Economic and Social Commission for Western Asia

Integrated and Multi-stakeholder Approach for rural and economic development

Regional Initiative for Promoting Small-Scale Renewable Energy Applications in Rural Areas of the Arab Region (REGEND)

Access to Finance for Municipalities – Nexus Thinking and Decentralization of Subnational Governments

UNITED NATIONS
ESCWA

Shared Prosperity Dignified Life

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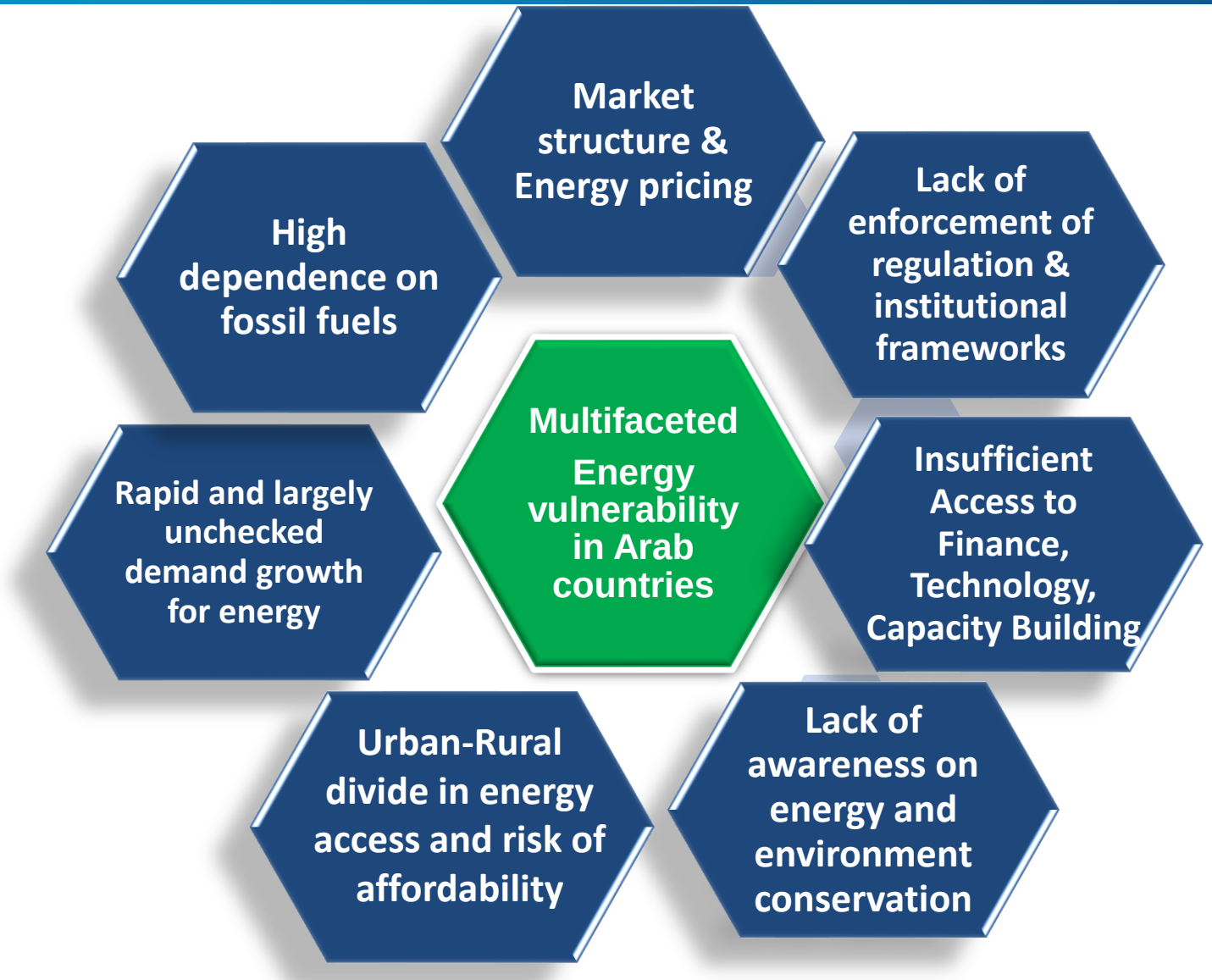
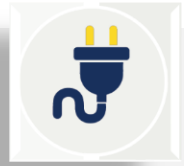
Climate Change and Natural Resource Sustainability
ESCWA

Inclusive and integrated approach for natural resource management and building resilience to climate change



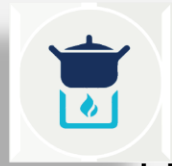
KEY FACTS IN NUMBERS – Are we on track in the ARAB REGION?

