup>lt;sup>4</sup> Measuring Green Jobs Creation in Kenya | RTI

**And if** DEPP IV engages into partnerships within strategically chosen areas with national partners in Brazil, India and Kenya who have the relevant mandates and a strong continued commitment to the partnership;

**Then** partner institutions will be more effective in driving a just and inclusive green energy transition, strengthening framework conditions for achieving low carbon development and implementation of short and long-term climate goals under the Paris Agreement.<sup>5</sup>

## **Output level:**

If DEA collaborates closely with key partners such as Ministries of Energy and utilities in Brazil, India and Kenya, leveraging its core competences, best practice knowledge, and learning-based institutional capacity development approaches;

And if these collaborations entail a series of targeted activities including workshops, peer-to-peer exchanges, embedded long-term advisors, south-south exchanges, and delegation visits including in Denmark;

Just and inclusive green energy transition can have different intepretations but implies in DEPP IV a transitioning from fossil fuel-based energy systems to sustainable energy (renewable energy sources and energy efficiency) in a manner that prioritizes social equity, environmental justice, and inclusion. It aims to address socio-economic disparities, ensure access to clean and affordable energy for all, and empower communities to participate in decision-making processes related to energy transition initiatives.

And if these activities are strategically designed to address the specific needs of partners, focusing on planning, strategies, regulatory, institutional, and technical measures;

**And if** this is done through sharing experience on medium and long-term just, inclusive, and green transition in the energy sector;

And if a multi-dimensional poverty approach and human rights principles underpin the cooperation as a whole;

#### **Outcome level:**

**Then**, scenario-based energy plans that can demonstrate the cost-effectiveness of a just inclusive and green energy transition can be used for building consensus and driving forward the transition to meet future power demand for households and industries to sustain growth opportunities aligned with the Paris Agreement;

**And then**, countries' robust regulatory and legal framework for renewable energy and energy efficiency, and power system optimisation facilitate and secure investments into renewable energy and energy efficiency based on transparent tenders and stakeholder consultations;

**Then**, favourable conditions are set for an increased and sustained renewable energy share in the countries' energy mix and a reduced energy intensity which demonstrate that future energy demand can met by renewables as the most cost-efficient pathway.

## **Impact level:**

**And then** a long-term contribution has been made towards a resource-efficient electricity system, ensuring affordability, security, reliability, and quality of power supply in partner countries benefitting more than 1.6 billion people.

And then a long-term contribution has been made towards a socially just, inclusive, and green transition and to sustainable growth and resilient development for people in partner countries in

<sup>&</sup>lt;sup>5</sup> The cause effect chain is not linear.

areas of energy by supporting a transparent governance system for renewable energy and more solid data for long-term energy planning.

## **Key assumptions:**

Several key assumptions are made regarding the political support from partner governments, capacity development efforts by DEA, and the collaborative partnerships formed between DEA and partner institutions.

## Political Support:

- Partner country government's sustained political support for NDC targets and related policy initiatives related to transparent governance of the renewable energy.
- Climate-diplomacy relations that support partner countries in addressing both climate action and a just energy transition, including community consultations and last-mile distribution.
- Partner countries continue to share the necessary data for providing technical assistance in energy modelling and planning.

## Capacity Development:

- DEA able to ensure additionality in a dynamic field with many actors.
- DEA ability to strategically support transformational change aligned to partner countries' NDC and SDG targets and related policies and strategies.
- DEA can both share technical data knowledge and discuss broader governance topics such socioenvironmental impacts of renewable energy and open tender processes with a view to attracting international investors.

## Collaborative Partnership:

- Country partners engage effectively throughout the programme and value peer-to-peer exchanges of good practice and paths to avoid.
- Adaptive management, effective governance and accountability mechanisms (including national steering committees) and continued attention to assumptions and risks during implementation to ensure continued alignment to countries priority needs.
- Larger scale investment financing is mobilised, where required, to complement institutional strengthening.
- Renewable energy is an enabler to meet future energy demand in countries, including the
  electrification and digitalisation of societies, while providing access to affordable and reliable
  energy to population.

## 4. Preliminary draft results framework at outcome level

The overall long-term and strategic objective of the DEPP IV programme is that the partnership countries achieve low carbon development and implement the Paris Agreement on Climate Change, through a just and inclusive green energy transition.

The programme is expected to deliver ten country-specific outcomes, which are listed in Table 4.1. below. These are preliminary and will be further defined and confirmed in the country programming missions and reflected in the full country programme documents. Preliminary indicators are listed.

While DEA will report results on all outcomes to the MFA, one outcome per country has been selected for the purpose of reporting results on Danida Open Aid: i) Brazil: Outcome 2 (long-term energy planning; ii) India: Outcome 1 (offshore wind); iii) Kenya: Outcome 2 (variable renewable

energy integration). The Danida Programme Committee is requested to comment on this point and whether the chosen outcomes are the most relevant and whether it might be relevant to define overarching strategic, long-term outcomes at framework programme level to which the country programme outcomes would contribute/aggregate.

**Table 4.1: Draft Country Outcomes** 

Country	Draft country Outcomes  Draft country Outcomes	Preliminary outcome		
Brazil	Offshore wind development further enabled through improved regulatory framework conditions based on environmental and socio-economic aspects.	Brazil has established a regulatory framework for offshore wind development at a legal level and the regulation has been enacted to implement the law.		
	2. Strengthened long-term planning has informed least-cost, low-carbon development of the energy sector and enhanced climate change mitigation.	Key characteristics of variable renewable energy and relevant flexibility measures are reflected in power system studies.  Institutional frameworks and analytical methods for energy and climate planning are designed to effectively inform policy-making.		
	3. Energy intensity has been reduced due to further deployment of energy efficiency measures.	Key energy efficiency measures in the buildings and industrial sectors are identified and implemented.		
India	A transparent regulatory and institutional framework lead to a timely and efficient implementation of India's offshore wind strategy.	The Government of India has created an attractive investment framework for offshore wind, that has resulted in a project pipeline, where final investment decision has be taken in accordance with the level of ambition in the offshore wind strategy.		
	2. Scenario-based modelling and long-term energy planning is used to inform decision-making and guide energy policies in India towards a low-carbon energy pathway.	The India Power Outlook is updated on a regular basis and is used to inform decision making and as a foundation for the update of India's targets on energy.		
	3. A transparent regulatory framework for efficient, secure, and market-based integration of variable renewable energy is implemented to secure affordable and reliable low-carbon energy.	Transparent regulatory framework in line with international standards in place for efficient, secure and market-based integration of variable renewable energy generation in the power system.		
	4. The partnership with the State Government of Tamil Nadu is supporting the local implementation of India's offshore wind strategy with a particular focus on paving the way for a sustainable and just energy transition in Tamil Nadu.	Policies and initiatives aiming to support effective implementation of India's offshore wind strategy with a		

			particular focus on all local
			stakeholder engagement and
			barriers to offshore wind
			development are implemented.
Kenya	1.	Ministry of Energy has robust systems and procedures for	National energy sector planning
		planning least-cost low-carbon energy pathways and effective	is conducted using advanced
		regulations to increase the share of renewable energy in the	modelling tools.
		energy mix to deliver universal access to reliable and affordable	Publication of Kenya technology
		energy.	catalogue
	2.	Transparent regulatory framework, in line with international	Share of variable renewable
		standards, for efficient, secure and market-based integration of	energy sources in the electricity
		variable RE generation adopted.	mix
			Adoption of electricity market
			regulation
	3.	Data-driven energy efficiency and demand-side management	Overall energy intensity of the
		strategies are in process of being approved, paving the way for	economy
		stronger policies and regulations, prioritized grid loss reduction,	
		and impactful energy saving measures across Kenya.	Sector coupling (electrification
		and impacted energy saving measures across retiya.	of other energy sectors)
			- Rate of energy efficiency
			implementation in selected
			industrial sectors

Further consultations with country partners will take place during formulation missions, to discuss outcomes and outputs, indicators, baselines, and targets and ensure to the extent possible that these are well aligned to the partners' own results frameworks.

The output indicators will emphasise the uptake and application of learning, which includes integrating newly acquired knowledge into the partner institutions' practices. This will be assessed through various means, such as institution self-assessments.

Impact indicators will reflect the contribution to advancement of NDC targets, SDG 7 and 13, such as: i) Level of greenhouse gas emission reduction; ii) Number of people accessing services; iii) Level of increase in access to jobs.

## 5. Inputs, budget, financial management

Budget

The proposed total budget for the 5-year DEPP IV programme is DKK 220 million of ODA-eligible grant funds sourced from the Danish Finance Act (FL-konto 06.31.01.70). The proposed budget has been adjusted to reflect higher operational costs since 2020, and incorporate additional activities at sub-national levels and two additional long-term advisors. MCEU has based on revised budget proposal approved a total budget of DKK 220.0 million which is pending final approval of the Ministry of Finance.

If the proposed grant of DKK 220.0 million is not approved by the Ministry of Finance, the budget will be reduced to DKK 180 million. However, this would mean removing larger components, outcomes, number of long-term advisors and in the case of India scaling down from the present level of support in the current INDEP-programme.

