

Innovation at IBERDROLA



GENERATION

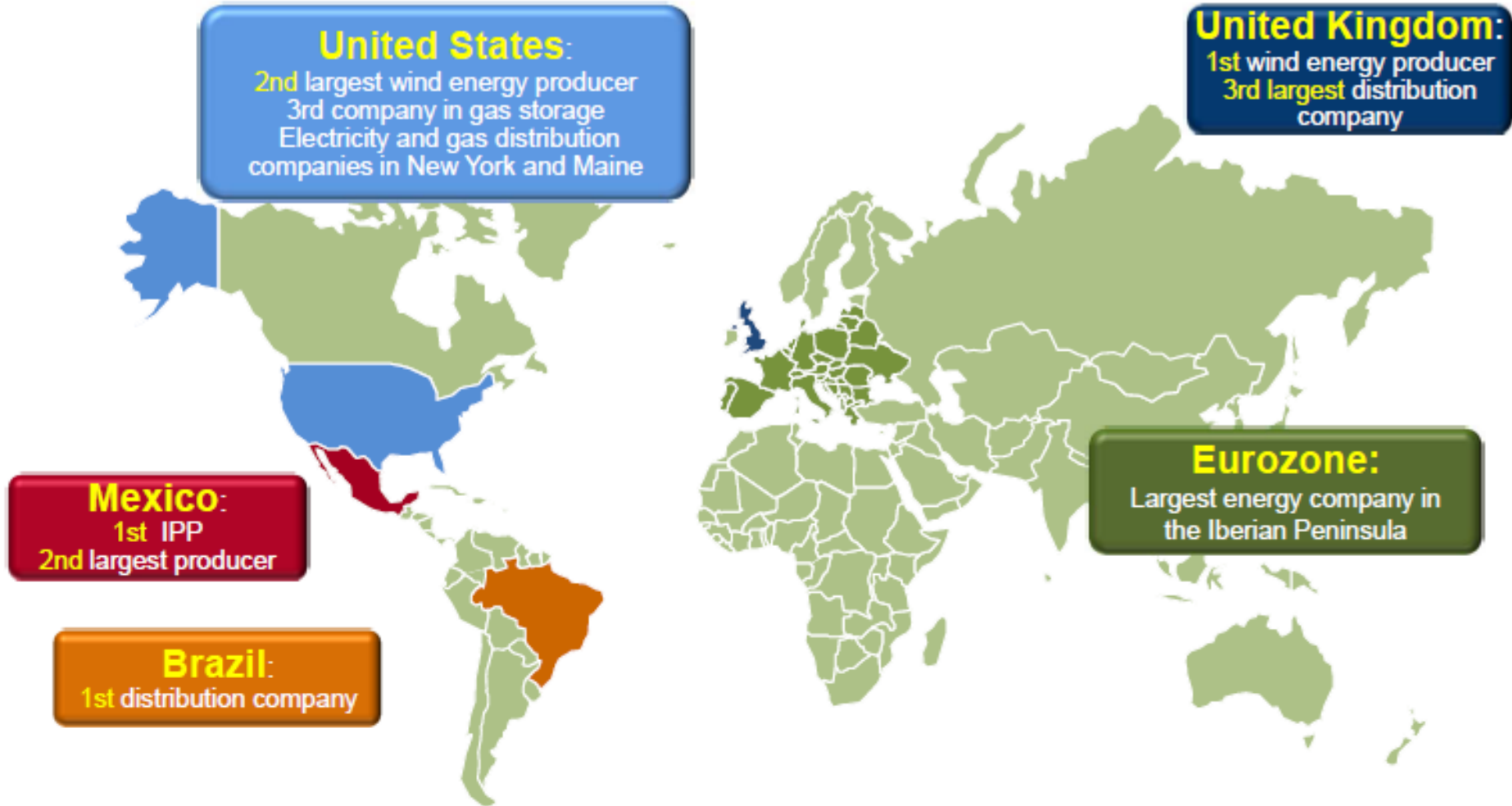


DISTRIBUTION



RENEWABLES





Iberdrola offers a mature product, which is electricity...