Near-universal access to modern energy but very slow progress in energy efficiency and a marginal role of renewable energy



Electrification

- **92.5 per cent** in the Arab region is electrified.
- **30 million** still remain without electricity access. Mainly in three LDCs with only **50%** deficit in rural.



Clean cooking

Access to CFTs is encouragingly high in the Arab region with **90.3%** in 2017.

- **38 million** people still lack access to CFTs, mainly in rural LDCs and conflict areas.

Renewables

RE share has been plateauing at around **10.2%** of the region total final energy consumption since 2010, mainly in Residential sector (80%).

- The share of Solar, Wind and hydro power lies at only **19%** of the region's RE total.

Efficiency

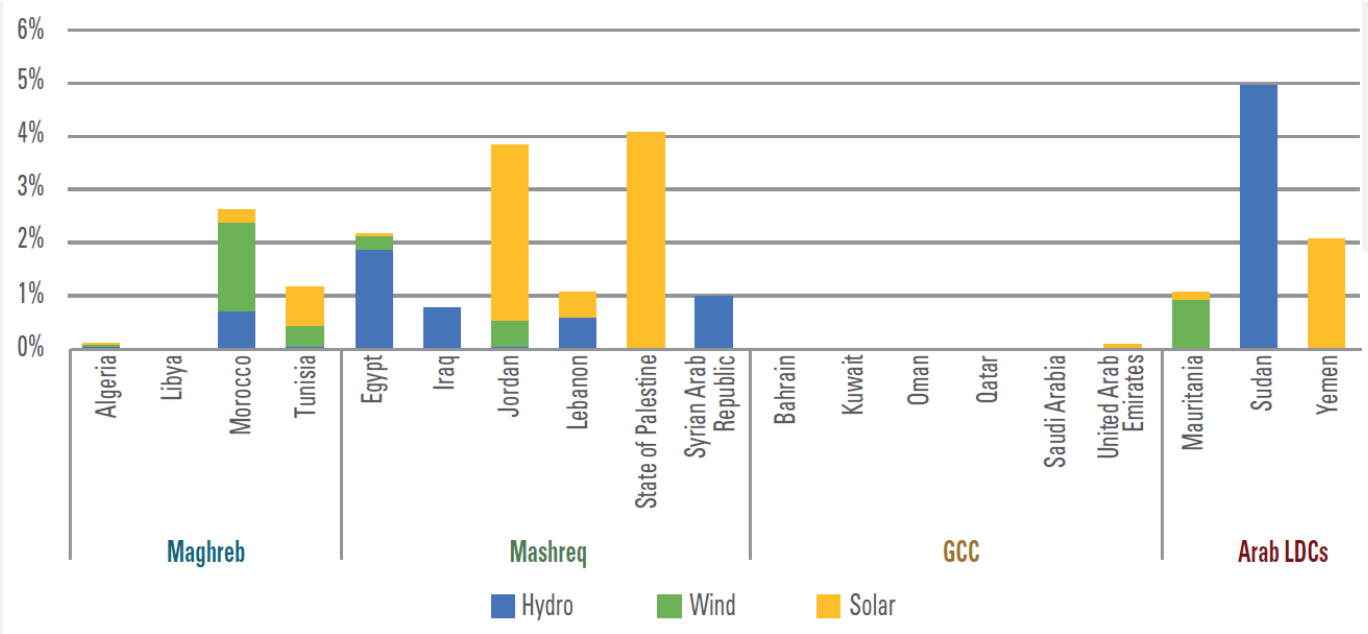
2nd lowest energy intensity of the world's regions, largely an artefact of its fuel mix based on widespread efficient use of gas.

- **Transport** remains by far the most energy-intensive sector, followed by industry and agriculture.

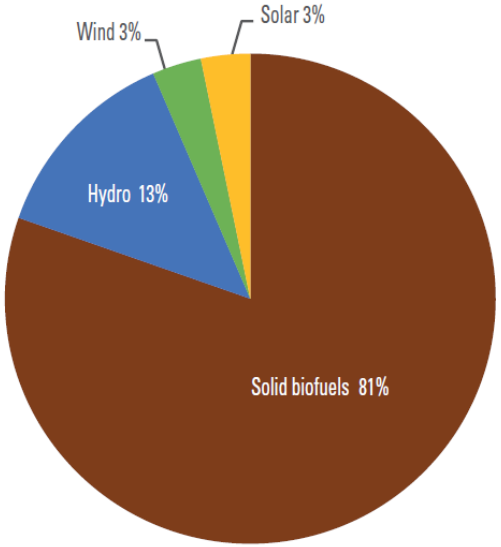
SDG 7.2: Are we on track? **(10%)**

Contribution of RE to the region's energy mix remains marginal….
Solid biofuel continues to dominate regional RE consumption