At this time, when the country formulation missions have not been completed and final budget approval is pending, it is considered premature to make detailed resource allocations to each country and their respective proposed outcomes. Furthermore, some budget flexibility and adaptability will be key for the five-year programme given the demand-driven nature of the partnerships and highly dynamic country contexts as well as the geopolitical context of the energy sector. A high degree of adaptability was also recommended in the MTRs and is fully in line with the MFA/Danida adaptive management approach. Also, there are still needs for confirmation and clarification on some budget assumptions<sup>6</sup>.

For a budget frame at DKK 220 million, it is at this time proposed that:

- A frame of DKK 42.2 million is allocated to the Brazil country programme, 60.8 million to 1. Kenya and 84.0 million to the India country programme, to be further allocated at outcome level and then at output and activity levels in work plans to be agreed by the national Steering Committees.
- 2. A total of 9.7% of the total DEPP IV budget (i.e. DKK 21.4 million) is unallocated at framework programme level, to be allocated to each country programme based on needs, speed of implementation/expenditure, to take advantage of new strategic opportunities and policy initiatives, etc. The full DEPP IV Framework Programme Document will spell-out proposed criteria for allocation of these resources, to be recommended by DEA endorsed at Programme Advisory Group (PAG) level - as relevant above a minimum threshold - to be decided by the Strategic Advisory Group (SAG).
- 3. The mandatory MFA MTR is budgeted at DKK 1.0 million to include country visits.
- Programme Level support by DEA (administration and communication) is budgeted at DKK 4. 10.6 million] or 4.8%.

No funds will be channelled through partner country institutions. National partners must provide the necessary staff resources as an in-kind contribution to the agreed annual work plans and as far as possible also cover travel expenses and per diems during delegation visits, learning events, etc. Where budget-constraints make this impossible, DEPP IV may finance limited costs subject to further agreement.

## Inputs

DEA as the Implementing Partner will be responsible for the organization and timely delivery of technical assistance inputs by DEA staff and external consultants to activities guided by demands and priorities as defined in the annual work plans. Consultancy inputs will be delivered based on Terms of Reference (ToR) that ensure the accountability for delivery in alignment with agreed work plans and partner availability and capacity to engage. National partner inputs will be delivered inkind, aligned to the same annual work plans, which are approved by the national Steering Committees.

The budget provides for a total of 6 person-years over four calendar years of Danida long-term advisor inputs, with 3 advisors in India and 3 in Kenya. Recruitment of the LTAs as Danida advisors follows procedures of the Danish Ministry of Foreign Affairs and is supported by DEA. Representatives from the partner institution where the LTA will be placed participate in the recruitment panel together with representatives from DEA and the Embassy of Denmark in the country. Financing and recruitment of Energy Sector Counsellors is done outside the DEPP IV and

<sup>&</sup>lt;sup>6</sup> The Energy Sector Counsellors for the Brazil country programme are budgeted at DKK 1.8 million/per person year times 10 person years. Funding to come from the Finance Act allocation to Myndighedssekretariatet/SSC.

hence, not financially managed within this programme. It is expected that posting as Danida long-term advisors are not possible in the case of the Brazil country programme, and hence it proposed to have two Energy Sector Counsellors, and possibly a third, formally embedded at the embassy, but working with partner institutions on a daily basis. These positions totalling 10 person years are in addition to the present Energy Sector Counsellor position associated with the current SSC-project.

Other inputs will be staff time inputs from DEA-GC and Energinet and consultant inputs from DEA Consortium partners under framework contract. Where specific inputs by external national consultants in the partner countries are required, such inputs will be procured through DEA under existing and/or new framework contracts.

DEA-GC has appointed a responsible country coordinator for each country based in Copenhagen, who will serve as the DEA contact person for all matters related to DEPP IV.

#### Financial management and reporting

DEPP IV grant funds will be transferred from the MFA to the DEA GC upon written request, and GC will be responsible for all financial management and reporting on DEPP IV funds. The financial management and reporting procedures will be as defined by the Danida guidelines and further specified in the Agreement to be signed between the MFA and DEA.

As no cash funds will be transferred or disbursed though national partners directly, there will be no requirements for accounting of funds and financial reporting by national partners. In order to monitor the use of budgets for delivery of technical assistance in-country, DEA, Energinet, and international and national consultancy inputs will be budgeted in terms of days delivered in-country consistent with agreed work plans and as agreed between DEA and the national partners.

# 6. Institutional arrangement, management, work planning and results reporting

#### Institutional and management structure

The institutional structure of the DEPP IV programme in Denmark and in the partner countries builds on the set-up in the DEPP III programme and on recommendations from the DEPP III MTR ensuring that the programme is embedded in the national context and with the effective engagement by national partners in relevant decision making and accountability structures.

### Internal governance structure

The Strategic Advisory Group (SAG), based in Denmark, acts as the highest decision-making authority on the DEPP IV programme. MCEU and MFA have already established a well-functioning SAG, which for several years has been strategically guiding the full portfolio of energy government-to-government programmes implemented by DEA. SAG consists of high-level representation from MFA, MCEU and DEA. DEA acts as secretary to the SAG, which meets every six months to discuss overall programme progress, approve cross-programme budget changes, including approval of the use of unallocated funds and ensures cross-exchanges of experience and good practice.

The Programme Advisory Group (PAG) is part of the already established governance structure, and consist of representatives from MFA, MCEU and DEA and meet every six months prior to the SAG meetings. DEA will prepare the annual progress report including a narrative report on progress in capacity development and the annual budget for presentation to and endorsement of the PAG. The PAG will also monitor risks and assumptions. The PAG reports to the SAG.

#### Country programme management structure

The country level management structure is established around the objective of forming a forum(s) for strategic direction, and decisions on programme-level together with monitoring and policy dialogue. Thus, the management structure with establishment of Steering Committee(s) and Working Group(s) in the partner countries can vary due to contextual and programmatic conditions that require a specific set up.

The in-country steering committees, which are co-led by the Danish Ambassador and high-level partner institution representatives, consist of representatives from each partner institution, other relevant authorities, and DEA. The steering committees will meet as a minimum once per year to approve the DEPP IV country programme annual work plans and progress reports. They will also monitor country level results, assumptions and risk factors, and discuss and resolve issues related to overall country programme progress and decide on reallocation of resources. By doing so they will ensure that evolving programme priorities are addressed based on an adaptive management approach and with engagement of relevant stakeholder enabling purposeful adaptation of the programme if needed. Finally, the Steering committees also act as a forum for policy dialogue. Prior to the national Steering Committee meetings DEA-GC will share information related to resources available for the year to deliver technical assistance with partners (not necessarily as a monetary budget). This will help ensure transparency and allow for an open discussion for the partners on how to design, prioritise and allocate annual resources aligned to programme objectives. The Country Programme Documents and Framework Programme Document will spell-out the details of who can make which decisions in the adaptive management process.

One or more Working Group(s) are to be established, to ensure effective commitment and engagement of the relevant partners in day-to-day coordination and management of the implementation of the agreed annual work programmes. Each partner institution will appoint members to the Working Groups where the DEA and LTAs also participate and with involvement of the Embassy Energy Sector Counsellor. The Working Groups will meet at least twice per year and have the responsibility to: i) develop, consolidate and check annual work-plans and budgets against development engagement partners work-plans; ii) monitor programme progress at output level, using "traffic light" markers for assessment of progress of activities against agreed work plans, and; iii) ensure cross fertilisation within and between engagements; iv) identify strategic interventions that may be supported by unallocated funds and; v) report on institutional uptake and application of capacity development activities and outputs. The Working Groups will report to the Steering Committee.

For the India programme an outcome-based governance structure is envisioned with three steering committees, one for each partner (MNRE for outcome 1; MOP for outcome 2 and 3; Tamil Nadu Energy Department for outcome 4). The steering committees are expected be co-chaired by high level participants from the Danish Embassy in Delhi, DEA, and the Indian partner ministry, and will meet once a year.

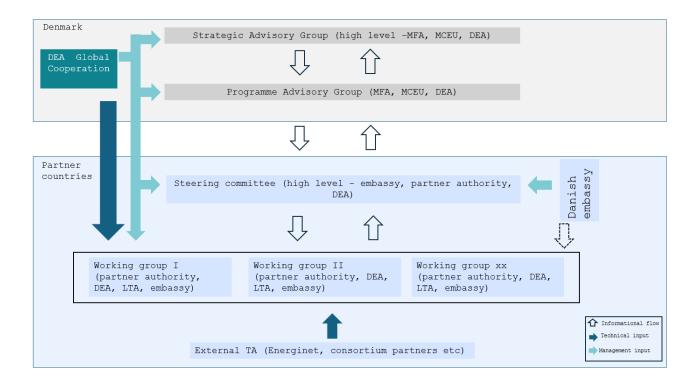
In addition to the steering committees, four advisory groups will be formed (one for each outcome) with working level participation from DEA and Indian partners. The main task of the advisory groups is to oversee and coordinate the implementation of the activities under each outcome and prepare the meetings in the steering committees. The advisory groups will meet at least every six months. Under each advisory group, project implementation working groups will be formed on an ad-hoc basis to execute on the implementation of the projects agreed upon in the work plan.

<u>For the Brazil programme</u>, the governance structure is expected to be based on a Steering Committee with the MEE as main partner with underlying Technical Working Groups under each outcome with relevant institutions.

<u>For the Kenya programme</u>, the governance structure is expected to be based on a Steering Committee with the Ministry of Energy as the main partner with three underlying Technical Working Groups, one for each outcome.

