



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



SUSTAINABLE DEVELOPMENT GOAL 9
INDUSTRY, INNOVATION AND INFRASTRUCTURE

Update on the Global Network of Regional Sustainable Energy Centers (GN-SEC)

High Level Conference “Regional Cooperation to Accelerate Sustainable Energy Innovation and Entrepreneurship in Developing Countries”, 3rd October 2018, in Vienna, Austria

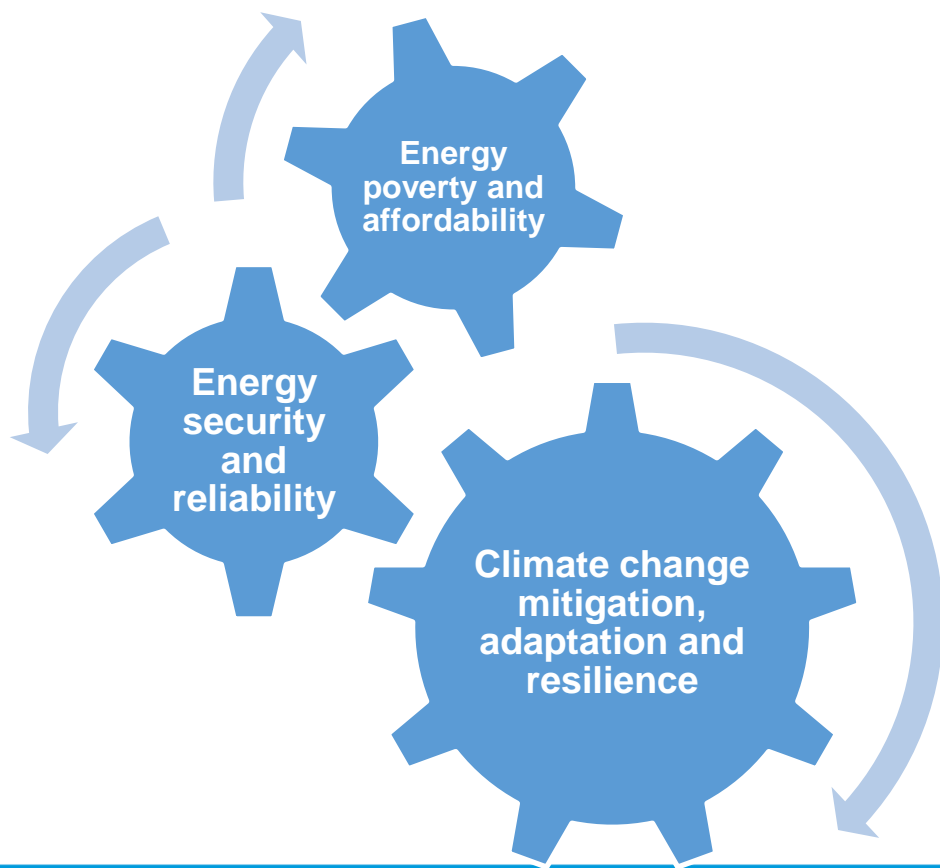
Martin Lugmayr, GN-SEC Coordinator, UNIDO and Mr. Solomon Fifita, Manager of PCREEE, GN-SEC Chair





Turning energy challenges into business and investment opportunities

Drivers towards the creation of sustainable energy markets in developing countries