RE share in total final energy consumption by technology (excluding solid biofuel), 2016



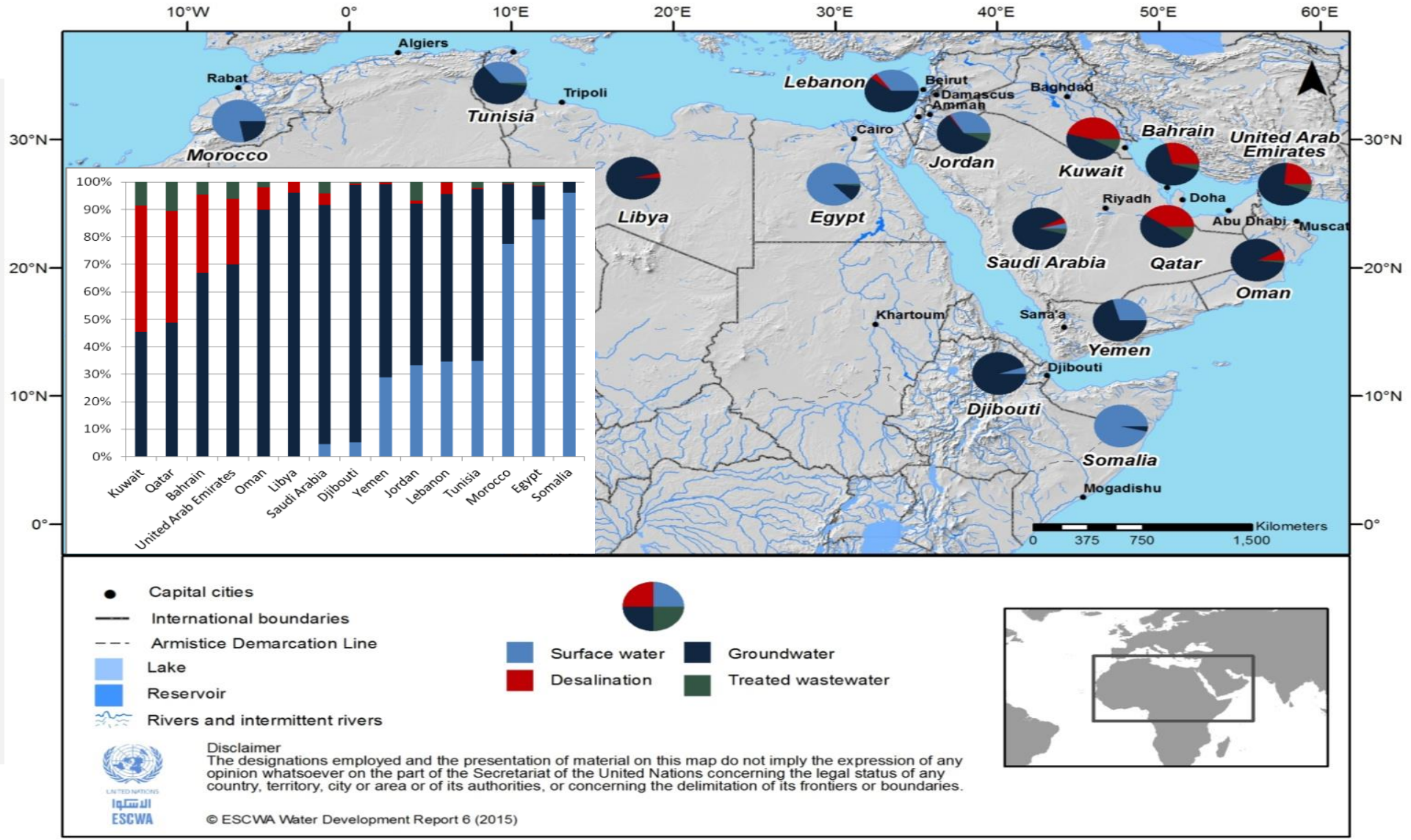
Harvesting the significant benefits of modern RE requires far more dedicated policy design – and investment – than is currently the case.