DEA's GC has appointed Country Team Leaders/Coordinators as focal point for each partner country. They are responsible for overseeing programme implementation. At country level the daily implementation of the programme is the responsibility of engagement partners in joint cooperation with DEA and advised by the LTAs.

Figure 6.1: Institutional and management structure



#### Work planning

DEPP IV work planning is an ongoing process with each partner, where the annual work programme will be developed to align to partners' annual work programmes and needs, and availability of DEA specialists and consultants, balanced with available resources. Work planning will be prepared with partners at Working Group Level, for endorsement at Steering Committee level. The annual work plans will define annual activities; annual output targets and link these directly to the Country Programme Result Framework. In collaboration with partners, ToR will be formulated for each activity and the ToR will specify tasks and targets for the activity as well as required specialist inputs from partners, DEA, LTA, Energy Sector Counsellors, consortium partners, Energinet and consultants. A particular concern will be to ensure a systematic approach to capacity development activities and the uptake and application of these.

Monitoring and reporting

Following Danida Aid Management Guidelines (AMG), monitoring and reporting will be based on the results framework at output and outcome level and each partner will, jointly with DEA, monitor progress toward achieving these outputs and outcomes via annual progress reporting to the Steering Committees. Monitoring of actual budget spent by DEA as well as international and national consultancy will be reported to SAG in the consolidated annual progress reports across all three countries.

A mandatory MTR of DEPP IV will be conducted by the MFA. In addition to the MTR, MFA has the right to carry out any technical mission that is considered necessary to monitor the implementation of the programme. After the termination of the programme support the MFA reserves the right to carry out an evaluation.

### Communication of results

As part of DEPP IV, DEA will actively engage in targeted communication of progress and results informing stakeholders both in Denmark and in the partner countries. Focus for the communication in Denmark will be to communicate the positive value added and transformational change effects of DEPP IV to decision makers, opinion leaders, and the general public through a variety of means, including social media and press. Press releases and reports will be made public on the DEA website. The MFA including its Embassies in the three countries and the MCEU will also contribute to effective communication of results, including on Danida Transparency. The full DEPP IV Programme Documents will elaborate on communication channels and key messages. In the partner countries, the focus will be on raising awareness on the opportunities and choices going towards a greener energy system and how DEPP IV contributes to this.

#### 7. Risks

A brief summary of key risk factors and mitigating measures is given below. A full risk matrix consistent with Danida guidelines will be included in each of the final DEPP IV Country Programme Documents, tailored to the country contexts.

#### Contextual risks

- ➤ Vested interests in current fossil fuel energy solutions, current power-division of existing power markets or popular resistance to green energy transition, particularly if it is not inclusive and just.
- ➤ Implications of global geopolitical tensions and related economic conditions (e.g. linked to high inflation), risk of populism or changing political priorities undermining support for green energy transition and climate action.
- Sovernment subsidies and internal financial interests can create barriers for rapid uptake of green energy transition, new regulations and private investments.
- ➤ Supply chain/market risks e.g. challenges in delivering wind turbines to be installed in the coming years.

Mitigating measures: Build upon strong demand and commitment from partner institutions, place emphasis on socio-economic aspects of the energy transition, and adopt an adaptive management approach that provides flexibility to readjust if required.

#### Programmatic risks

- ➤ Ineffective capacity development support if not guided by adequate partner needs assessment and systematic plans and effective tolls and modalities.
- > Continued capacity constraints and/or frequent changes in partner country institutions.

Mitigating measures: A systematic approach to institutional capacity development, uptake, and application of TA and initial assessment of partner needs, mandate and technical capabilities.

## Institutional risks

- ➤ Challenges in cross-ministerial, central-state level and inter-state coordination and collaboration.
- ➤ Ineffective accountability mechanisms in partner countries.
- ➤ Risk of potential duplication or overlap of efforts or lack of sufficient coordination and synergies with other initiatives in a dynamic and complex institutional architecture.
- Failure to deliver results against output targets would reflect negatively on DEA, the national partners, and the MFA.

Mitigating measures: National steering committees with relevant membership, clear mandates, and adherence to meeting frequency and results reporting requirements. Attention to continued coordination and synergy with other initiatives.

## Annex A: Preliminary partner assessment

# A.1 Brief presentation of the Danish Energy Agency as implementing partner and summary of capacity assessment

The Danish Energy Agency (DEA) was established in 1976, and is an agency under the Ministry of Climate, Energy & Utilities (MCEU). The Danish Energy Agency share best practices from decades of green transition in Denmark through government-to-government cooperation with 24 partner countries (see below map).



Figure A.1: DEA Global Cooperation on the World Map

DEA's international development cooperation is anchored in the Centre for Global Cooperation (GC) where around 100 people are working with one or several of the 24 partner countries. The Centre of Global Cooperation is organised within a matrix structure. In terms of the vertical structure, the management level consists of four Directors with the responsibility of country programmes as illustrated below. Every country programme comprises a team leader, specialists and in some cases a generalist. The energy partnerships with India, China, and Vietnam are the programmes with the most full-time employees (FTEs). 11 FTEs are assigned to the INDEP programme, while 3 FTEs are currently assigned to the SSC projects in Kenya and Brazil. In the country programmes, each outcome has a Project Lead with the role of ensuring progress, providing regular updates and identifying resource needs. In terms of the horizontal structure, all personnel are assigned to one of the six specialist teams known as 'faggrupper'. The specialist teams are aligned with the five work streams within the country programmes, namely energy modelling, offshore wind, integration, energy efficiency, and district heating. Additionally, there is one specialist team designated for generalists. Generalists are tasked with supporting the team leader in programme management and solving crosscutting tasks beyond the country programmes. For every specialist team, a coordinator is appointed to support competency development and to ensure coordination and synergies across the country programs. The coordinators ensure that the necessary competences are present in the specialist-team. Thus, the coordinator's main responsibility is to foster a platform for knowledge sharing, sustaining a high level of expertise, and facilitate exchange across programmes, ongoing tasks and the national centres. To reinforce specialized competencies and expertise in Global Cooperation, individuals known as "Technical Lighthouses" are appointed. A Technical Lighthouse is an

experienced specialist who has in-depth knowledge of a particular area. They have a special responsibility to engage and follow the latest developments within a specialised field in order to have the necessary knowledge about the latest developments, trends and relevant news, which they then share with their colleagues. In addition to DEA staff exclusively employed in the Centre for Global Cooperation, a "satellite program" is established, incorporating DEA staff from other national centres. The objective is to ensure knowledge about the latest Danish regulatory framework within the country programs. It is anticipated to have 10 satellites assigned to Global Cooperation's country programs in 2024.

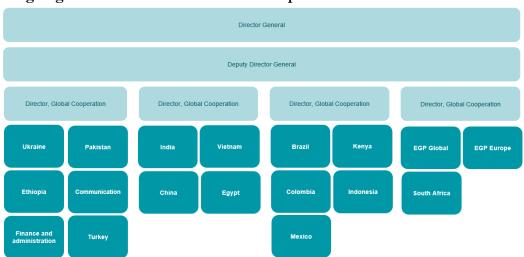


Figure A.2: Organigram - DEA Centre of Global Cooperation

#### Knowledge exchange

Various meeting formats are implemented to promote knowledge exchange within Global Cooperation. Weekly centre meetings with presentations from specialist teams, insights and key findings from missions, and discussions on overarching topics like KODEKS VII. Additionally, weekly team leader meetings aim to facilitate experience sharing among country programs, enhance management skills, and address crosscutting issues.

Country programme meetings typically occur biweekly. Coordination meetings within development engagements are also held weekly, although typically organised in larger country programmes. Moreover, meetings within specialist teams are typically arranged on an ad hoc basis. Likewise, knowledge sharing between Long-term Advisors, the Danish Embassy and Global Cooperation is taking place.

#### Brief identification of Energinet and consortium partners

Global Cooperation has entered Framework Contracts with a series of Consortiums on six positions. The contract period of the current Framework Contract is from 2020 with termination 16 august 2024.

The Framework Contract Consortiums are:

- <u>Position 1 Energy Planning and Modelling:</u> Consortium Ea Energianalyse A/S (lead), COWI A/S, Viegand Maagøe A/S and DTU Consortium
- <u>Position 2 Renewable Energy Integration:</u> Consortium COWI A/S (lead), DTU, Viegand Maagøe A/S and Ea Energianalyse A/S

- <u>Position 3 Offshore Wind Development:</u> Consortium DTU Wind Energy (lead), COWI A/S, Viegand Maagøe A/S and Ea Energianalyse A/S
- <u>Position 4 Energy Efficiency:</u> Consortium Viegand Maagøe A/S (lead), COWI A/S, DTU and Ea Energianalyse A/S
- <u>Position 5 Heating and Cooling supply legislation, planning and modelling:</u> Consortium Rambøll Denmark A/S (lead), NIRAS A/S and DNV GL Denmark A/S
- <u>Position 6 Climate change mitigation planning and modelling</u>: Consortium COWI A/S (lead), DTU,
   Viegand Maagøe A/S and Ea Energianalyse A/S

Additionally, Global Cooperation and Energinet have recently entered a new framework contract with effect from 1 May 2024 and termination 1 May 2027 with the opportunity of one year extension. As the Danish Transmission System Operator (TSO), Energinet has a unique position in providing consultative assistance to the partner countries within the areas of system operation, forecasting of variable renewable energy, electricity market, balancing and ancillary services, system flexibility, network codes, transmission and coherent energy planning, grid-connection of on- and offshore wind power, and High-Voltage Direct Current (HVDC) technology.