2030

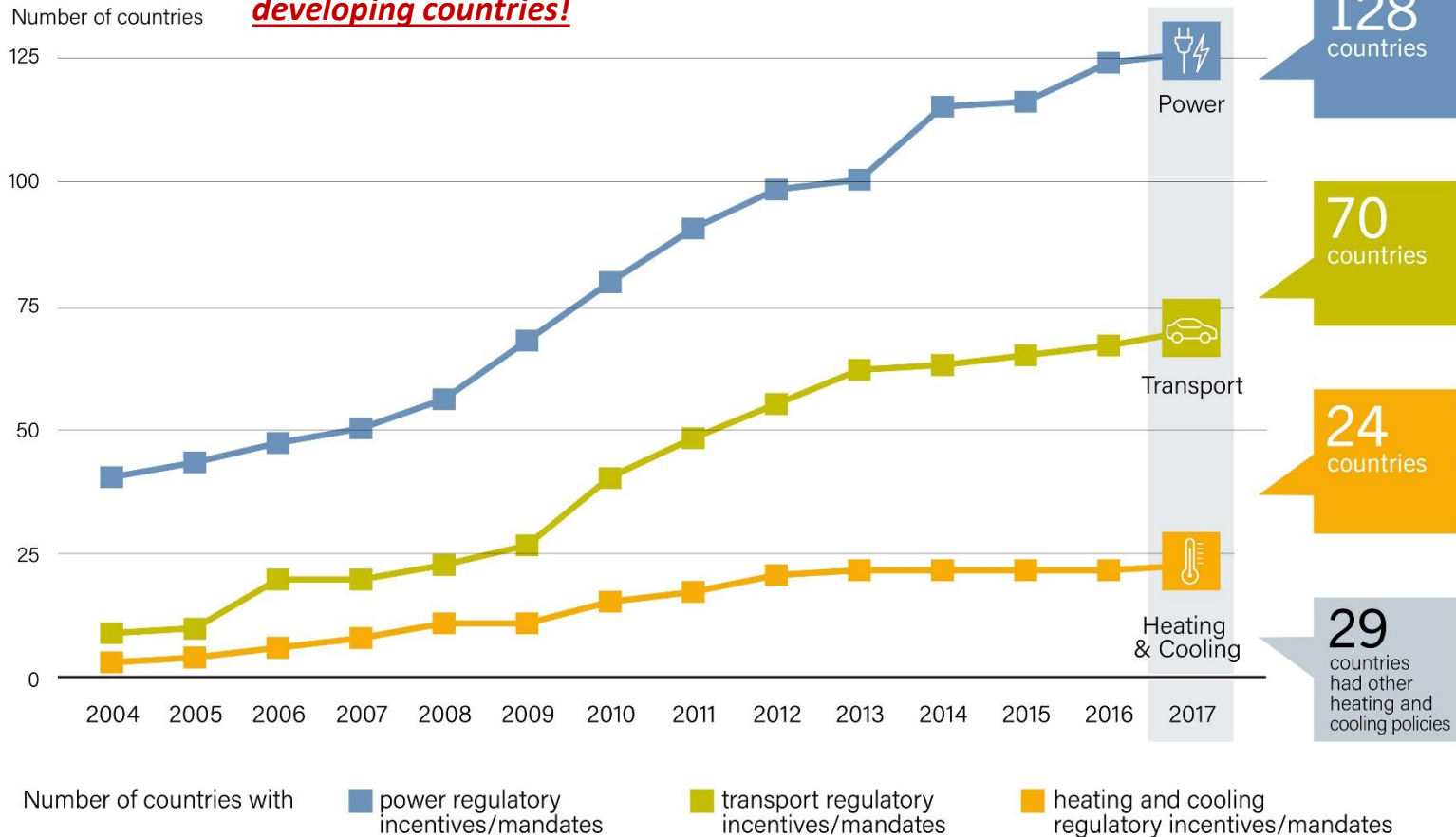
Estimated annual climate mitigation investment up to US\$ 300 billion by 2020, and US\$500 billion by 2030 in developing countries!



Making progress: Increasing global policy readiness

Number of Countries with Renewable Energy Regulatory Policies, by Sector, 2004-2017

Continued policy gaps in specific areas and lack of execution in developing countries!

