

# SDG7 Energy Compact of Kube Energy A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

# **SECTION 1: AMBITION**

#### **1.1. Ambitions to achieve SDG7 by 2030.** [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporat

7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.	Target(s): Improve access to affordable, reliable and sustainable energy services in fragile regions, including 6 priority a Kenya, Central African Republic, Mali and South Sudan), by providing around 150 GWh of energy per year. Time frame: From now to December 2029 Context for the ambition(s): Kube Energy aims to generate 150 GWh of electricity per year from 50 future renewable b areas with a high concentration of international organizations. Each power plant will have 1-5MWp of solar capacity ar is estimated to 120MWp. These new infrastructures will supply electricity to international organizations operating in the businesses and, through a local utility company, to communities. Services will be reliable and provided at a cheaper electricity already exist (around 20-30% cheaper than local tariff), to improve access to energy.
☑ 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	Target(s): Commit to ensure that 75% of the energy generated by our projects in fragile countries will come from solar increase the share of renewable energy in the global energy mix. Time frame: From now to December 2029 Context for the ambition(s): Kube Energy aims to develop 150 MWh per year of energy from 50 future renewable base areas. These new infrastructures will replace existing diesel generators or charcoal usage. Their design will include sola 75% of renewable penetration, cutting considerably on CO2 emissions.
□ <b>7.3.</b> By 2030, double the global rate of improvement in energy efficiency.	Target(s): Time frame: Context for the ambition(s):
□ 7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Target(s): Time frame: Context for the ambition(s):
☑ 7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked	<ul> <li>Target(s): Develop 50 new energy infrastructure in fragile regions, including 6 priority areas (Somalia, DRC, Kenya, Co and South Sudan), in support of national efforts and in accordance with their respective programs of support.</li> <li>Time frame: From now to December 2029</li> <li>Context for the ambition(s): Kube Energy aims to develop 150 GWh of energy from 50 future renewable energy based including 6 priority areas (Somalia, DRC, northern Kenya, Central African Republic, Mali and South Sudan), where the international organizations. Kube Energy has already active operations northern Kenya, South Sudan and Somalia and priority areas.</li> </ul>

te strategy)
areas (Somalia, DRC, northern
based power plants in fragile and the total installed capacity the area, government services, lectricity tariff, if this service
r power as to substantially
ed power plants in fragile ar PV and batteries to enable
Central African Republic, Mali
l plants in fragile areas, ere is a high concentration of plans to expand to DRC, Mali

developing countries, in accordance with
their respective programs of support.

and CAR. All these new infrastructures will be developed in partnership with the local governments and in cooperation with international organizations operating in the area. Infrastructures will be mainly financed by private investors. Ownership of energy infrastructures will be transferred to local authorities after 15 years of operations to enhance local capacity.

#### 1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s): Time frame: Context for the ambition(s):

## **SECTION 2: ACTIONS TO ACHIEVE THE AMBITION**

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

Description of action (please specify for which ambition from Section 1) : Ambition 7.1:	Star Froi
- Identify locations for projects development in remote and fragile areas where impact on energy access and decarbonization will be high.	can
- Work with local authorities to define project structure and maximize benefits, including for off-takers.	situ
- Partner with local utility company to supply existing grid and/or work with local authorities to develop or upgrade grid.	
Description of action (please specify for which ambition from Section 1)	Star
Ambition 7.2	Tec
- Technical design of the plant to include solar PV and batteries in order to guarantee a renewable penetration of at least 75%.	inte
- Document renewable penetration with energy yield analysis and simulation.	stru
	(ave
Description of action (please specify for which ambition from Section 1)	Star
Ambition 7.b:	From
- Develop cooperation frameworks with local authorities in targeted areas.	
- Mobilize private financing for 50 renewable based power plants.	
- Enter into power purchase agreements with clients, including anchor clients to ensure financial sustainability of projects.	
Description of action (please specify for which ambition from Section 1)	Star

rt and end date m now to December 2025 (this be extended depending on the uation)

rt and end date hnical development will ervene in phases after project acture for each plant is defined erage 3 to 6 months) rt and end date m now to January 2029

rt and end date

#### **SECTION 3: OUTCOMES**

3.1. Please add at least one measurable and time-based outcome for each of the actions from section 2. [Please add rows as needed].