If the consortium partners do not have the required competences to solve the tasks requested in the ToR, the leading consultants of the consortium can subcontract a national/local consultant accepted by the Danish Energy Agency. This modality is often used when local and contextual knowledge is needed for solving the tasks.

The current tender process is underway for the new Framework Contract and will terminate at 31 May 2024. The duration of the Framework Agreement will be 3 years with the possibility to extend the duration once by 12 months.

Table A.1: Summary of key partner features

Table A.1: Summai	<del>/ / 1</del>		[		· .	
Name of Partner	Core business	Importance	Influence	Contribution	Capacity	Exit strategy
	What is the main business, interest and goal of the partner?	How important is the programme for the partner's activity-level (Low, medium high)?	How much influence does the partner have over the programme (low, medium, high)?	What will be the partner's main contribution?	What are the main issues emerging from the assessment of the partner's capacity?	What is the strategy for exiting the partnership?
DEA	DEA's goal is a well-planned green transition with Denmark leading the way, sharing Danish experiences and solutions globally.	Low	High	DEA cooperates with governments in order to contribute to their just and inclusive green energy transition. The approach is adapted to local circumstances in close dialogue with the partners with the focus to reach a long term and viable green transition.	1 7	There is not exit strategy defined as such. The partnership is expected to evolve over time, with the portfolio of SSC and DEPP programmes.  The essence of the knowledge-sharing partnerships is to ensure that the capacity building during the programmes is institutionalised and endure through updated tools, practices, procedures, and principles.

#### A.2 Preliminary identification of national partners

#### **Brazil:**

Key partners (all existing SSC partners):

- Ministry of Mines and Energy (MME)
- Energy Research Office (EPE)
- The National Electricity Agency (ANEEL)
- Transmission System Operator (ONS)
- The Environment Agency (IBAMA) under Ministry of Environment and Climate (MMA)

#### Potential new partners:

- Ministry of Environment and Climate (MMA)
- State level engagement (e.g. Rio de Janeiro, Ceará, Rio Grande do Sul)
- CEBRI (think tank)

#### **India:**

Key partners (all existing partners from INDEP):

- Ministry of New and Renewable Energy (MNRE)
- National Institute of Wind Energy (NIWE)
- Ministry of Power (MoP)
- Central Electricity Authority (CEA)
- Grid-India

#### Other partners (all existing partners from INDEP):

- Central Transmission Utility (CTU)
- Central Electricity Regulatory Commission (CERC)

#### Potential new partners:

- Government of Tamil Nadu - Energy Department

Potential new knowledge partners (associated to the program):

- Council on Energy, Environment and Water (CEEW) (think thank)
- ITT Madras (university)

#### Kenya:

Key partners (all existing SSC partners)

- Ministry of Energy and Petroleum, State Department of Energy (MoEP)
- Energy and Petroleum Regulatory Authority (EPRA)
- Kenya Electricity Transmission Company (KETRACO)
- Kenya Power and Lighting Company (KPLC)

#### Potential new partners:

- Kenya Electricity Generation Company (KenGen)
- Rural Electrification and Renewable Energy Corporation (REREC)
- Geothermal Development Corporation (GDC)

# Annex B: Summary information on the ongoing partnerships with Brazil, India, and Kenya

## Brazil - current SSC partnership:

Key information on the current SSC is summarised in the table below:

Title:	Strategic Sector Cooperation on Energy between Denmark and Brazil		
Objective:	To support Brazil's energy transition through least-cost long-term energy planning and the		
,	improved integration of renewable energy.		
Outcomes:	1.A Support long-term energy planning to achieve least-cost low-carbon development of the		
	Brazilian energy sector		
	1.B Improved integration of renewable energy in the Brazilian power system to support cost-		
	effective security of supply  2. Enhancement of Danish green diplomatic engagement in support of climate mitigation through a just and inclusive green transition in the energy sector.		
	3. Enhancement of private sector engagement and Danish green technology and knowhow		
	in a just and inclusive green transition of the energy sector.		
Main Partner	Ministry of Mines and Energy (MME)		
Authority:			
Governance:	Steering Committee co-chaired by MME Undersecretary and the Danish Ambassador to		
	Brazil. Meetings every 6 months.		
Other	The Energy Research Office (EPE), the Brazilian Electricity Regulatory Agency (ANEEL),		
national	the National Electric System Operator (ONS), the Brazilian Institute of Environment and		
partners:	Renewable Natural Resources (IBAMA)		
Budget:	DKK 10.0 million		
Delivery model:	DEA GC support with consortium partners. Energy counsellor at the Danish Embassy.		
Duration:	3 years 1 September 2023 1 September 2026		
Current	3 years, 1 September 2023-1 September 2026.		
work	Outcome 1A: long-term planning Outputs:		
programme:	A1 Support studies on key technologies for the Brazilian energy transition		
programme.	A2 Advance impact of long-term planning studies on political decision making		
	A3 Improve methodological approaches to model low-carbon energy technologies		
	Outcome 1B: Integration of RE and offshore wind		
	Outputs:		
	B1 Enhanced capability in integration of variable renewable energy		
	B2 Improved regulatory frameworks for offshore wind		
	Outcome 2: Green diplomacy		
	Outcome 3: Private sector engagement in a just and inclusive energy transition		
	Output 3.1 Crate awareness of Danish green technology and know-how		
	- Output 5.1 Grate awareness of Danish green technology and know-now		

Key results	SSC implementation was preceded by engagement under the Danish Energy Transition		
and lessons:	Initiative (DETI) during mid-2021-end 2022 and an SSC inception period during late 2022-		
	August 2023. The SSC programme has achieved important results such as for example, the use		
	of Denmark's legal expertise and advisory to a new Brazilian Decree on offshore wind and		
	demonstrated high demand from partners. A variety of delegation visits, meetings, a		
	workshops have been held, exchanging knowledge and experience on specialised topics with		
	partners to define implementation plans for the activities agreed on during the first Steering		
	Committee Meeting held in October 2023. Strategic SSC results include strong, equal		
	partnership with Brazil's leading authority in the energy transition, the MME and other key		
	institutions for the green transition in Brazil. Denmark participates in the G20 Energy		
	Transition Working Group and the Climate Financing Task force. Brazilian partner institutions		
	have high ambitions and highly skilled technical staff but experience resource and capacity		
	constraints. With respect to the SSC green diplomacy workstream, it is important to highlight		
	Brazil's role as current G20 chair and upcoming role as host of COP30 in November 2025		
	(during Denmark's EU chairmanship) which have also contributed to the strategic importance		
	of this partnership. The Danish Minister's visit to Brazil in August 2023, 3 high-level Brazilian		
	delegations to Denmark, and the visit to Brazil by the Climate, Energy and Utilities Committee		
	of the Danish Parliament all reflect the importance of this partnership.		

### **INDEP India:**

Key information on the current INDEP Programme is summarised in the table below:

Title:	India-Denmark Energy Partnership (INDEP) Programme			
Objective:	Reduced greenhouse gas emissions and leverage of the partnership in mobilising further			
·	resources for India's green transition.			
Outcomes:	1. A Centre of Excellence (CoE) for offshore wind that promotes and creates an enab			
	environment for lowering the cost of offshore wind power using best available practice.			
	2. Energy planning decision-making is guided by state-of-the-art long-term-energy modelling			
	tools based on a regularly adjusted technology catalogue.			
	3. Flexibility and integration of increasing levels of RE in the power system (through			
	optimized flexibility, forecasting, energy efficiency, consolidated grid codes, efficient			
	design of the power market, and other measures).			
Main Partner	Ministry of New and Renewable Energy (MNRE) for Outcome 1 and Ministry of Power			
Authorities:	(MOP) for Outcomes 2 and 3. MOU signed with MNRE 2008 and with MOP in 2020. India-			
	Denmark Green Strategic Partnership signed in 2020.			
Governance:	One Joint Working Group co-chaired by the respective Joint Secretary from MNRE or MOP			
	and the DEA Deputy Director General/Director, meeting every 6 months (see below).			
Other national	$O_{i} \setminus O_{i} \setminus O_{i}$			
partners:	For Outcomes 1 and 2: Central Electricity Authority (CEA), Central Electricity Regulatory			
	Commission (CERC), Grid India, Central Transmission Utility of India (CTU), National			
	Thermal Power Company (NTPC), Karnataka Power Cooperation Limited.			
Budget:	DKK 69.0 million			
Delivery	Technical cooperation inputs by DEA with consortium partners and Energinet, three			
model:	embedded long-term advisors (LTAs), one energy counsellor at the Danish Embassy.			
Duration:	January 2020-December 2024 (5 years) <sup>7</sup>			
Current work	Output 1.1: An enabling framework that streamlines site  On track			
programme	selection, clearances and procurement while reducing risk			
status, based	to investors.			