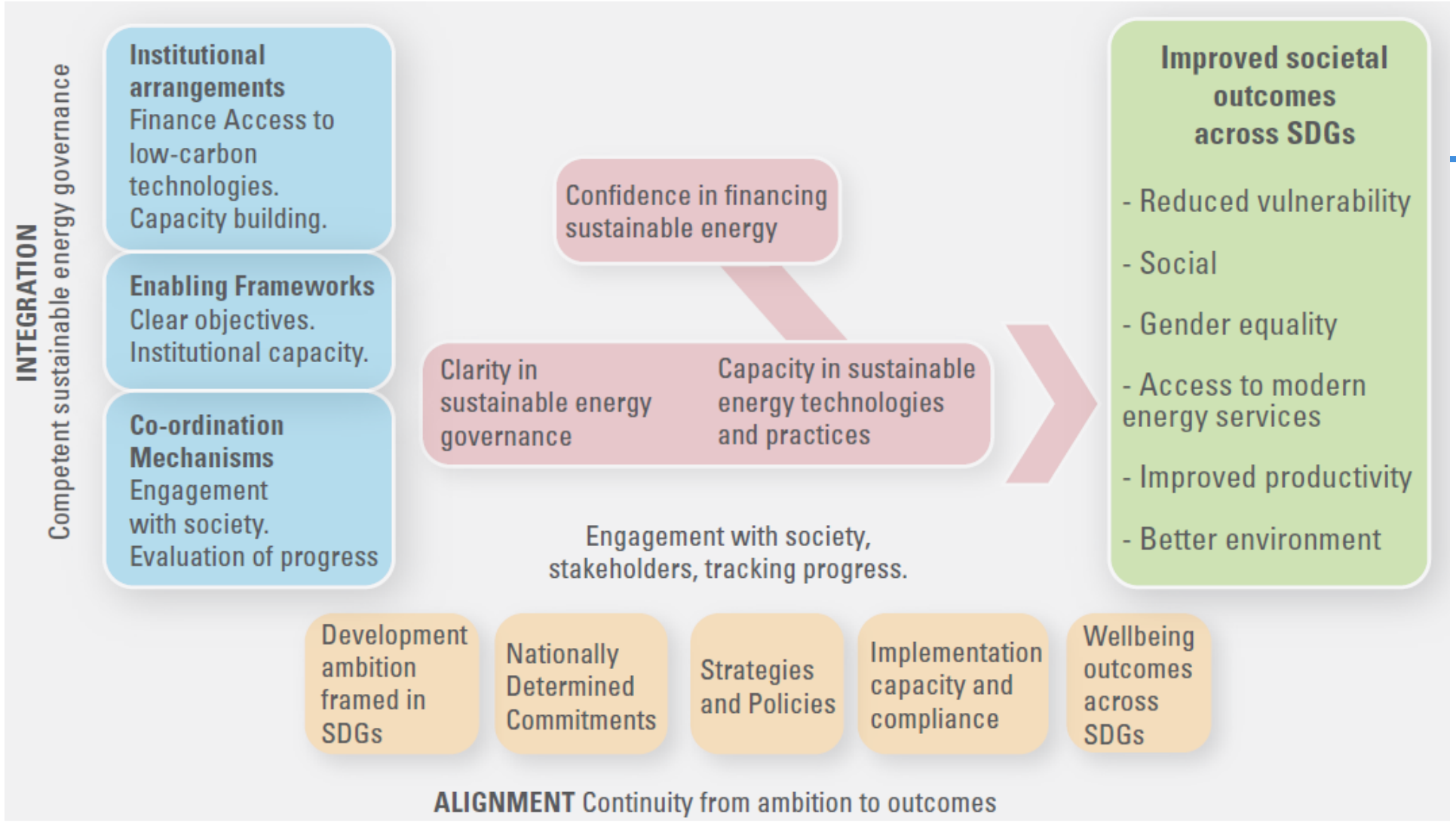
RE consumption by type of fuel in the Arab region

Source: *IEA, UNSD, 2018.*

Energy Demand of Water Sector in the Arab Region



National energy planning needs to integrate the dual objectives of sustainable energy (SDG 7) with climate objectives (SDG 13) and other related SDGs



Project Justification: major challenges in the Arab region

- Limited knowledge and awareness on policy tools to incentivize the dissemination and use of appropriate small scale RE technologies in rural communities;
- Focus of many governments in the Arab countries on the development of large scale RE power generation systems;
- Centralized systems are driven more by the demands of big industries and urban population;
- Less importance is given to develop, install, assemble and undertake maintenance work for small scale RE systems;
- Absence of an enabling environment for the private sector to invest in small scale RE technologies, especially in rural areas;
- Lack of accessible financial support for small scale projects able to facilitate private consumers to install RE technologies;