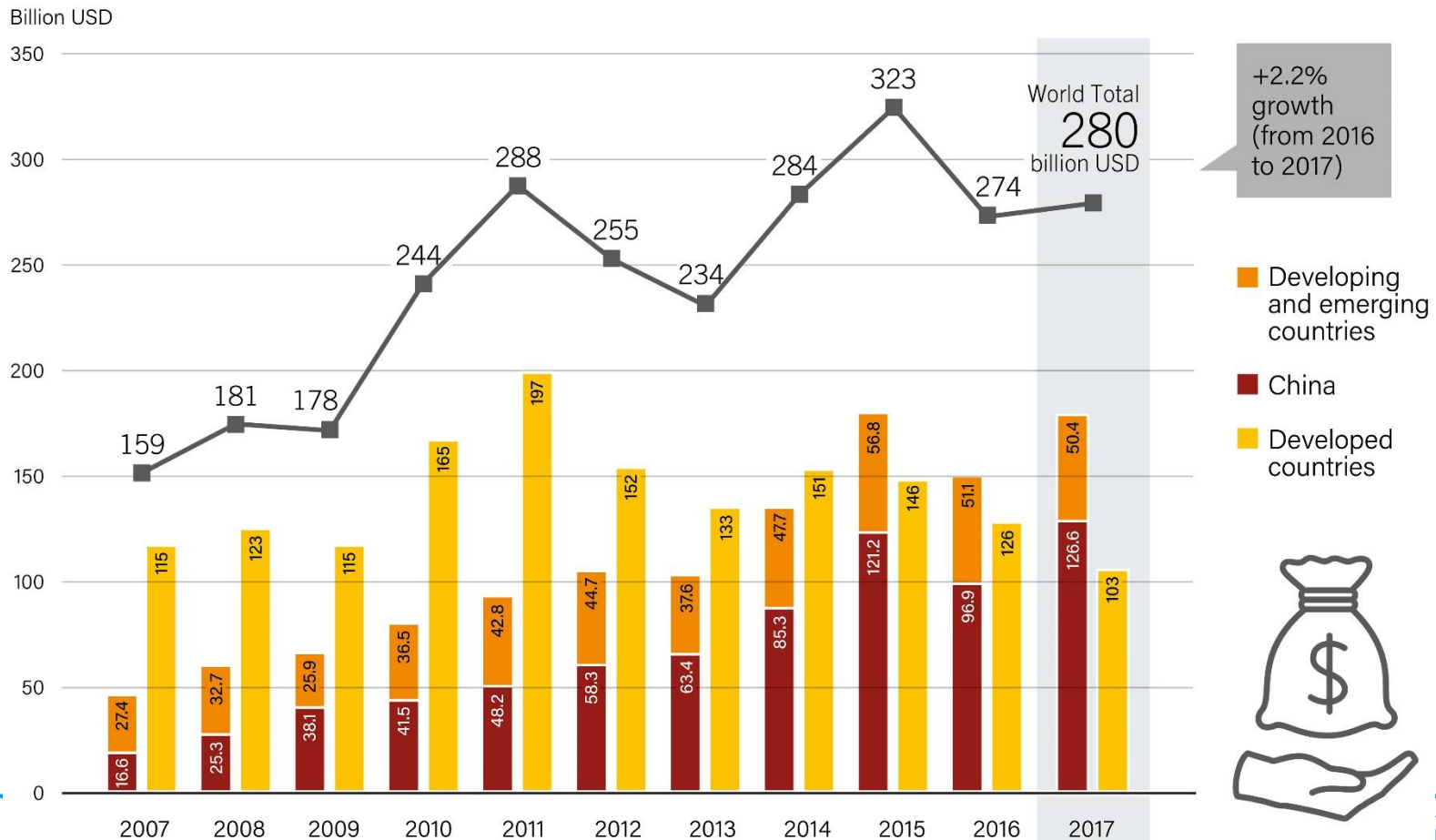


Source: REN21 Policy Database

Increasing private investment in SECTs

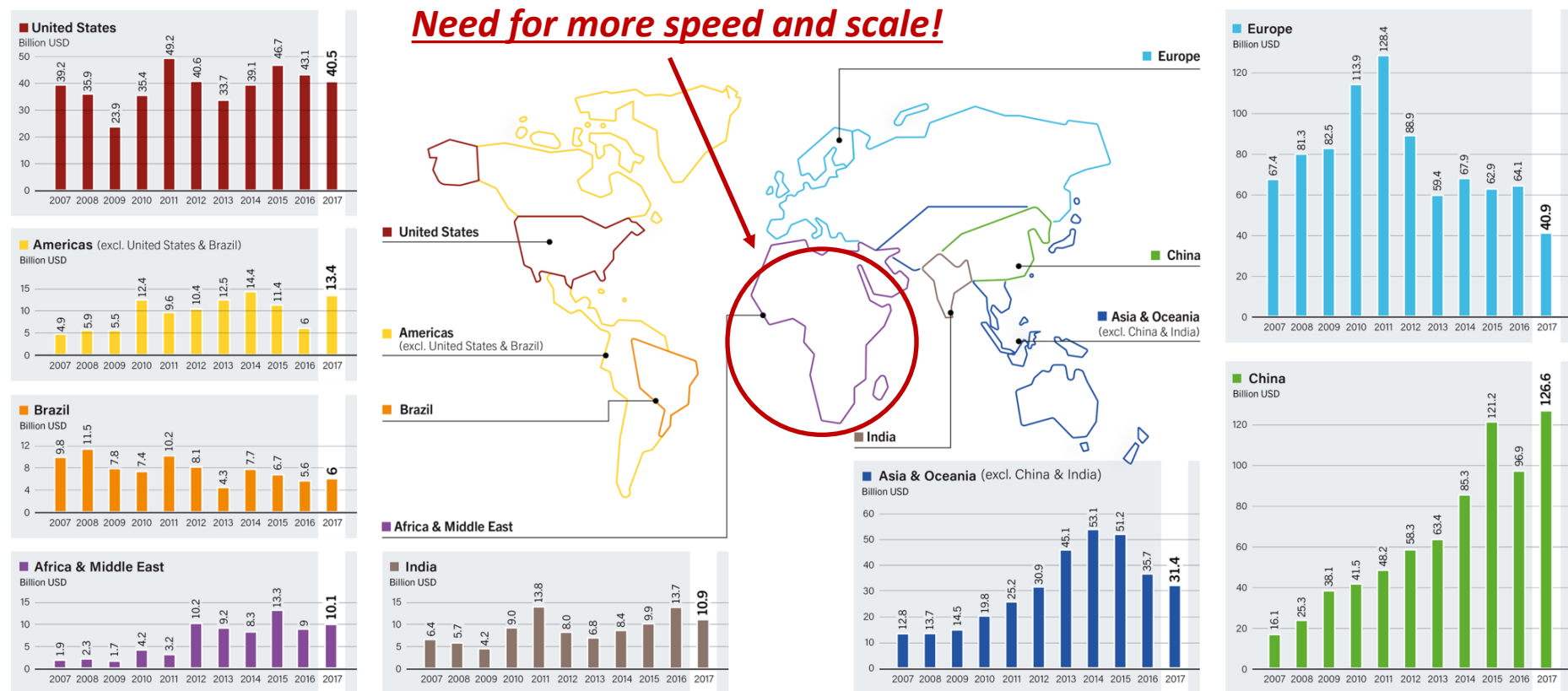
Need for more speed and scale! Required annual investment of USD 300 billion by 2020 and USD 500 billion by 2030 for climate change mitigation in developing countries.