KWh is a commodity



The difference is not in the product

Values : → Sustainability, Greenness.....

Business Model → Renewable company, Mix of production..

Vertical Integration → Our own engineering...

Added Services → Quality, maintenance,...

Innovation drives Efficiency

Environment is a key competitive factor

We earn more if we are able to produce/distribute/sell more at a lower cost

New IBERDROLA Innovation Plan for 2012-2014

Best in Class : R&D management

- Maintaining leadership in Innovation Management
- Consolidation of the international organisation and management model (open and decentralized)

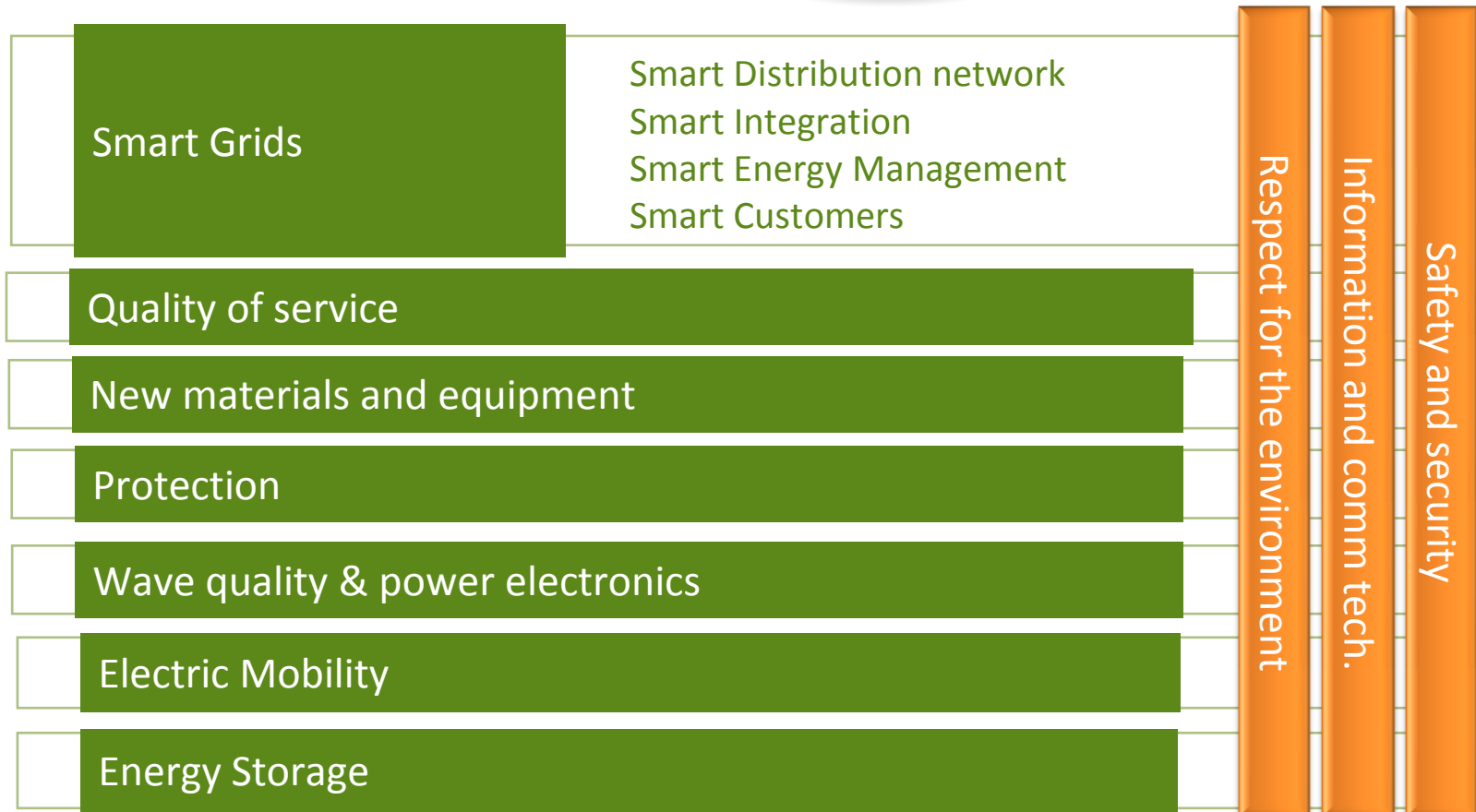
Iberdrola to achieve a top level position for energy technologies