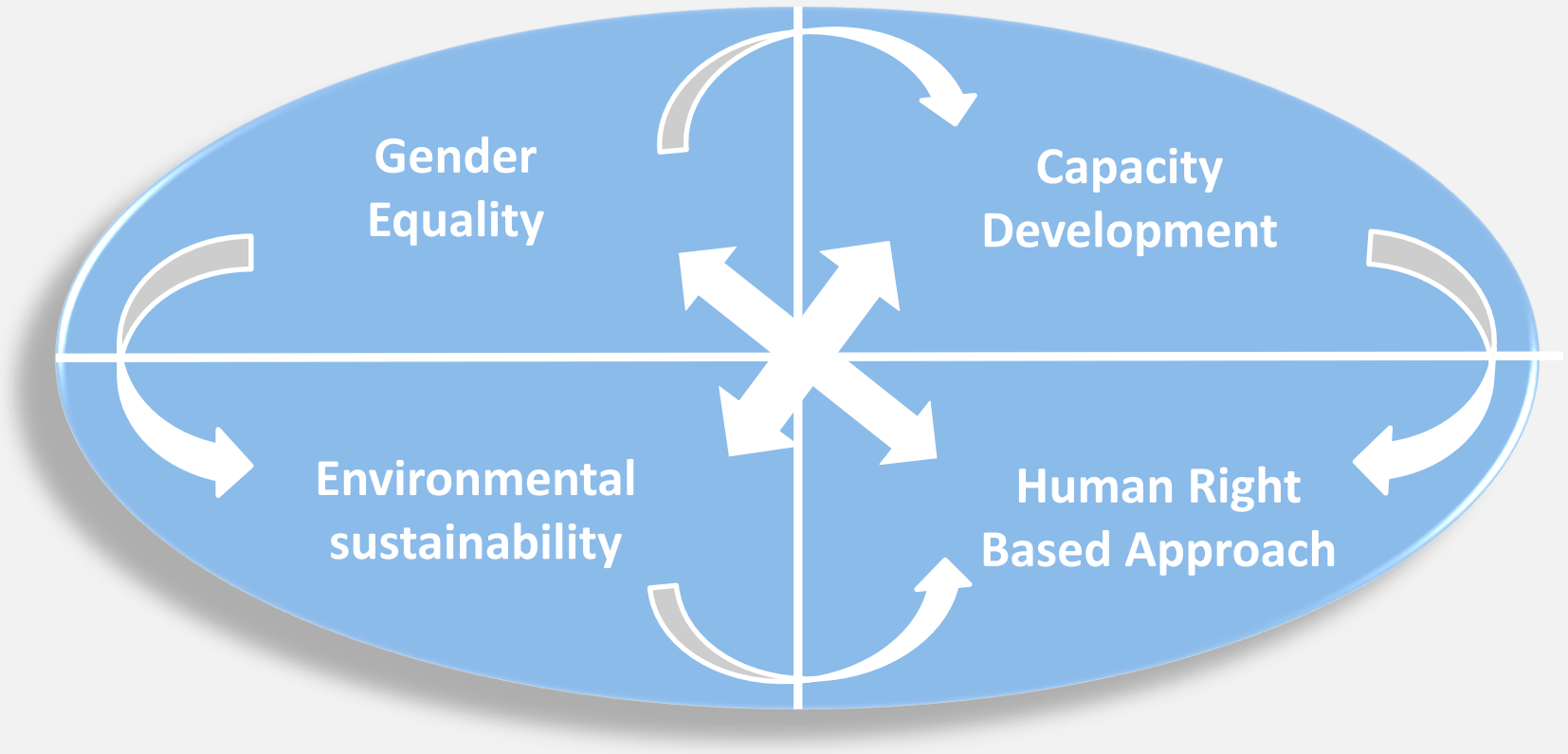
RE applications if used adequately to meet the needs of rural communities:

- will open up more **entrepreneurial** opportunities in **productive** sectors beyond agriculture
- will ease the pressure of **migration** to urban areas
- will contribute to **reducing the social strife**, **gender disparity,** potential **rise of conflict** and build resilience to climate change.