Outcon	ne	Timeline
-	Identify locations for projects development in remote and fragile areas to ensure high impact.	Please refer to timelines se
⇒	50 new locations identified for projects, including land/space for construction and installation of plants	
-	Work with local authorities to define project structure and maximize benefits.	
⇒	50 project concepts and structures developed and communicated to stakeholders	
-	Partner with local utility company to supply existing grid and/or work with local authorities to develop or upgrade grid.	
⇒	At least 10 local utility company identified and partnership signed.	
-	Technical design of the plant to include solar PV and batteries in order to guarantee a renewable penetration of at least 75%.	
⇒	50 technical designs developed and validated.	
-	Document renewable penetration with energy yield analysis and simulation.	
⇒	50 energy yield studies for projects prepared.	
-	Develop cooperation frameworks with local authorities in the targeted areas.	
⇒	Develop and sign 50 Memorandum of Understanding(s) with local or national authorities (MOU in each locations are not	
	necessary given that some projects can be in the same location or implemented with international organizations).	
-	Mobilize private financing for 50 solar energy plants.	
⇒	50-80 million USD\$ of private investment mobilized to finance the 50 renewable based power plants	
-	Enter into PPA with clients, including anchor clients to ensure financial sustainability of projects.	
⇒	At least 20 power purchase agreements signed with off-takers in targeted locations (PPA can cover multiple locations, it is hard to	
	predict)	

#### SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **<u>each</u>** of the actions in section 2.

Costs of development, construction, installation, operations and maintenance of renewable based power plants vary from one location to another. Costing each component will require advance projects development, which is part of the compact. Based on our experience in Somalia, Kenya and South Sudan, Kube Energy evaluates that each solar plant (for a size of 1-5 MW of PV and 2-8 MWh of battery) will cost around 1 to 10 million USD\$. We estimate the total capital investment requirement between 50 to 80 million USD\$. For your information, the most time consuming is the development phase, while the actual construction takes in general 3 to 6 months. The batterie component, as well as transport of material are often the costliest in fragile areas.

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

⊠Financing	Description: We estimate that between 50 to 80 million USD\$ will be required to build and operate 50 renewable based power plants in fragile areas. Kul private investors to mobilize funds We aim to mobilize around 60 percent of these funds as equity capital from private investors (corporate investors, de institutions and investment funds), and the remining 40% as debt (development banks and investment funds).
☑ In-Kind contribution	Description: 1.5 million USD\$ to assist the development phase of the 50 projects will allow simultaneous development of projects, ensure legal support to no energy regulatory frameworks, development of social and environmental studies, and build up (or eventually contract another company) a technical to solar power plants.

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I Technical Support	Description: in-kind contribution to provide technical support, including design and optimization of solar power plants ("early technical work"), as well as aspects on the implementation of solar power projects. This support will reduce the general requirement for in-kind contribution.
□ Other/Please specify	Description

#### **SECTION 5: IMPACT**

5.1. Countries planned for implementation including number of people potentially impacted.

6 countries; total of 100,0000 people per plants and about 35 international organizations.

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how <u>each</u> of the actions from section 2 impact advancing the SDGs by 2030. [up to 500 words, please upload supporting strategy documents as needed]

In partnership with local governments (SDG 17), the construction of solar power plants in the selected fragile areas has a direct impact on development opportunities, peacebuild and services by improving access to clean, reliable and affordable energy (SDG 7). The power generated is cheaper than the one produced by diesel-powered mini grids, reducing and making it more accessible to communities. The reliability of power has increased, reducing power outage time and lost sales for businesses. Local government and basic servi including security, education and health care. The availability and increased reliability of electricity allow industries and businesses to produce better and at lower costs, leading t output. Savings made by international organizations connected to the solar plants can be reallocated to impactful programmes increasing resilience of communities. This results i connection to the local grid, through local utility companies, improves distribution and increase access by communities, who often rely on charcoal or diesel generators for electric see a return on investment, improving the investment climate in fragile settings and attracting even more commercial opportunities and eventually infrastructure development. Of the creation of jobs in the operations phase, and the payment of taxes and fees by Kube Energy to the local governments as per signed MOUs.