- Creating value across business units through the development of R&D&i projects in key technology areas
- Consolidation of PERSEO- Corporate venture capital programme
- Establishment of a technology center in Qatar

Annual investment of 130-150MM€ - 450 MM€ in the period 2012-2014

Funding from the European Investment Bank (200MM€)

Electrical Networks for the future



Generation and retail



O&M Excellence	Materials Operation and maintenance Security and safety	Respect for the environment	Information and comm tech.	Safety and security
Low emission & environmental technologies	Emissions control Respect for the environment			
Retail & Energy Management	Energy Management Energy selling process Energy Efficiency			
Electric Mobility				

Renewable energy sources



O&M Excellence

Grid integration
Energy generation forecast
O/M efficiency improvement

New renewable technologies

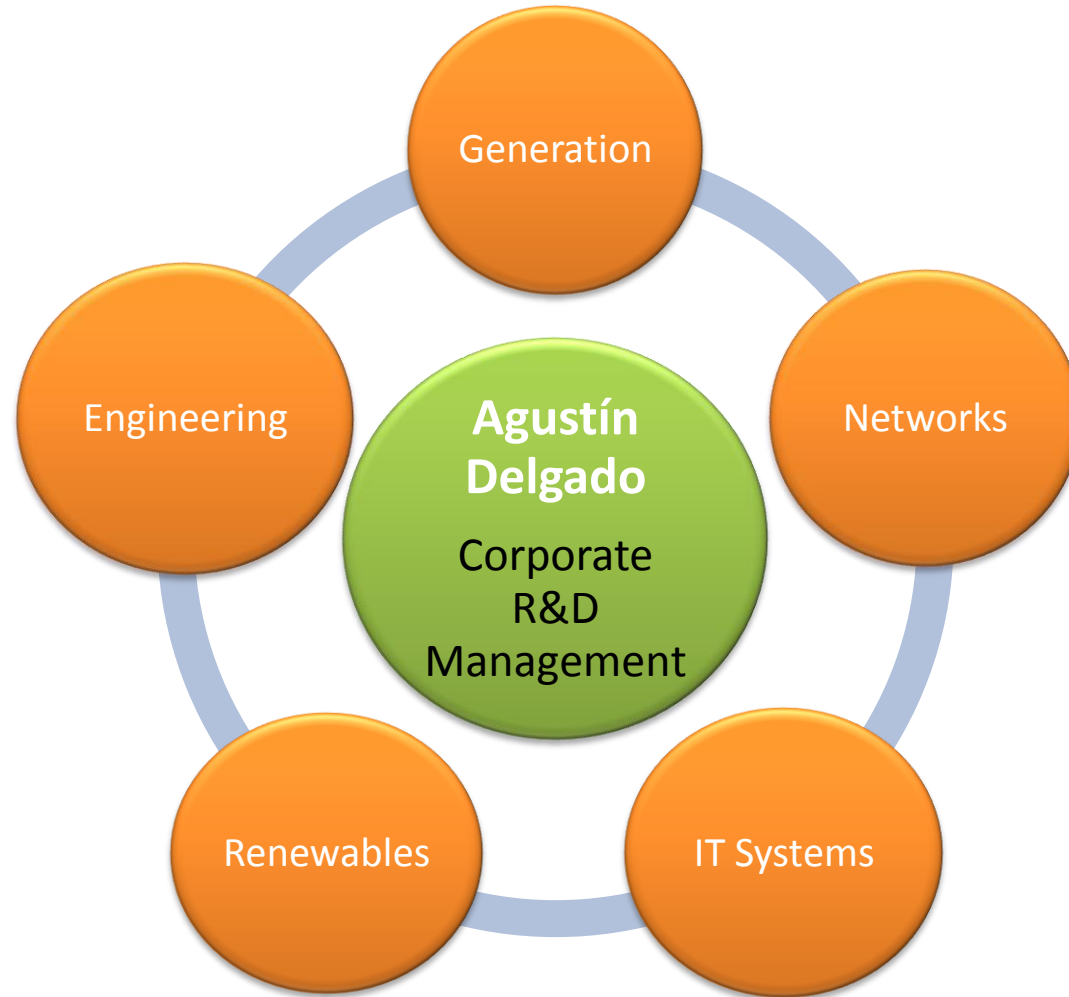
Offshore Wind energy
Solar energy
Marine energy
Biomass and other sources