 $<sup>^{7}</sup>$  The former SSC-programme on offshore wind ended by 31 December 2022 and all outputs were transferred to INDEP by 1 January 2023.

on 2023	Output 1.2: Development and implementation of	On track			
progress	coordinated measures for minimizing grid infrastructure	On track			
report, March	and supply chain obstacles to the development of the				
2024:	offshore wind sector.				
	Output 1.3: Technical standards and rules that promote	Delayed, due to lack of partner			
	innovation and research.	interest.			
	Output 2.1: Enhanced energy modelling capacity in the	Publishing of Indian Power			
	relevant Indian institutions.	Outlook delayed, due to Indian			
		approvement process.			
	Output 2.2: Technology catalogue established, updated,	Delayed. The second			
	and used.	technology catalogue on power			
		storage and green fuels was			
		postponed and is expected to be			
		published in mid/late 2024.			
	Output 2.3: Strengthened capacity of Ministry of New and	Joint projects have not been			
	Renewable Energy (MNRE) for embracing the green	identified. At the PAG meeting			
	hydrogen economy through concrete joint projects.	in March 2024, it was agreed not			
		to pursue further the			
		implementation of the output.			
	Output 3.1: Revised and strengthened grid codes for	On track			
	variable renewable energy integration including offshore				
	wind.				
	Output 3.2: Enhanced flexibility of the Indian power Capacity development on track,				
	system for integration of renewable energy, security of	but implementation of many of			
	supply and cost (through market development and	the recommendations and			
	operational improvements in integrating renewable	suggestions still have to be			
	energy).	commenced by the Indian			
		authorities.			
	Output 3.3: Improved forecasting and dispatching tools and procedures for variable renewable energy generation				
V16-	are implemented.				
Key results and lessons:	The MFA MTR of INDEP in 2023 concluded that the progressive of the discharge to the contract of the discharge to the discharge				
and lessons.	would, except for Outcome 1 (Government of India has tal-				
	likely be able to meet all output and outcome targets by end 2024. However, capacity development plans had not been prepared as foreseen to provide a common reference with				
	the partners and to guide the high number of staff involved, which makes results monitoring				
	on capacity development difficult. The MTR made 7 recom-				
	agreed by DEA and MFA(KLIMA) and are being followed-up, albeit in some cases with				
	reference to the follow-up being part of DEPP IV formulation. The MTR found that risks				
	and assumptions were not generally monitored. One potential risk factor is the opposition				
	from civil society towards offshore wind) in the form of local fishermen in Tamil Nadu, The				
	MTR made a recommendation of particular relevance in the planned increased engagement				
	at the State level, to consider cooperating with new partners on socio economic and political				
	economy issues. An MTR recommendation on a no-cost extension of INDEP has not been				
	implemented as implementation progress has picked up and the programme is planned to				
	expire by end 2024, providing for a direct transition to continued partnership under DEPP				
	IV.				
	DEA has concluded that INDEP has been a very successful programme, with great buy-in				
	from partners and Danish competences within offshore wind, modelling and variable				
	renewable energy integration being in high demand. The Danish contribution to India's first				
	offshore wind tender is a particularly important result, and t				
	codes are examples of value added leading to impact.				
	1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5				

The INDEP progress report for 2023 highlighted among other things the following results:

- ➤ Work under the joint *Centre of Excellence (CoE) for Offshore Wind and Renewable Energy* has been progressing according to plan, with the DEA providing key support and technical assistance to India on the development of the first offshore wind tender of 4 GW in India which was launched in 2024.
- ➤ The CoE has conducted a number of important studies (e.g. on ports and maritime spatial planning), which has provided Indian partners with key inputs to offshore wind policy making and planning. This include the planning of public consultation as new infrastructure will be needed.
- ➤ The preparation of the first Indian Power Outlook has progressed well with strong buy-in from partners, but the publication will be only in 2024 due to the Indian approval process. The Indian Power Outlook is expected to be a data input for India's next NDC and long-term cost-efficient energy planning, which will benefit India's more 1.4 billion people with reliable, affordable, and more sustainable energy (progress on SDG7).
- > Successful continuation of pilot projects on thermal power flexibility, reaching important results and illustrating the potential for flexibility for the Indian partners. This could lead to reducing the coal power plant consumption as more renewable energy will power the energy system
- Development of day-ahead and intra-day forecasting models for wind power as part of a pilot project in Karnataka.
- Extensive technical assistance on the development of grid codes, which have now been approved and published by the Indian authorities.
- Contributions to tangible results under the Joint Action Plan for the Green Strategic Partnership between India and Denmark (GSP).
- ➤ Participation in the business promotional campaign to India in February/March 2023, sharing experiences and insights from INDEP, illustrating how India's green transition may result in new opportunities for Danish businesses.

#### Kenya - current SSC partnership:

Key information on the current SSC is summarised in the table below:

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Title:	Kenya-Denmark Strategic Sector Cooperation on Energy
Objective:	Kenya continues its low carbon energy transition supporting sustainable development targets
	through least-cost long-term energy planning and optimized infrastructure development.
Outcomes:	A- National capacities for energy modelling and long-term energy planning are enhanced to
	support continued least cost and low carbon power sector development.
	B- Improved regulatory framework, operational procedures and flexibility in the power system
	supporting cost-effective security of supply with a rising share of electricity from variable
	renewable energy sources.
Main Partner	Ministry of Energy and Petroleum (MoEP). State Department of Energy.
Authority:	
Governance:	Steering Committee co-chaired by MOE Principal Secretary and the Danish ambassador in
	Kenya. Meetings every 6 months.
Other	Energy and Petroleum Regulatory Authority (EPRA)
national	Kenya Electricity Transmission Company (KETRACO)
partners:	Kenya Power
Budget:	DKK 8,497,291 million
Delivery	DEA GC support with consortium partners. Energy counsellor at the Danish Embassy.
model:	
Duration:	2.5 years (30 months) – July 2022 to December 2024
Current	Outcome A: long-term planning
work	Output: Enhancement of the institutional setup and development of a self-driven and
programme	supportive environment for decision making based on long-term planning and modelling
(until	within MoE.

December	Outcome B: Power System				
2024):	Output B1: Power market design, provision of ancillary services and securing stability and				
	flexibility of the power system.				
	Output B2: Relevant authorities (MoE, Kenya Power, KETRACO) have identified best				
	practices from Danish experiences on integration of variable renewable energy.				
Key results	SSC full scale implementation is still new but has yielded results on both technical and strategic				
and lessons:	levels, leading to a strong partnership with Kenya, which creates strong foundation for further				
	collaboration.				
	➤ High-level Engagement: The project facilitated frequent meetings between ministers				
	from both countries throughout the project, fostering strong diplomatic ties.				
	➤ Green Transition Collaboration: Discussions through the SSC project on Kenya's fossil				
	fuel dependence led to Kenya joining BOGA, showcasing their commitment to green				
	development.				
	➤ <b>Joint Initiatives:</b> The SSC project helped facilitate the way for the development of the				
	Africa-focused Accelerated Partnership for Renewables in Africa (APRA) with Kenya				
	playing a leading role. This initiative demonstrates a united front on renewable energy.				
	Enhanced Partnerships: The project facilitated collaboration with other stakeholders				
	like IEA, IRENA, and GIZ. This broader engagement creates a stronger support network				
	for Kenya's energy transition.				
	The Danish engagement in Kenya's energy sector highlighted the importance of:				
	Alignment and Coordination: Effective collaboration with Kenyan partners with				
	varying perspectives requires significant investment in ensuring everyone is on the same				
	page through a collaborative process. The success of Outcome B, where a complex group				
	had to be formed and aligned before engaging in capacity building, exemplifies this.				
	Establishing a dedicated coordination group fosters efficient knowledge transfer and				
	ensures decisions are made by the right people.				
	Capacity Development Needs: Kenyan partners often lack the resources and expertise				
	to fully implement their goals and strategic plans. While the SSC project offered support,				
	it is crucial to prioritise activities based on available resources and the SSC lacks the				
	capacity to do more on-the-ground compared to DEPP.				

## Overview of other development partners in Kenya:

Development	Areas of support
Partner	
African Development	Support renewable energy projects to increase the capacity of renewable energy in
Bank (AfDB)	the national grid.
, ,	Support the establishment of a KPLC run Energy Efficiency Unit
World Bank	Upgrading of KenGen Geothermal Training Centre to a Regional Centre of
	Excellence, which would serve the full range of Energy Technology training and
	would act as the Regional Flagship Technical and Vocational Education and
	Training Institute for the Energy sector.
Deutsche	Power System Readiness for Integration of Variable Renewable Energies. Project
Gesellschaft für	to improve the cost-efficient integration of variable renewable energy in the
Internationale	electricity grid. This includes support of the Least Cost Power Development Plan
Zusammenarbeit	team in energy planning and modelling, and energy regulations (e.g. grid code,
(GIZ)	INEP regulations, study on ancillary services) as well as capacity development for
	grid operation.
European Union	Renewable energy projects to increase the capacity of renewable energy in the
(EU)	national grid.
	Reinforcement for the Electricity Transmission Network (RETNet) - Capacity
	building to assist KETRACO to build capacity in the system operations as they
	transition to the system operator role.
Japan International	Partnership between the Government of Kenya and the Government of Japan to
Cooperation Agency	making sure the electric power system in Kenya is stabilised and has additional
(JICA)	capacity to absorb variable renewable energy and ensuring that KETRACO

	improves its capacity for transmission network planning, and system operation and	
	control.	
USAID	Wind projects	
IEA	Training on data modelling for planning at national (MoE and EPRA) and regional	
	levels.	
	Support SACREE on energy efficiency appliances prices and standards.	
	Energy efficiency training weeks.	
IRENA	Accelerated Partnership for Renewables in Africa (APRA)	
SEforALL	Support leadership in international forums, Energy compact review, Energy policy	
	review, include specific targets on energy efficiency in NDC, technical assistance	
	and policy support on renewables and energy efficiency, support GoF in the	
	development of a Super ESCO.	
	Sustainable cooling	
	Capacity building on SEforAll Energy Systems Model and demand forecasting,	
	including setting of an open portal.	
WRI	Training some counties in the use of the Energy Access Explorer for energy	
	planning.	