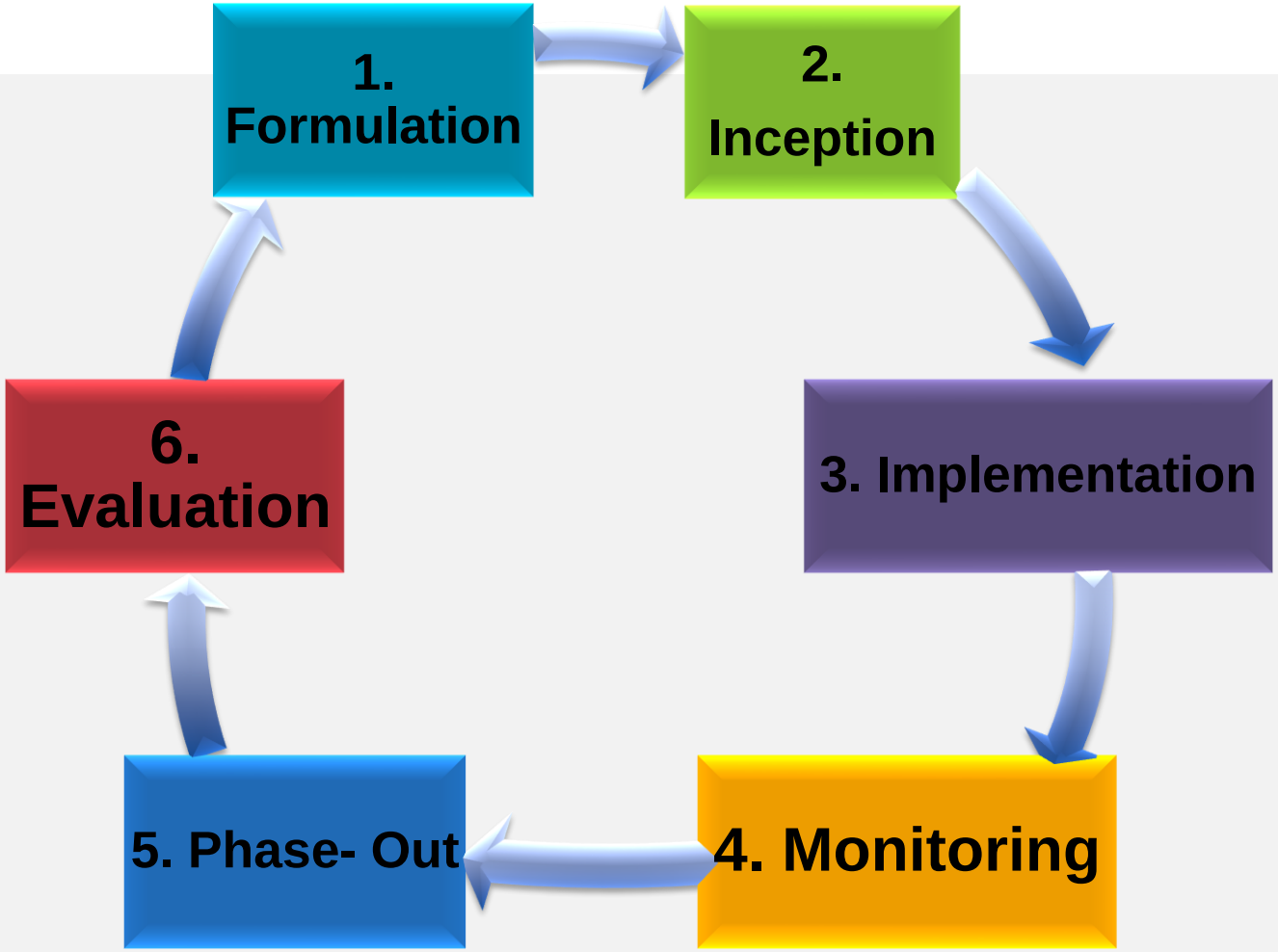
Project Summary

Title:	**Regional Initiative for Promoting Small-Scale Renewable Energy Applications in rural areas of the Arab Region**
Implementing Division	ESCWA Climate Change and Natural Resource Sustainability Cluster with inputs from other ESCWA Clusters
Key Partners	SIDA Partners in implementation include LAS, line ministries, National Instructions, local authorities, Local and regional NGOs, UN organisations, various regional organizations,..
Duration	4 years: 2018 – 2021 including an Inception Phase
Target Countries	ESCWA Member States and Sweden's Regional Strategy for Development Cooperation in MENA 2016-2020 target countries. Focus will be on Jordan, Lebanon and Tunisia
Main Beneficiaries	▪ Primary beneficiaries: Rural population with emphasis on marginalized and vulnerable groups ▪ The second category of beneficiaries: Governmental relevant ministries and Agencies (Energy, Economic Development, Industry, Agriculture, Planning, Social Affairs, ..), local government bodies, civil societies, relevant NGOs and women associations, SME, Financial institutions, Academic Research institutions, Universities; ▪ Project results and recommendations will be shared in national and regional workshops with other Arab countries.