Global New Investment in Renewable Power and Fuels in Developed, Emerging and Developing Countries, 2007-2017



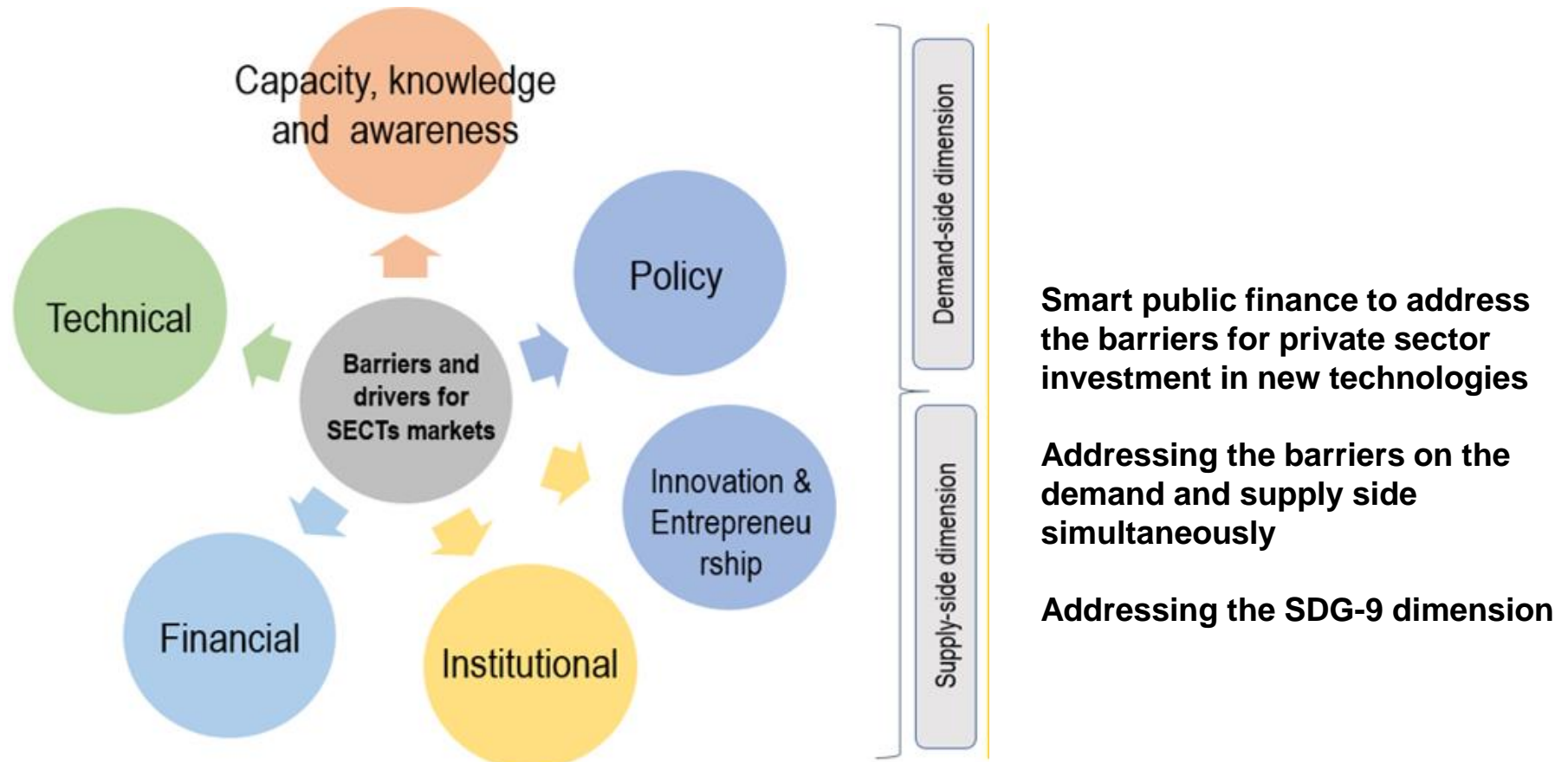
Mismatch between SDG-7 and investment flows

FIGURE 49. Global New Investment in Renewable Power and Fuels, by Country or Region, 2007-2017



Source: BNEF

Barriers for the uptake of integrated and inclusive sustainable energy technology markets and investments



