

Access to Energy- A Power Sector Perspective

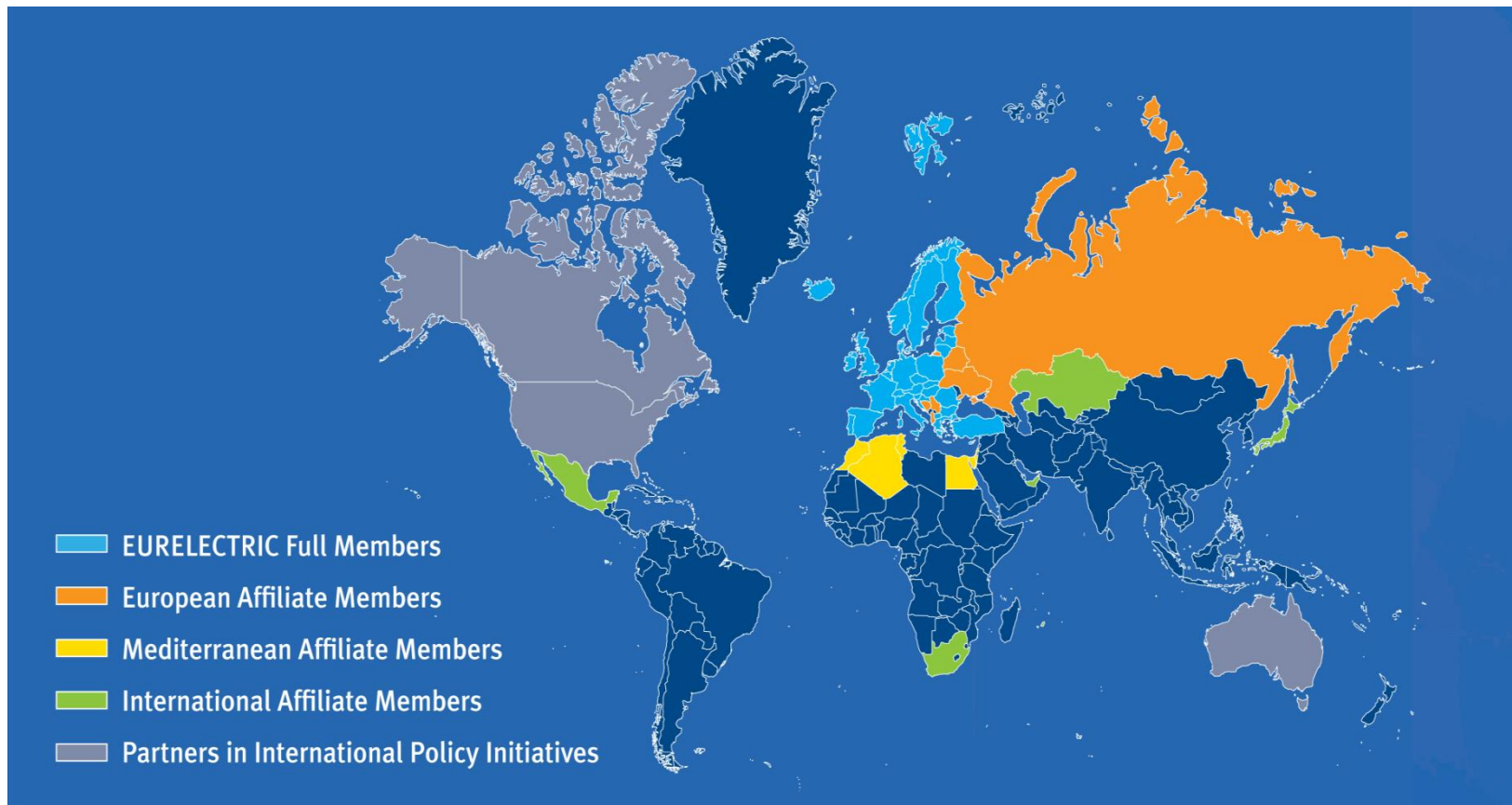
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EURELECTRIC – a pan European and Internationally Oriented Association



EURELECTRIC CHARTER - Universal access to energy by 2030 – the European power industry's commitment

1. Responsibility of the electricity industry to society
2. Develop win-win for industry, local business and local communities through responsible business
3. Demonstrating and sharing best practice
4. A European interface for the European Commission and international institutions



To Leverage the huge financial volumes
needed to achieve energy access for all by
2030

A shared commitment for a sustainable energy transition—the EU electricity market has built up quite some experience

UN High-level objectives by 2030:

Ensuring universal access to modern energy services

Double the rate of improvement in energy efficiency

Double the share of RES in the energy mix

Examples (next slides):

- Enel “Enabling electricity”
- GDF Suez “Rassembleurs d’Energies”, “Energy Assistance Associations”
- EDF dam in Laos
- EDP “Kakuma project”

Note: these examples are mainly CSR oriented, however industry has also kick started business projects creating a win win for our industry, local industries population

In the EU:

- Target of 20% reduction in primary energy use by 2020
- (Should be) driven by market instruments (ETS)
- Reliable networks

In the EU:

- Target of 20% share of RES in final energy consumption by 2020
- EU-28 RES Electricity generation in 2012: 23% of total
- Industry is an important investor and has a key role in the economic recovery

With the appropriate conditions the growth model can be adapted and replicated worldwide – innovation as catalyzer