### Annex C: Justification against OECD DAC Criteria

Table C1 below summarises the justification for the proposed Programme based on the OECD DAC criteria of relevance, coherence, effectiveness, efficiency, impact, and sustainability.

#### Table C.1: Justification based on OECD DAC criteria:

Relevance: DEPP IV is directly relevant to/specifically responds to needs and priorities expressed by key partners in Brazil, India, and Kenya under the ongoing cooperation and this will be further confirmed in the upcoming formulation missions, where also potential new partners will be met, and their priorities be considered in programme design. DEPP IV interventions will be in areas where Denmark adds value based on expertise and experience in green energy transition and climate action and is directly relevant to Denmark's priorities expressed in the Development Strategy "The World We Share" which states that "The international cooperation on energy under the strategic sector cooperation will lie at the heart of the efforts to promote green transition and underpin Danish climate diplomacy". "Denmark must assume international leadership within reductions, green transition, and access to clean energy". And "Denmark will.... 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".

Internal and external coherence: DEPP IV interventions will address interlinkages with other policy priorities of partner government institutions in inclusive just and equitable energy transition, thus avoiding a "silo" approach. Emphasis will be placed on synergy with support from other development partners, avoiding overlap – the Danish embassies in the countries will contribute to this. There is internal coherence and crossfertilisation between and among several other SSC and DEPP programmes implemented by DEA, which is facilitated within DEA through its internal organisational structure, substantive exchanges and staff meetings, and overseen by the Strategic Advisory Group and Programme Advisory Group. Synergies with Denmark's multilateral energy/climate cooperation will also be in focus.

<u>Effectiveness:</u> Objectives and outcomes of DEPP IV are formulated in alignment with partner priorities and steering committees will serve as accountability mechanisms ensuring effective results monitoring and attention to assumptions and risk factors that may affect implementation. An adaptative management approach will underpin implementation in the highly dynamic context in which DEPP IV operates, ensuring flexibility and adjustment as required over the 5-year implementation period.

<u>Efficiency</u>: DEPP IV is demand-driven and builds upon the experience, approaches and tools developed through DEPP programmes since 2012. The peer-to-peer cooperation that is at the heat of DEPP, is based on specific TOR for each major intervention, which is intended to further ensure a demand-driven approach to TA delivery, based on capacity development needs assessments. The DEA Global Cooperation currently supports 24 bilateral energy partnership programmes, which provides for economies of scale.

Impact: The combined focus of DEPP IV on green energy transition and climate change mitigation is intended to lead to a more resource-efficient electricity system, increased security, reliability and quality of supply, lower cost and improved affordability and thus increased energy access, reduced energy intensity, as well as job growth in the RE/EE sectors, health co-benefits and other socio-economic benefits. The programme is thus designed to achieve impact on the just inclusive green energy transition and contribution to the partner countries' NDC goals, SDG7 and SDG13 targets.

<u>Sustainability</u>: It is central to DEPP IV's demand-driven engagements to integrate the cooperation into overall partner development and sector policies and plans, involve other stakeholders, including think tanks, possibly academia and the private sector, in strengthening the enabling framework for green energy transition and climate action. The emphasis is on institutional development with technical cooperation inputs targeted on uptake and application toward transformative change. Drivers of sustainable impact include effective accountability mechanisms in the form of national steering committees with ownership and commitment at high levels, communication of results and lessons targeted at decision makers, striving for value added and synergy with support from other development partners, and potentially, support for South-South cooperation.

### Annex D: Forståelsespapir om det flerdimensionelle fattigdomsbegreb og den menneskeretlige tilgang i Energistyrelsens myndighedssamarbejder

### Forståelsespapir om det flerdimensionelle fattigdomsbegreb og den menneskeretlige tilgang i Energistyrelsens myndighedssamarbejder

#### 1. Formål

Dette papir skal tilvejebringe et fælles forståelsespapir mellem UM, KEFM og ENS, der operationaliserer ENS' inddragelse af det flerdimensionelle fattigdomsbegreb og en menneskeretlig tilgang (HRBA) i Energistyrelsens myndighedssamarbejder. Det gælder både de eksisterende programmer med henblik på mere fyldestgørende midtvejsevalueringer (Mid-term review) og det fremadrettede arbejde med programudvikling – herunder en ny rammesætning for det

Office/department Global Rådgivning

Date

10-11-2022

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strategiske sektorprogram (SSC). Papiret udarbejdes efter anmodning fra Udviklingspolitisk Råd (UPR) samt for at implementere Udenrigsministeriets udviklingspolitiske strategi og relaterede "how-to notes".

#### 2. Baggrund

Med afsæt i den danske lov om internationalt udviklingssamarbejde er målet for Danmarks udviklingssamarbejde at bekæmpe fattigdom og fremme menneskerettigheder, demokrati, bæredygtig udvikling, fred og stabilitet i overensstemmelse med FN-pagten, Verdenserklæringen om Menneskerettighederne og FN's konventioner om menneskerettigheder. Et centralt omdrejningspunkt er FN's 2030-dagsorden for bæredygtig udvikling samt verdensmål.

Loven om internationalt udviklingssamarbejde såvel som den udviklingspolitiske strategi beskriver altså FN's verdensmål og Parisaftalen som afgørende indsatsområder og pejlemærker for at bekæmpe fattigdom. Loven og strategien anerkender på overordnet plan, at klimaindsatsen er et selvstændigt indsatsområde til at opnå fattigdomsbekæmpelse.

#### 2.1 Rammesætning for myndighedssamarbejderne for energi

Det er essentielt at påpege, at myndighedssamarbejderne som udgangspunkt er organiseret mellem to nationale myndigheder (hhv. KEFM og et partnerministerie i et partnerland) og med Energistyrelsen som udførende dansk part. Derfor er udgangspunktet for arbejdet et nationalt perspektiv for det pågældende land og sekundært - hvor relevant - fokus på regionale og lokale forhold. Det er vigtigt at fremhæve, at Energistyrelsen indgår i et *kapacitetsophyggende* samarbejde med partnerne for at fremme og accelerere grøn omstilling, men at det er de nationale myndighedspartnere, som i praksis beslutter, om en implementering inden for udvalgte områder skal ske. Det er derfor altid partnerne, der implementerer lovgivning og regulering, offentliggør udbud eller øger ambitioner og mål i praksis, hvorfor den danske indsats kan siges at have bidraget til, men ikke tilskrives effekten for omstillingen.

Som udgangspunkt tager myndighedssamarbejdet afsæt i de specifikke partnerlandes efterspørgsel, som matcher de danske erfaringer med grøn omstilling i energisektoren. Det primære fokus for projekterne er derfor en energi- og klimamæssig vinkel, som direkte henfører til verdensmål 7 – at sikre adgang til pålidelig, bæredygtig og moderne energi til en overkommelig pris. Men som FN selv påpeger har arbejdet med dette verdensmål en central rolle ift. en lang række andre globale udfordringer – herunder fattigdom og menneskerettigheder (se tekstboks 18).

"Energy is central to nearly every major challenge and opportunity the world faces today. Be it for jobs, security, climate change, food production or increasing incomes, access to energy for all is essential.

Transitioning the global economy towards clean and sustainable sources of energy is one of our greatest challenges in the coming decades. Sustainable energy is an opportunity – it transforms lives, economies and the planet."

	Delmål under verdensmål 7	Myndighedssamarbejdets tiltænkte effekt
7.1	Inden 2030 skal der sikres universel adgang til pålidelig og moderne energiforsyning til en overkommelig pris.	7.1.1. Andel af befolkning med adgang til elektricitet.  Myndighedssamarbejdet sætter ind ved at sikre adgang til strøm med høj forsyningssikkerhed.  Programmerne arbejder for at sikre overkommelige priser på elektricitet gennem teknologineutrale energiscenarier som på et faktabaseret grundlag viser hvordan et forventet energiforbrug billigst leveres ud fra tilgængelige energikilder.  Myndighedssamarbejdet fokuserer ikke direkte på etablering af den fysiske adgang via opsætning af kabler mv., men indirekte gennem estimering af fremtidigt energiforbrug og rådgivning omkring nødvendige investeringer i infrastruktur. Det er en grundlæggende forudsætning, at der findes elektricitet fra moderne kilder til at starte med. Ydermere er det en forudsætning, at elprisen er tilstrækkelig lav, så forbrugerne i udsatte grupper har råd til at betale for dem. Dette opnås via et konkurrenceudsat og teknologineutralt elmarked.  7.2.2 Andel af befolkning, som primært anvender vedvarende energi / grøn strøm  Ved at øge adgangen til elektricitet i områder, hvor det giver samfundsøkonomisk mening, vil andelen af mennesker som kan bruge ren energi til fx madlavning, belysning og varme/køling på mellemlang sigt vokse.
7.2	Inden 2030 skal andelen af vedvarende energi i det globale energimix øges væsentligt.	7.2.2. Andel af vedvarende energi i det samlede, endelige energiforbrug.  Alle aktiviteter i programmerne søger direkte at øge andelen af vedvarende energi i partnerlandenes energiforbrug.
7.3	Inden 2030 skal den globale hastighed for forbedring af energieffektiviteten fordobles.	7.3.1. Energiintensitet målt i forhold til primær energi og BNP.  Gennem den danske styrkeposition inden for energieffektivitet rådgives partnerministerier om afkobling af økonomisk vækst og energiforbrug.