Energy Storage

Respect for the environment

Information and comm tech.

Safety and security

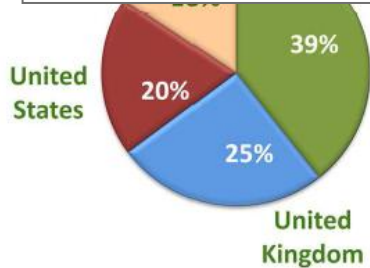




Renewable Energy Business

**Liberalized Business
(Power Generation, Energy Management, Retail)**

**Regulated Business
(Electricity & Gas Transmission & Distribution)**



SPAIN & INTERNATIONAL

UK & OFFSHORE

USA

CONTINENTAL EUROPE



MEXICO

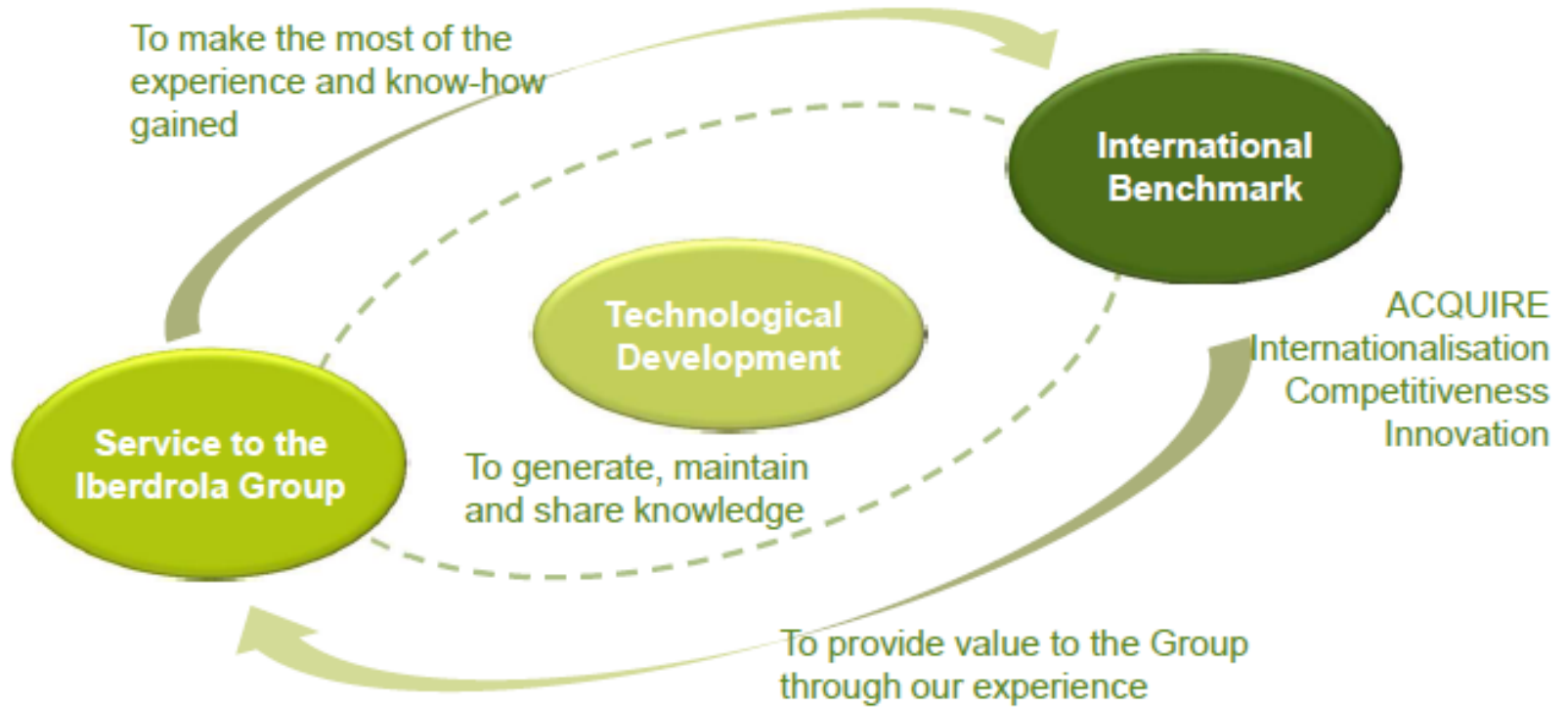
TRADING

SPAIN

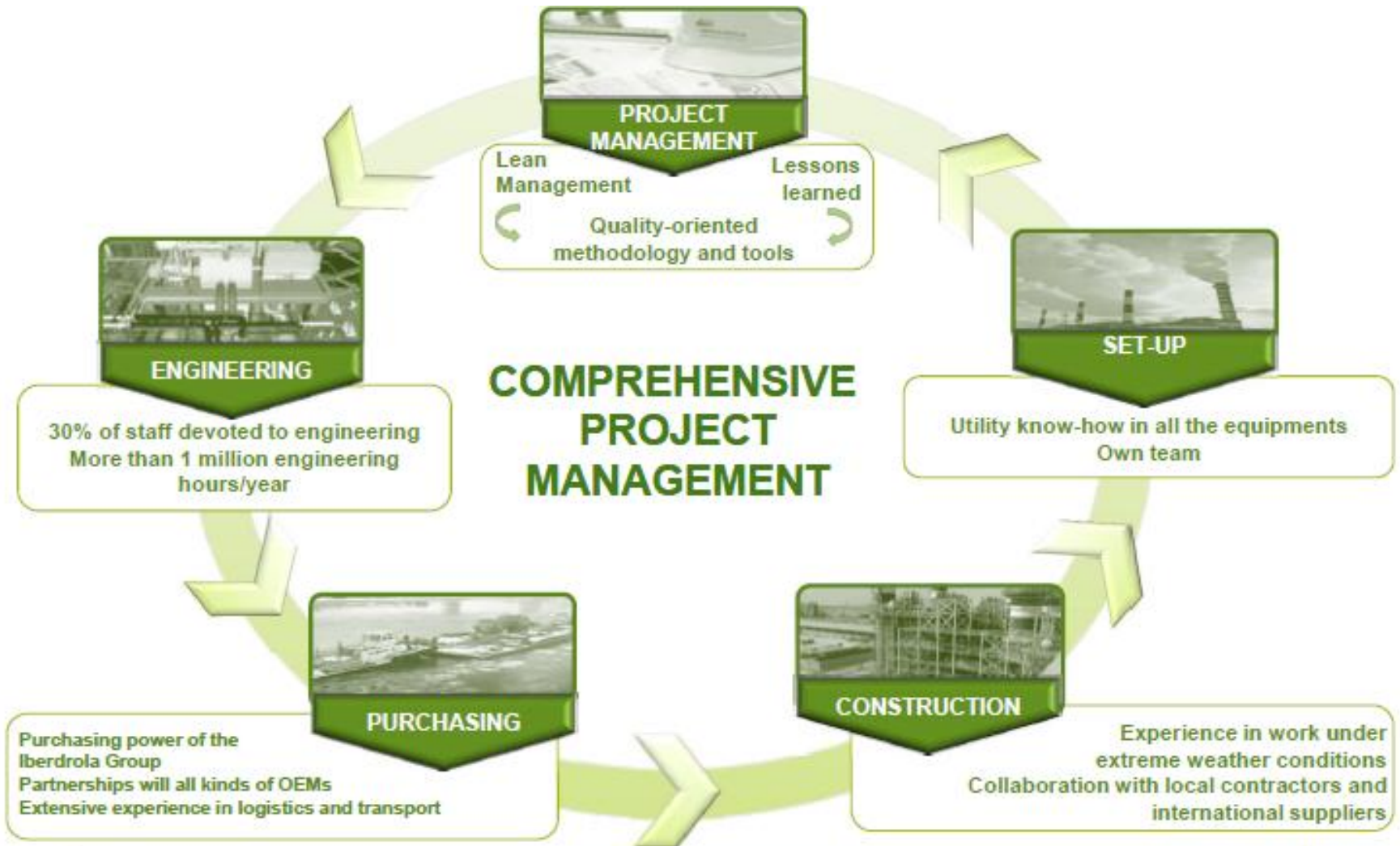
SP NETWORKS



ELEKTRO
BRASIL



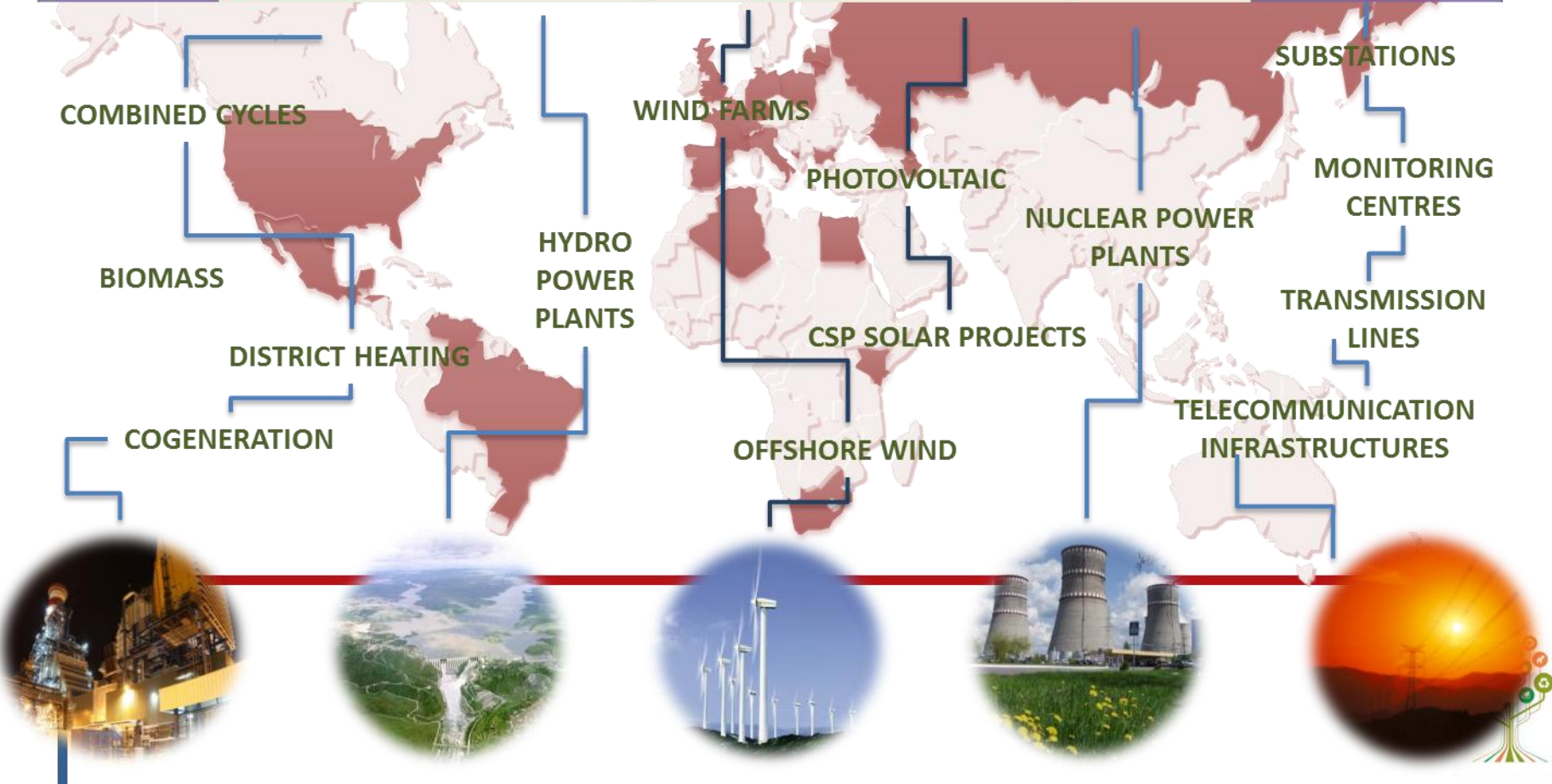
IBERDROLA benefits from our international activity and our customers have available the experience and technology of a leading utility



The scope of our activities includes from the execution of basic studies to the construction of turnkey projects

IBERDROLA Engineering & Construction

	THERMAL	HYDRO	WIND	SOLAR	NUCLEAR	T&D
Iberdrola	11,808	11,596	3,372	54	6 NPP	Full Support
Third Parties	5,285	469	1,789	97 (PV)	18 NPP	+27 Projects
	17,222 MW	12,065 MW	5,160 MW	151 MW	24 NPP	