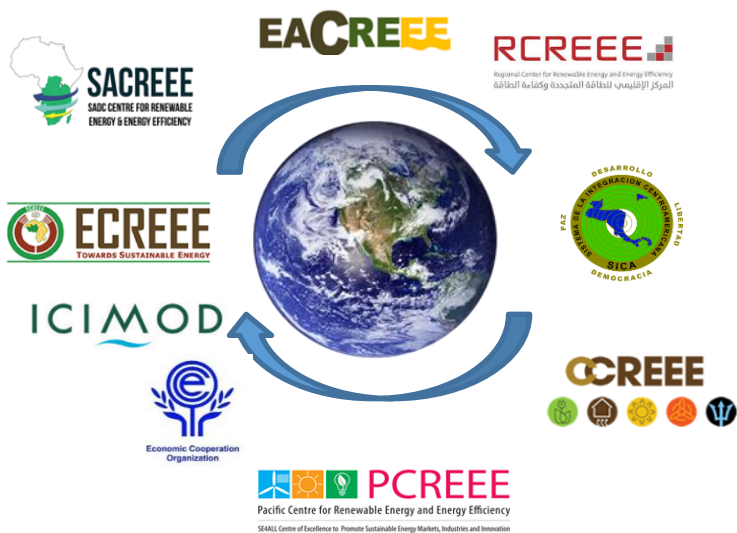
Benefits of regional energy and climate cooperation

- *Address barriers jointly at lower cost with shared resources and makerspace*
- *Economies of scale through common markets following joined standards*
- *Strengthen regional capacities to plan, coordinate, implement and monitor*
- *Promote equal progress between countries*
- *Ownership and priority-setting by the region for the region*
- *De-risking through joint standards/regulation*
- *Donor harmonization and coordination*
- *Enhanced inclusiveness through regional local content requirements, entrepreneurship and innovation support*
- *Enhanced execution capacities for int. climate agreements and funds*





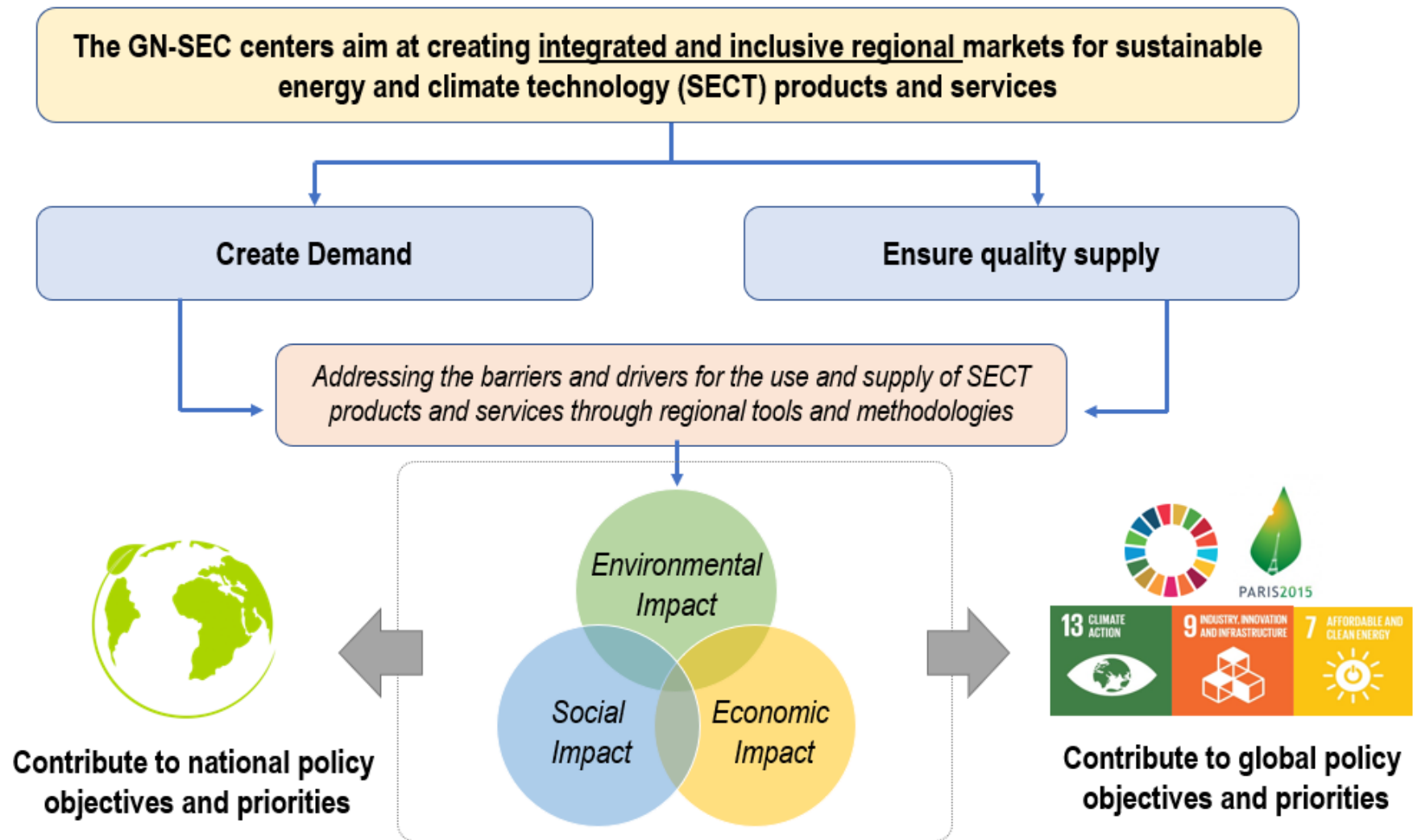
Regional hubs to accelerate the energy and climate transformation