I udmøntningen af myndighedssamarbejdet udgør følgende styrkepositioner de overordnede kategorier for ENS' tekniske bistand; Langsigtet energiplanlægning, rammevilkår for vedvarende energi, integration af vedvarende energi, energieffektivitet og fjernvarme.

Nedenfor gennemgås kort baggrund og UM's anvendte definitioner på fattigdom og menneskeretlig tilgang med udgangspunkt i Global Rådgivnings (GR) virke. Derefter følger et

<sup>8</sup> https://sdg-tracker.org/energy/https://www.unccd.int/resources/publications/fuel-life-securing-land-energy-nexus

<sup>&</sup>lt;sup>9</sup> Elektricitet som produceres fra en central enhed til et antal forbrugere.

udkast til operationalisering under GR's myndighedssamarbejder. Da forhold omkring fattigdomsbekæmpelse og menneskeretlig tilgang er kontekstspecifikke, er der i Annex 1 til SSC-rammeaftalen udarbejdet eksempler for hvert land.

I tillæg hertil samarbejder Global Rådgivning også med multilaterale aktører som IRENA, der er tilstede i partnerlandene. Som eksempel arbejder IRENA mere for den udviklingspolitisk dagsorden, hvilket Global Rådgivning drager nytte af i sine programmer, ligesom IRENA udnytter, at Global Rådgivning oftere har en tættere adgang til myndighederne i de pågældende partnerlande.

#### 3. Fattigdomsbekæmpelse

Verdensbanken estimerer, at globale klimaforandringer vil skubbe op til 132 millioner mennesker ud i fattigdom i perioden 2020 til 2030¹0. Frem mod 2050 konkluderes også, at 213 millioner mennesker vil migrere frem mod 2050 som følge af klimaforandringer. Det sætter fattigdomsbekæmpelsen under pres.

Denne udvikling er blevet accelereret af pandemien og den nuværende energikrise, hvor 75 mio. mennesker har mistet evnen til at betale for elektricitet, og 100 mio. mennesker har mistet muligheden for madlavning baseret på bæredygtige energiløsninger. I udviklingslande, hvor energi og fødevarer udgør en stor andel af husholdningsbudgetterne, har stigende energipriser en betydelig påvirkning på inflation ogg stigende energipriser har været et tilbageslag i forhold til at øge andelen af befolkning, som har adgang til energi. De stigende energipriser har også bidraget til at antallet af mennesker, der lever i ekstrem fattigdom i de mest udsatte lande og regioner af verden er steget. <sup>11</sup>

Der er dog samtidig evidens for, at grøn energitransition har positive effekter. Andelen af grønne jobs inden for vedvarende energi er på globalt niveau vokset i perioden 2012 til 2022 til 12 millioner (64%). En rapport fra IRENA og ILO konkluderer ligeledes, at der vil blive skabt flere jobs gennem en grøn energiomstilling, end der vil blive tabt. 12 Dette kræver dog, at der i den holistiske planlægning tages højde for de socioøkonomiske bidrag, som kommer med den grønne omstilling. Det samme gælder i udrulningen af vedvarende energi og energieffektivitet, hvor man bør inkludere relevante forhold omkring jobskabelse og lokalsamfund (fx modvirkning af negative effekter for lokalsamfund afhængige af fossile energikilder). 13

<sup>10</sup> Verdensbanken. 2020. Revised Estimates of the Impact of Climate Change on Extreme Poverty by 2030. <a href="https://documents1.worldbank.org/curated/en/706751601388457990/pdf/Revised-Estimates-of-the-Impact-of-Climate-Change-on-Extreme-Poverty-by-2030.pdf">https://documents1.worldbank.org/curated/en/706751601388457990/pdf/Revised-Estimates-of-the-Impact-of-Climate-Change-on-Extreme-Poverty-by-2030.pdf</a>

<sup>11</sup> IEA Energy Outlook 2022. <a href="https://iea.blob.core.windows.net/assets/47be1252-05d6-4dda-bd64-4926806dd7f3/WorldEnergyOutlook2022.pdf">https://iea.blob.core.windows.net/assets/47be1252-05d6-4dda-bd64-4926806dd7f3/WorldEnergyOutlook2022.pdf</a>
12 IRENA, ILO (2021)

<sup>&</sup>lt;sup>13</sup> A Sure Path to Sustainable Renewable Energy – Maximizing Socioeconomic Benefits Triggered by Renewables (ESMAP, SMRI, Oct 2022). <a href="https://esmap.org/sites/default/files/esmap-files/81331">https://esmap.org/sites/default/files/esmap-files/81331</a> SRMI%20Socioeconomic%20Guidelines Spreads.pdf

#### 1. Domestic participation in the RE value chain.

The goal here is to enhance the involvement of domestic firms and labor in a competitive manner to maximize job creation, skills development, and knowledge transfer all along the value chain.

#### 2. Local development.

The objective is to design and implement initiatives to strengthen the resilience and livelihoods of communities living near RE project sites. These could include programs to hone skills (general or specific to RE), improve or augment services and infrastructure, increase revenue and initiate ownership-sharing agreements.

#### 3. Gender equality and social inclusion.

The aim here is to ensure that all individuals and groups - including women and those disadvantaged on the basis of their identity—have equal opportunity to benefit from RE deployment, including job opportunities, education and training, business

opportunities, and local development initiatives.

I dialogen med ENS' partnermyndigheder er der meget fokus på *holistisk* planlægning, som skal sikre evidensbaseret viden om jobskabelse, gensidig afhængighed til andre sektorer (fx minedrift og fossile energisektorer), nationale værdikæder, styrkelse af lokalsamfund og uddannelse. Som eksempel har ENS' partnerlande typisk store udfordringer med forsyningssikkerhed i deres elsystemer.

<u>Det er vigtigt at understrege</u>, at en øget andel af fluktuerende vedvarende energi kan udfordre forsyningssikkerheden, såfremt landets operatører og markedsvilkår ikke sikrer en effektiv integration. **En effektiv integration er en forudsætning for, at grøn energi og forsyningssikkerhed kan gå hånd-i-hånd**. Sker dette, vil det understøtte verdensmål 7.1.

#### 3.1 Det flerdimensionelle fattigdomsbegreb

Det flerdimensionelle fattigdomsbegreb ser bredt på fattigdom og omhandler adgang til ressourcer såsom uddannelse, sundhed, naturressourcer, vand, energi og rettigheder – og er altså ikke kun fokuseret på indkomst. Begrebet opdeles i fire områder: ressourcer, muligheder og valg, stemme og indflydelse, samt personlig sikkerhed.

Et forsimplet, men konkret eksempel, der illustrerer at tilgangen anvendes på ENS' arbejdsområder findes i den danske tilgang til energiplanlægning.

- 1. Ressourcer: fx bedømmes alle ressourceformer til at producere elektricitet på lige fod og på basis af livstidsomkostninger samt inddrager eksternalitetsomkostninger for samfundet.
- 2. *Muligheder og valg*: fx har alle samfundsgrupper adgang til energi på lige fod og leveringssikkerheden ensartet.
- 3. *Stemme og indflydelse*: fx gennemføres politiske beslutninger på energiområdet med en transparent adgang til information og med mulighed for at blive hørt i processen.

<sup>&</sup>lt;sup>14</sup> (ESMAP, SMRI, Oct 2022).

4. *Personlig sikkerhed:* fx grøn omstilling reducerer forurening (eksempelvis luftforurening og dermed forbedrer sundhedstilstanden for udsatte samfundsgrupper).

#### 3.2 Human Rights Based Approach (HRBA)

Den menneskeretlige tilgang er baseret på fire principper – *ikke-diskrimination, deltagelse og inklusion, gennemsigtighed, og ansvarlighed.* I dansk forvaltningspraksis indgår principperne som en integreret værdi, hvilket også kommer til udtryk i Energistyrelsens globale partnerskaber. Et forsimplet, men konkret eksempel, der illustrerer tilgangen anvendt på ENS' arbejdsområder i partnerlande findes i etableringen af en ny landvindmøllepark.

- 1. *Ikke-diskrimination:* energien fra møllerne kommer alle til gode, bl.a. ved integration i elmarked, og forbeholdes ikke specifikke grupper af samfundet
- 2. *Deltagelse og inklusion:* fx åbne høringer for samfundet (erhvervsliv, ngo'er, uddannelsesinstitutioner) og inddragelse af lokalsamfund i processen med at definere projektet
- 3. Gennemsigtighed: fx åbne udbud med transparent og lige adgang til information (one-stop shop)
- 4. Ansvarlighed: fx udbud og kontrakter har information om og mulighed for at klage til en instans.

#### 3.3 Operationalisering af dimensioner og principper

Energistyrelsens myndighedssamarbejder understøtter primært SDG 7, 8, 9, 13 og 17 ved bl.a. at bidrage til en styrkelse af partnerlandenes klimamål, sikre adgang til ren og bæredygtig energi samt understøtte kapacitetsopbygning inden for energiområdet.