Please refer to SDGs company framework / theory of change for further information.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how <u>each</u> of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and [up to 500 words, please upload supporting strategy documents as needed]

The renewable penetration of each solar power plants enables a direct and immediate reduction of GhG emissions by replacing diesel generators and charcoal usage by communi International organizations connected to the plants reduce their environmental footprint, aligning with the climate objectives of their respective organizations. The ecosystem arc created by the projects encourages federal and local governments to embrace renewable energies and improve the regulatory framework.

Please refer to SDGs company framework / theory of change for further information.

advice on other technical	
ding and demand for goods	
g the overall price of electricity rices can offer better services, to increased commercial in more energy demand. The ricity. Kube Energy's investors Other positive effects include	
d support the net-zero emissions	by 2050.
ities and businesses. bund renewable energy	

#### **SECTION 6: MONITORING AND REPORTING**

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

- Total energy generation and renewable penetration performance will be monitored and documented by regular reports on electricity output from the solar plants.
- SCADA systems will be installed to ensure performance and reliability of the solar plants.
- Technical design of the plant to ensure a minimum of 75% of renewable penetration will be documented by energy yield study.
- Company annual financial reports will document on the status of the projects and achievements of the 50 targeted new energy infrastructures.
- Report from local utility partner will help monitoring the number of new offtakers among communities.

#### **SECTION 7: GUIDING PRINCIPLES CHECKLIST**

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

- I. Stepping up ambition and accelerating action Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement
  - I. 1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks?  $\boxtimes$ Yes  $\square$ No
  - 1.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts?  $\square$  Yes  $\square$  No
  - 1.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 as defied by latest global analysis and data including the outcome of the Technical Working Groups?  $\boxtimes$  Yes  $\Box$  No
- II. Alignment with the 2030 agenda on Sustainable Development Goals Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.
  - II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030?  $\boxtimes$  Yes  $\Box$  No
  - II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? 🛛 Yes 🗌 No
  - II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action?  $\square$  Yes  $\square$  No
- III. Alignment with Paris Agreement and net-zero by 2050 Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.
  - III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050?  $\boxtimes$  Yes  $\square$  No
  - III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs?  $\boxtimes$  Yes  $\Box$ No
  - III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050?  $\boxtimes$ Yes  $\Box$  No
- IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.
  - IV.1. Does the Energy Compact include socio-economic impacts of measures being considered?  $\square$  Yes  $\square$  No
  - IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition?  $\square$  Yes  $\square$  No
  - IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)?  $\square$  Yes  $\square$  No
- V. Feasibility and Robustness Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.
  - V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? 🛛 Yes 🗋 No
  - V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives?  $\square$  Yes  $\square$  No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistant needs and partnerships, policy and regulatory gaps, data and technology)?  $\boxtimes$  Yes  $\square$  No

### **SECTION 8: ENERGY COMPACT GENERAL INFORMATION**

8.1. Title/name of the Energy Compact

Kube Energy Compact

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

Kube Energy AS		
8.3. Lead entity type		
□ Government	□ Local/Regional Government	Multilateral body /Intergov
□ Non-Governmental Organization (NGO)	□ Civil Society organization/Youth	□ Academic Institution /Scie
⊠ Private Sector	Philanthropic Organization	□ Other relevant actor
8.4. Contact Information		
Kristen Petillon: <u>kristen@kubeenergy.com</u> +417985111	16	
8.5. Please select the geographical coverage of the Energy Cor	mpact	

⊠Africa □Asia and Pacific □Europe □Latin America and Caribbean □North America □West Asia □Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

### SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.

Please visit our website <u>www.kubeenergy.com</u>. This website contained our recent publications. We have also an innovative partnership with UNHCR and MIT to develop a smart energy system that aims to influence loads to reduce consumption and match it with solar energy generation.

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