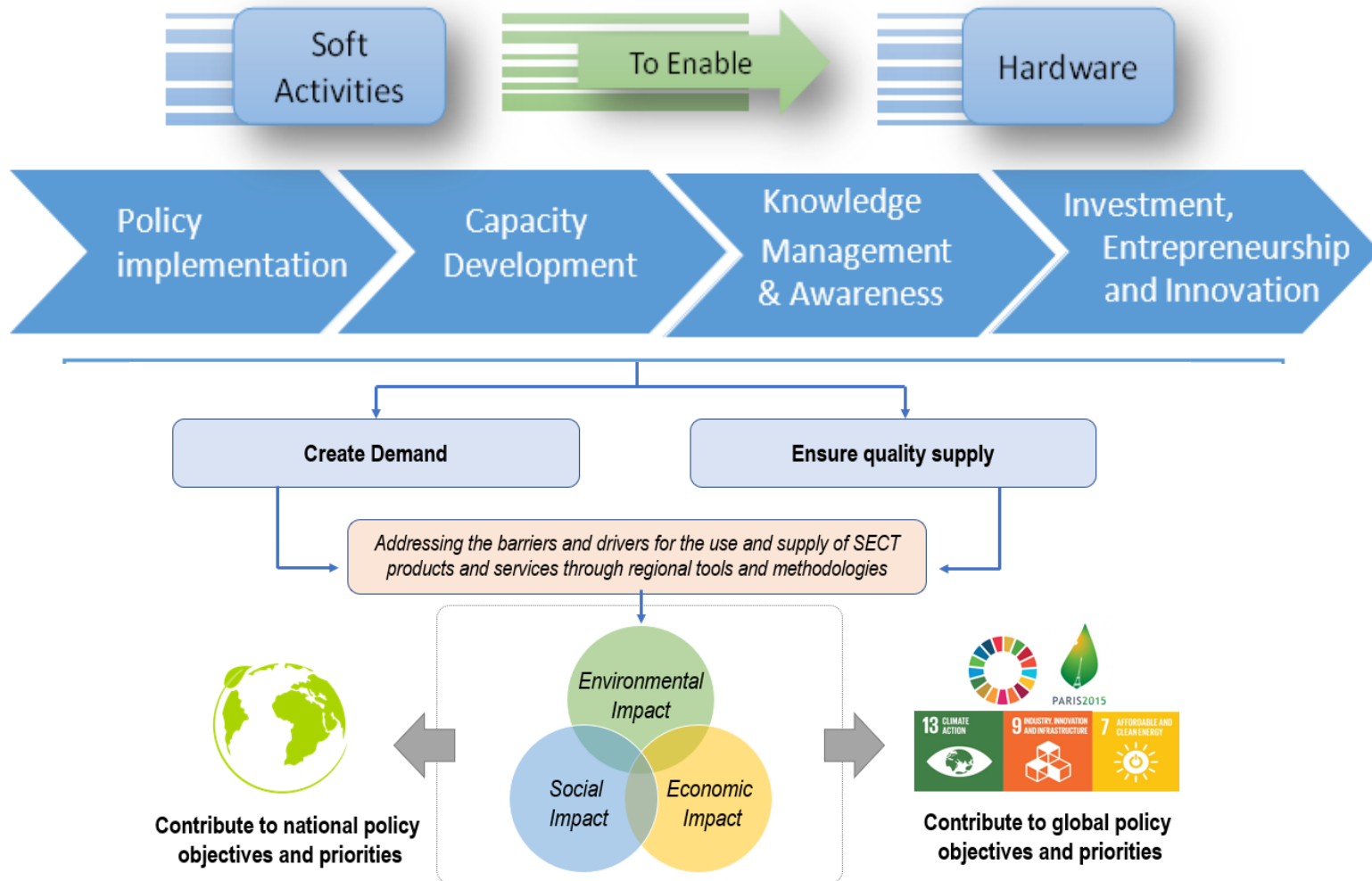
Adopted by more than 97 Ministers of Energy!