Alle myndighedssamarbejder er udarbejdet og programmeret med fokus på den energifaglige efterspørgsel fra partnerlandene. Men det kan indirekte belyses, hvordan aktiviteterne i myndighedssamarbejdet understøtter det flerdimensionelle fattigdomsbegreb og principperne for HRBA.

#### 1. Langsigtet energiplanlægning

Eksempler på GR indsatser:

- Udvikling af energisektormodeller, der tager udgangspunkt i en faktabaseret tilgang og som har til formål at levere billig strøm med høj leveringssikkerhed.
- Udvikling af teknologikataloger, der inddrager relevante interessenter (erhverv, universiteter, andre myndigheder) i udarbejdelsen af datagrundlaget.
   Teknologikataloget anvendes til at informere den politiske beslutningsproces, som skal understøtte nationale mål omkring adgang til energi (herunder specifikt elektricitet).
- Analyser og data offentliggøres så vidt muligt med henblik på at informere interessenter eller det bredere samfund.
- Energimodeller og specifikke analyser på nationalt og subnationalt niveau og understøtter SDG 7 omkring bl.a. adgang til energi for alle.

Fattigdomsbegreber	HRBA-principper
Så vidt muligt skal GRs aktiviteter	Så vidt muligt skal GRs aktiviteter
søge at sikre:	søge at sikre:
- At energimodeller og scenarier inkluderer reelle livstids- og eksternalitets- omkostninger fx luftforurening	- At partnermyndigheden gør brug af åbne konsultationer, hvor relevante interessenter herunder privatsektor har kunnet byde ind med data og viden

- At energimodeller og specifikke analyser ikke udelukker dele af samfundet e.g. udsatte grupper
- At der undersøges job effekt af forskellige scenarier af grøn energiomstilling
- At øget adgang til energi styrker borgernes muligheder for at gennemføre uddannelse, opstart af virksomhed o. lign.? Fx i yderområder.
- At de sundhedsmæssige effekter fra elektricitetsproduktion estimeres

- At analyser og data offentliggøres med henblik på at informere interessenter eller det bredere samfund.
- At der i dialogen omkring ny regulering og politik tages højde for udsatte grupper.
- At det foreslås eller rådgives om nye antagelser og kriterier i modeludviklingen der gør, at flere dele af landet eller befolkningsgrupper inkluderes (såfremt det modsatte var tilfældet før)

#### GR kerneområde: Rammevilkår for vedvarende energi

#### Eksempler på GR indsatser:

- Objektiv planlægning af placering, miljøvurdering, lovgivning mv. som skal levere omkostningseffektiv vedvarende energi til alle borgere.
- Ved VE udbud: Introducere interessentdialog før udarbejdelse og annoncering af udbud. Inddragelse af lokalsamfund i høringer som en del af processen (kan også reducere investor-risiko).
- One-stop shop: én indgang for alle interessenter sikrer transparent og lige adgang til information.
- Udbudsdesign: sikres anføring af klagevejledning i udbudsmateriale.

#### Fattigdomsbegreber

## Så vidt muligt skal GRs aktiviteter søge at sikre:

- At nationale planer om VE udbygning understøtter, at elektriciteten kommer alle til gode
- At der udarbejdes analyser for jobskabelsespotentiale for øget andel af VE i elproduktionen
- At øget leveringssikkerhed af elektricitet giver fattige og/eller udsatte grupper mulighed for at tænke mere langsigtet (fx ved øget livskvalitet eller forbedret drift af små virksomheder.
- At der udarbejdes analyse af uddannelses- og træningsbehov for at gennemføre VE udbygning
- At lokalbefolkninger involveres tidligt i planlægningsprocesser gennem høringer fx ved identificering af nye områder til VE udbygning

#### HRBA-principper

## Så vidt muligt skal GRs aktiviteter søge at sikre:

- At partneren er blevet introduceret for one-stop-shop tilgangen, og at hele eller delelementer er blevet brugt.
- At alle befolkningsgrupper har lige adgang til fordele fra VE udbygning fx jobs? Og tages der i den forbindelse højde for at lokalsamfund, kvinder, udsatte grupper har adgang til uddannelse, forretningsmuligheder og offentlige tilbud (fx incitamentsordninger)
- At der er udført åbne konsultationer for at få input fra relevante interessenter herunder privatsektor, NGOer og samfundsinstitutioner.
- At der i offentliggjort udbudsmateriale er indført klagemulighed
- At rammerne for privatsektor bidrager med at opnå mål omkring jobskabelse og uddannelse

#### Personlig sikkerhed

#### Ansvarlighed

Mulige monitoreringsspørgsmål:	Mulige monitoreringsspørgsmål:
-	<ul> <li>er der indført klagemulighed i offentliggjort udbudsmateriale?</li> </ul>

#### GR kerneområde: Integration af vedvarende energi

#### Eksempler på GR indsatser:

- Objektiv planlægning af placering, miljøvurdering, lovgivning mv. af elnetsinfrastruktur
- Grid codes
- Liberalisering af elsektoren
- Elmarked

#### Fattigdomsbegreber

## Så vidt muligt skal GRs aktiviteter søge at sikre:

- At øget leveringssikkerhed af elektricitet giver fattige og/eller udsatte grupper mulighed for at tænke mere langsigtet (fx ved øget livskvalitet eller forbedret drift af små virksomheder.
- At der udarbejdes analyse af uddannelses- og træningsbehov for at gennemføre VE udbygning
- At lokalbefolkninger involveres tidligt i planlægningsprocesser gennem høringer fx ved identificering af nye områder til VE udbygning

#### HRBA-principper

## Så vidt muligt skal GRs aktiviteter søge at sikre:

- At alle befolkningsgrupper har lige adgang til fordele fra VE udbygning fx jobs? Og tages der i den forbindelse højde for at lokalsamfund, kvinder, udsatte grupper har adgang til uddannelse, forretningsmuligheder og offentlige tilbud (fx incitamentsordninger)
- At der er udført åbne konsultationer for at få input fra relevante interessenter herunder privatsektor, NGOer og samfundsinstitutioner.
- At rammerne for privatsektor bidrager med at opnå mål omkring jobskabelse og uddannelse

### GR kerneområde: Energieffektivitet og fjernvarme

#### Eksempler på GR indsatser:

- Vidensdeling omkring danske erfaringer med brug af redskaber på myndighedsniveau herunder incitamenter og ny regulering, som sænker energiforbrug eller øger energiintensiteten.
- Vidensdeling omkring udvikling af bygningsreglement for nye og eksisterende bygninger.
- Udvikling af aftaleordninger for energieffektivitet i industrisektorer tilordnet nationale forhold med inspiration fra danske ordninger.
- Vidensdeling om lovgivning for etablering og udbygning af fjernvarme herunder tekniske implementeringsformer

Fattigdomsbegreber	HRBA-principper
Så vidt muligt skal GRs aktiviteter	Så vidt muligt skal GRs aktiviteter
søge at sikre:	søge at sikre:

- At der udarbejdes analyse af uddannelses- og træningsbehov for at implementere EE løsninger i bygninger og industri
- At de sundhedsmæssige effekter fra ee indsats estimeres
- At rammerne for privatsektor bidrager med at opnå mål omkring jobskabelse og uddannelse
- At partnermyndigheden gør brug af åbne konsultationer, hvor relevante interessenter herunder privatsektor har kunnet byde ind med data og viden
- At analyser og data offentliggøres med henblik på at informere interessenter eller det bredere samfund.
- At der i dialogen omkring ny regulering og politik tages højde for udsatte grupper.

## Annex E: Process action plan

Activity	Timing/deadline	Responsible
Formulation mission to Kenya.	28 April-3 May	DEA with formulation
		process consultant
Formulation mission to India.	22 May-1 June	DEA with formulation
	, ,	process consultant
Formulation mission to Brazil.	11-21 June	DEA with formulation
	· ·	process consultant
Submission of early draft DEPP IV programme	29 May	MFA(KLIMA) with DEA
document ("concept note") to the Danida		, ,
Programme Committee.		
Presentation to the Danida Programme Committee.	11 June	MFA(KLIMA) with DEA
DEPP IV Framework Programme Document with	19 August	DEA with formulation
Country Programme Documents for Brazil, India,	_	process consultant
Kenya ready for appraisal.		
Appraisal of proposed DEPP IV	19 August- 16	MFA(KLIMA) with
	September	appraisal consultant
Submit final DEPP IV Framework Programme	14 October	MFA(KLIMA) with DEA
Document with Country Programme Documents		
for Brazil, India, Kenya, and with appropriation		
cover note to the UPR Secretariat.		
Present the DEPP IV Programme to the Council	31 October	MFA(KLIMA) with DEA
for Development Policy (UPR).		
Approval of DEPP IV by the Danish Minister.	Early/mid-	Minister for Development
	November	Cooperation and Global
		Climate Policy
Document for Finance Committee (Aktstykke) and	November	MFA(KLIMA)
presentation to the Parliamentary Finance		
Committee.		
Sign Agreement between MFA and DEA and as	Late November/early	DEA/ MFA(KLIMA)
required with national partners in DEPP IV	December	
countries.		
DEPP IV Programme implementation.	Early 2025-end 2029.	DEA
Mandatory Mid-term Review (MTR).	Mid-2027 (tbd)	MFA(LÆRING)