For example, from investing in RES to developing new retail energy services

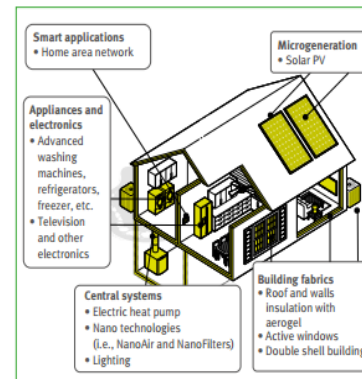
The cost of key RES technologies is expected to decrease by as much as 60% to 2020: huge cost reduction (competitiveness) potential

EUR/MWh¹

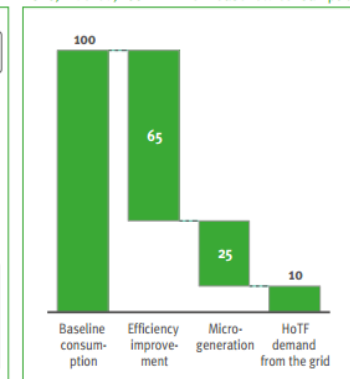


¹ Cost refers to the levelised cost of energy attainable using leading technology in favourable conditions. Assumptions include (2011, 2020): Onshore wind capex in EUR/kW (1188, 1108), load factor (36%, 39%), WACC 9%; Offshore wind capex in EUR/kW (3772, 2830), load factor (51%, 54%), WACC 10%; Solar PV capex in EUR/kW (2162, 927), load factor (16%, 16%), WACC 7%

The home of the future: example of a new single house



Decrease in energy needed from the grid by the HoT 2020, indexed, 100 = kWh of household consumption



Engagement in developing countries already a fact today - examples of international projects

GDF SUEZ “Rassembleurs d’Energies”

- Support social entrepreneurs (energy access and energy scarcity)
- Specific social solidarity investment Fund
- Donations via the “Energy for all” program (GDF SUEZ Foundation)
- Technical assistance



NOTE that GDF SUEZ has developed/is developing business projects in developing countries - e.g. Africa, Asia & Latin America-. These projects aim at creating value for both the company and the local industries and populations

ENEL “Enabling electricity”

- Guarantee Technological and Infrastructural Accessibility
- Abate economic barriers
- Foster capacity building to those most in need



Beyond CSR, towards business: Future sustained growth depends on removing the perceived barriers for investment...

Physical and geographical barriers

- Infrastructure (absence) – Energy demand (low)
- Capacity and training level insufficient
- Lack of local experts
- Long Construction time

Political and regulatory uncertainty

- Legal frameworks to ease/protect private (+ foreign investments)
- Lack of or weak Regulator
- Lack of transparency (information, authorization, returns ..)

Financial barriers

- Huge infrastructure financing needs
- No robust Internal financing/Payment Risk
- Development of an adequate business case

(Internal) Mind set

- The prevailing notion to think in terms of CSR instead of viable business models

... by putting the right technical, financial and regulatory framework in place

Technical

- Providing local communities (and local utility officers) with training programs that building capacities in the country for long term success
- Provide support in technology ÷ knowledge sharing

Financial

- Coverage of extra-ordinary risks (foreign exchange rate, debtor's default,...)
- Financing mechanisms for which private sector & foreign investors are directly eligible partners (e.g. concessional financing)

Regulatory

- Relation with public authorities
- Adequate tariffs for power generation
- Ease of permitting process
- Simplify the land registration process
- Customer protection

Public, private partners and also civil society to team up in ensuring the long term investment success

Public sector:

**Improve the legal framework for investments
(financial, political, administrative);**

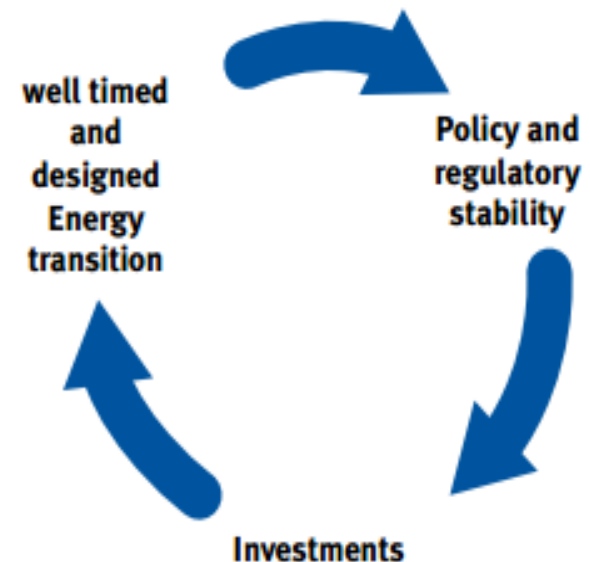


Private sector:

**develop sustainable business strategy
together with policy makers**

Plus experience and know how of NGOs

**BUT: focus on sustainable business models,
NOT on Charity!**



EURELECTRIC supports the EU in granting access to 500 million people by 2030

EURELECTRIC & dedicated members support the initiative. We welcome the ElectriFI proposal and the energy agreements between EU and five countries in Africa

We would further welcome if

1. DG DEVCO would elaborate a roadmap for achieving the 2030 target, based on the EU-Africa energy partnership, and including steps, instruments, and roles for each stakeholder, as well as priority actions.
2. an A2E marketplace was set up on the DG DEVCO website, as to grant access to information, project opportunities, and link up stakeholders.
3. ElectriFI, discussed to be later today, would be 'userfriendly', and include, in its advisory Board, a representative from EURELECTRIC as for assessing the suitability of the proposed strategy, from a private sector point of view.