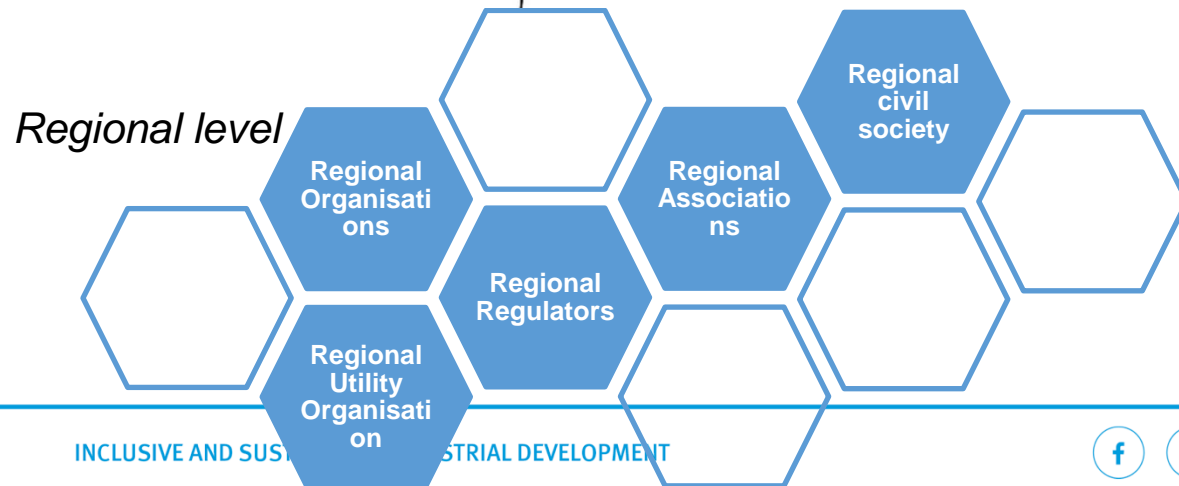
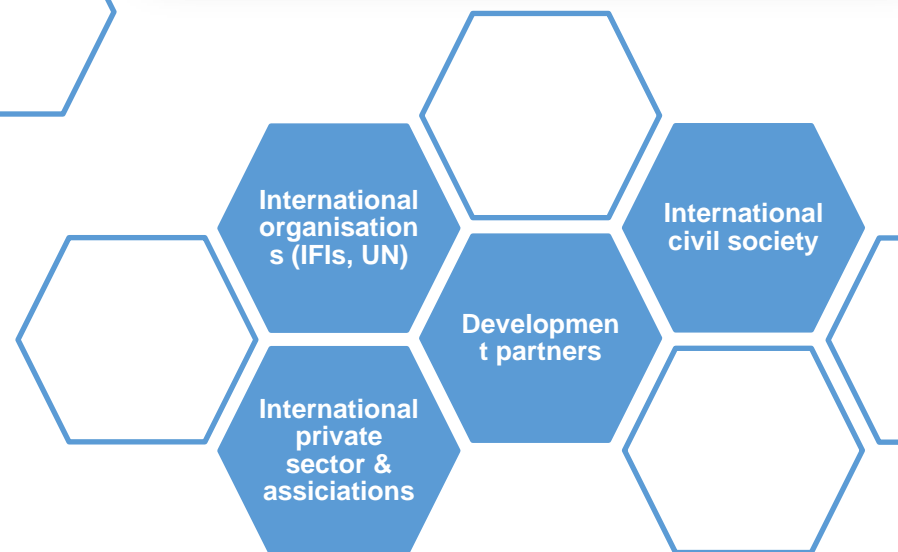
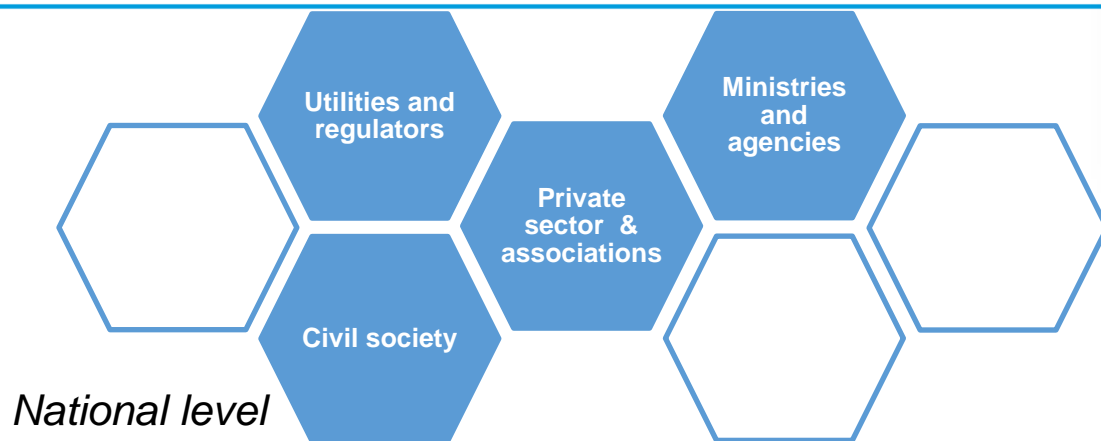
- Sub-Network Africa and Arab region
- Sub-Network for SIDS
- New centre in Central America
- New centre in Himalaya-Hindukush
- New centre with ECO in Central Asia





Focus on enabling activities and de-risking - Examples





Guiding GN-SEC Principles – A new deal for inclusiveness

- ☐ „No blueprints“ - tailored to the individual needs of the region
- ☐ Demand-driven and ownership
- ☐ High level of legitimacy and intergovernmental character
- ☐ Well embedded in the regional system
- ☐ Building on national and regional institutions (NFIs, THs)
- ☐ Complementary (e.g. power pools, development banks)
- ☐ Use of local processes / empowerment of local staff (decision-making)
- ☐ „Small is beautiful“ and „form follows function“
- ☐ Institutional check and balances
- ☐ Financial sustainability through high leverage and partnerships
- ☐ Part of a global program