Sustainability and national ownership aspects



Gender mainstreaming strategy: Project's Life Cycle



Project Objective: Long Term

Improve the livelihood, economic benefits, social inclusion and gender equality of Arab rural communities particularly marginalized groups by addressing energy poverty, water scarcity and vulnerability to climate change and other natural resources challenges

Using appropriate **small-scale renewable energy** technologies for **productive activities** to stimulate **entrepreneurial development, women empowerment** with emphasis on job creation and developing robust value chains in a **nexus approach** to encourage a **sustainable economy**.

Support the needs to move away from a model based on **“handouts”** to a model based on **“knowhow”** in order to ensure a promising way forward.

DRIVER

INCLUSIVE , SUSTAINABLE, ENVIRNMENTAL AND ECONOMIC REVIVAL & DEVELOPMENT OF THE ARAB RURAL COMMUNITIES

PILLARDS

RE Technologies

- Effective/innovative RE-Small scale decentralized and modular, energy systems.
- Water-Energy-Food nexus
- Access to productive resources, appropriate and reliable services.

Human Capacity

- Model based on knowhow
- Trainings, Knowledge skills/Advisory Services.
- Brining change among rural community from resource poor living standards to reliable, affordable and modern sources of energy.

Women's Empowerment & Social inclusion

- Economic power in rural women's hands
- Female mentor
- Participative and bottom-up approach

Entrepreneurial development

- Economic transformation, Environmental and socio-economic development priorities
- Entrepreneurial jobs in productive sectors
- Spawn energy-based enterprises around RE based service providers

Policy and institutional Framework

- Pro-poor investments and private sector involvement
- Synergies among national/regional stakeholders.
- Innovative incentive mechanisms.