Committed to the technological challenges of the future

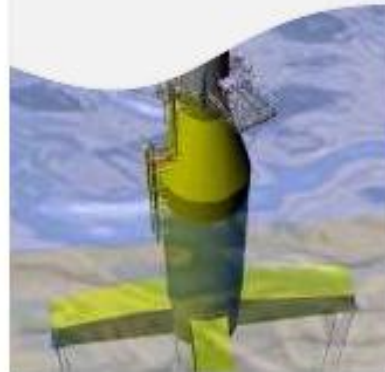
Current and future networks

- Smart grids
- HVDC



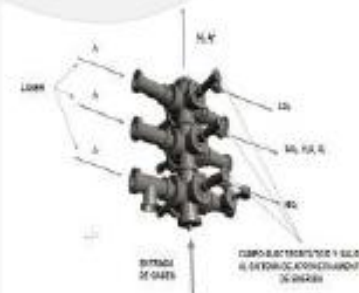
Renewable energy technologies

- Offshore
- Marine energy
- Solar



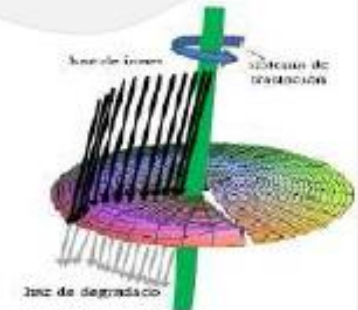
Clean energy generation

- Energy efficiency
- Emission control
- Biomass



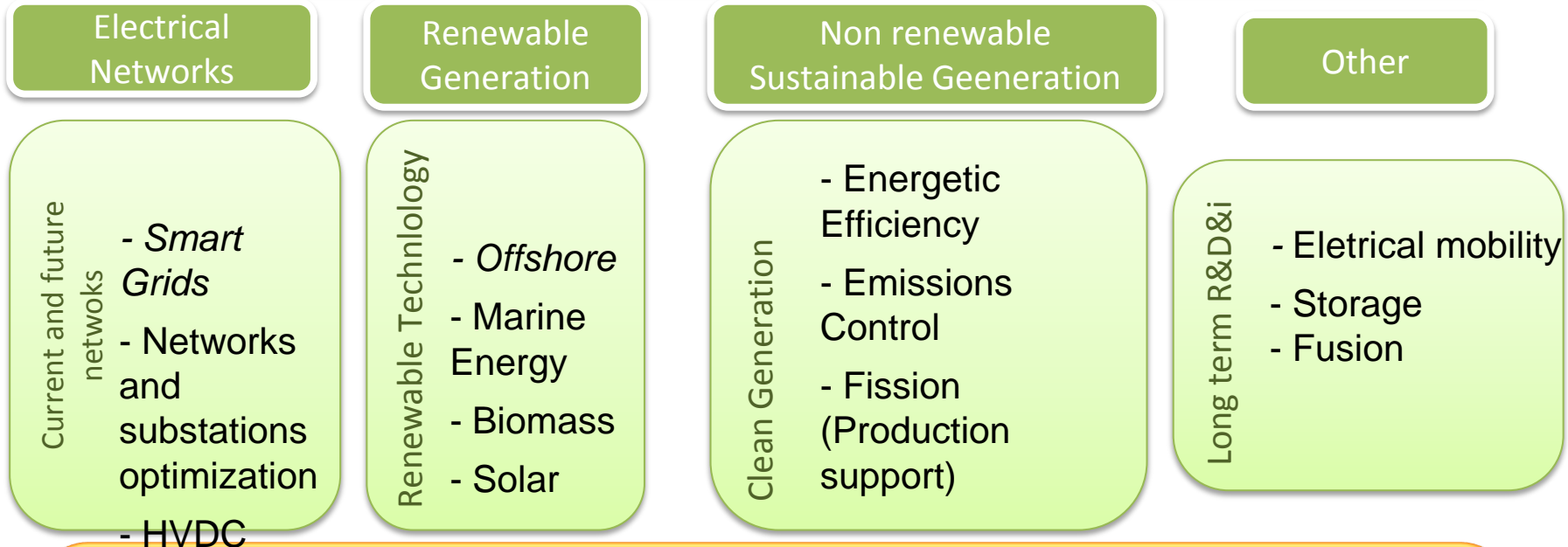
Long-term R&D

- Energy storage
- Fusion
- Electric mobility



Investments of 12.5 million euros en R&D&i in 2013

Committed to Group's technological challenges...



...while watching over the competitiveness and efficiency of our business

Methodologies, process and tools innovation

Ongoing training for a better service to the Group

Long term business exploration

R&D

Strategic areas are classified in action lines depending on their time horizon

Inmediate

Efficiency Improvement
Projects

Aimed to operational costs reduction by the development of tools and methodologies for resources optimization

Short term

Technological Innovation Projects

Technological Development

Technological skills development in business areas

Medium term

Diversification

Long term

Disruptive Innovation
Projects

New skills development to anticipate the requirements for future business sustainability

Actions in each area will be materialized in projects

Internal: financed by own funds with expected ROI

Financed: by funds from R&D&i supporting programmes

Innovation at IBERDROLA

Thank you for your attention!!!