UNIDO's support model is implemented in three phases:

Preparatory Phase

Consultative needs assessment undertaken

A project document on the technical and institutional design developed

Consultative and validation workshops organized

Initial funding for the first operational phase mobilized

Approval of the project document and establishment of the Centre by Energy Ministers

1st Operational Phase

Selection of a host country/ organization

Selection of the Director and recruitment of local and international quality staff

Establishment of the Centre's Secretariat, its institutional structure and internal proceedings (staffing, finance, accounting, procurement)

Organization of the governing meetings and establishment of the National Focal Institutions (NFIs)

Development of a long-term Business Plan

Development and the start of implementation of RE&EE flagship programs and projects

Continued fundraising

Preparing for independent work without UNIDO's institution-building support

2nd Operational Phase

Further consolidation of the institutional structures and expansion of technical program portfolio based on an external evaluation

The Centre starts to implement major donor-funded RE&EE programs and projects

Partnership with UNIDO transforms into a partnership for project execution

If necessary, UNIDO continues to provide limited capacity-strengthening support to the Centre





The sun never goes down in the GN-SEC: South-South Cooperation Platform established!

The screenshot shows a web browser window with the URL <https://www.se4allnetwork.org/>. The browser's address bar and search bar are visible. The website's header includes the UNIDO logo and navigation links: The Network, News & Events, Media, Job Opportunities, Procurements, Publications, and Contact. The main content area features a world map with a network of lines connecting various regions. Overlaid on the map is a semi-transparent box containing the GN-SEC logo and the text "Global Network Regional Sustainable Energy Centres". Below this, a quote reads: "Think globally, act regionally, implement locally!". At the bottom of the page, there are five blue boxes representing different regional centres: CCREEE (Caribbean Centre for Renewable Energy & Energy Efficiency), EACREEE (East African Centre for Renewable Energy & Energy Efficiency), ECREEE (ECOWAS Centre for Renewable Energy & Energy Efficiency), PCREEE (Pacific Centre for Renewable Energy & Energy Efficiency), and RCREEE (Regional Centre for Renewable Energy & Energy Efficiency).

GN-SEC Global Network Regional Sustainable Energy Centres

"Think globally, act regionally, implement locally!"

CCREEE
CARIBBEAN CENTRE FOR
RENEWABLE ENERGY & ENERGY EFFICIENCY

EACREEE
EAST AFRICAN CENTRE FOR
RENEWABLE ENERGY & ENERGY EFFICIENCY

ECREEE
ECOWAS CENTRE FOR
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PCREEE
PACIFIC CENTRE FOR
RENEWABLE ENERGY & ENERGY EFFICIENCY

RCREEE
REGIONAL CENTRE FOR
RENEWABLE ENERGY & ENERGY EFFICIENCY

Sponsorship Guide: Become a Member

I. STRATEGIC PARTNER OF THE NETWORK – Level of contribution:

Stakeholder Type	Bi-annual Contribution
<ul style="list-style-type: none"> - Bilateral Donors - International Funding Facilities (GEF, GCF) - Strategic Donors 	> USD 1M\$

II. MEMBER OF THE NETWORK – Levels of contribution:

Stakeholder Type	Criteria	Bi-annual Contribution
Universities, NGOs		\$50,000
Industry / Private sector / Foundations	A) Companies generating > \$1 billion in annual revenue	\$200,000
	B) Companies generating from \$100 million to \$1 billion in annual revenue	\$150,000
	C) Companies generating < \$100 million in annual revenue	\$100,000
Energy associations and business councils		\$10,000



REGIONAL COOPERATION INNOVATIONS



Solomone Fifita, PCREEE



SUPPORTING ENERGY REGULATORS



2MW *Matatua* Solar Farm - Tonga



1.1MW Coca Cola Rooftop Solar Panels

- Joint workshop with Caribbean in 2014



ENERGY EFFICIENCY IN LAND TRANSPORT



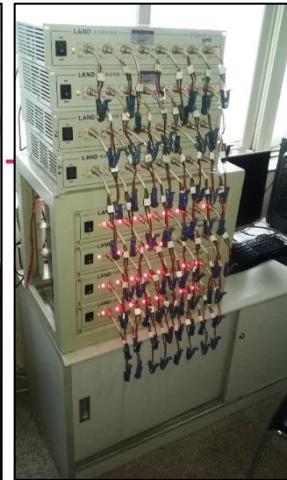
Electric bus



Solar Tuk Tuk



BATTERY STORAGE SYSTEM



- Increase interest in Battery storage system
- Ongoing research in terms of comparing Lithium ion based batteries and Zinc bromine flow batteries
- Samoa: First in the Pacific to install battery storage system

BIOGAS THROUGH A CIRCULAR ECONOMY STRATEGY



A Tonga-PCREEE tour of a biogas plant in Germany

A riSk facility

- Power utilities and small island economies are risky
- Investor confidence is low
- Facility enhances opportunities for private sector investment





Welcome to the GN-SEC makerspace!

Where the day has more than 24 hours!