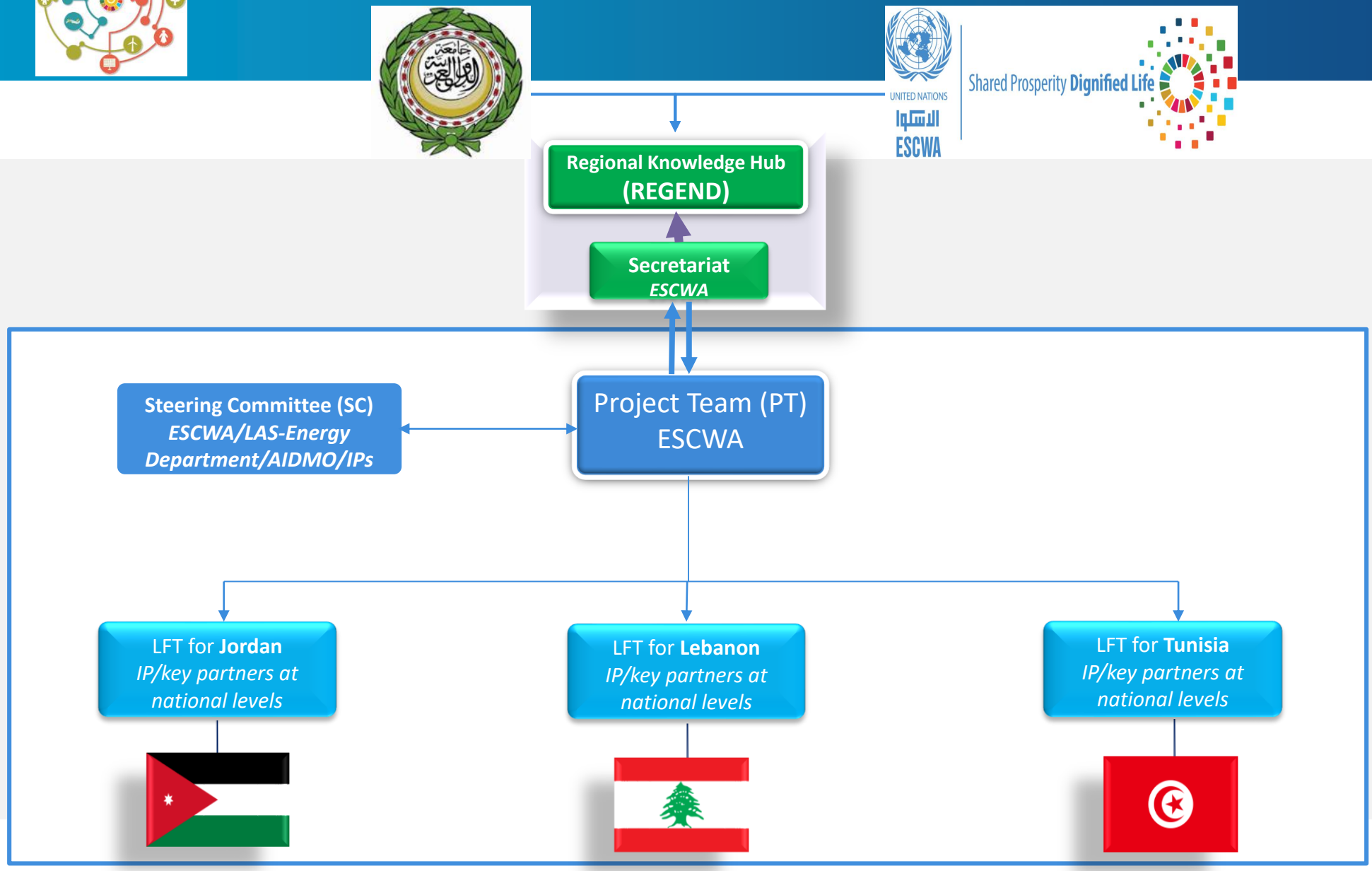
Cross Cutting

Human Rights, Gender equality, resilience to Climate Change

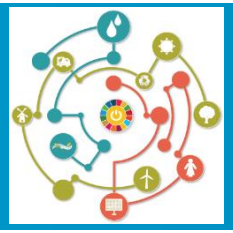
FONDATION

Untapped RE Resource, high Unemployment, chronic poverty, water scarcity, food insecurity, energy poverty and vulnerability to climate change of the rural communities of the Arab countries

PROJECT GOVERNANCE AND SUSTAINABILITY



Abbreviations: Arab Industrial Development & Mining Organization (AIDMO); Implementing Partners (IP); Local Facilitating Team (LFT); League of Arab States(LAS); Steering Committee (SC)



Pillars for the Community's Identification and Selection

- Relatively vulnerable rural area
- Availability of natural resources (agricultural land, springs, rivers, etc.)
- Infrastructure and ease of access
- Human resources and active population
- Availability of productive activities, with growth potential
- Active participation of women in the labor force (or potential)
- Low security risk
- Strong local governance (municipalities)
- Active NGOs

Women's Agro-Food Cooperative of Akkar El Atika, Lebanon

Women's Sewing Factory in Chaqdouf, Lebanon

Bee Keepers Cooperative, Akkar Al Attika, Lebanon

Al Jawhara CBO's products, Jordan

Woman's Home-Based Food Production, Jordan

CBOs of Batir and Rakin, Jordan

Water pumping in Ashaari Farm, Jordan

SMSA ElFawoz, Chorbane, Mahdia, Tunisia

LFT at the Municipality of Chorbane, Mahdia, Tunisia

REGEND: Program of Capacity Building

Capacity Building as per the Project plan:

- ❑ **Renewable energies:**
  - Awareness, technical knowledge, regulatory framework, economic issues, and potential opportunities
  - Operation, troubleshooting, maintenance of solar photovoltaic systems
- ❑ **Entrepreneurial development in rural areas:**
  - Involvement of the private sector
  - Starting and managing a cooperative
  - Access to finance (loans, micro finance)
- ❑ **Gender mainstreaming**

Capacity Building identified from the assessment phase as complementary and required to ensure further impact:

- ❑ Labeling, branding, and marketing of agricultural and food products
- ❑ Diversification of agricultural and food processing activities:
  - Valorization of all beekeeping products
  - Milk processing
  - Cheese and butter production
  - Extraction of oils for medicinal plants
  - Innovation in animal breeding
  - Production of soaps
  - Certification and accreditation of agricultural and food products
  - Sustainable agriculture

REGEND: Pilot Projects to be implemented

Lebanon:

- Solar photovoltaic energy system for beekeeping and agro-food cooperatives.
- Solar photovoltaic energy system for a women-led sowing factory.
- Supply of productive equipment and training to grow current productive activities or develop new ones

Jordan

- Solar photovoltaic energy system for Community-Based Organizations (CBO)
- Solar water heater systems for Community-Based Organizations and home-based women entrepreneurs
- Supply of productive equipment and training for Community-Based Organizations and women entrepreneurs to grow current productive activities or develop new ones

Tunisia:

- Self-production of electricity using solar photovoltaic energy for the milk collection center, agro-food mill and small packaging unit
- Cooling tanks for farmer's milk collection and storage powered by small-scale solar photovoltaic energy
- Solar photovoltaic energy for pumping to improve access to drinking water
- Supply of various productive equipment in the fields of food, agro-food, and livestock including packaging and labeling equipment; all to be powered by solar photovoltaic energy

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Thank you