



GDF SUEZ Energy Latin America

Funding Climate Action - Thursday, 4 December

GDF SUEZ ENERGY LATIN AMERICA
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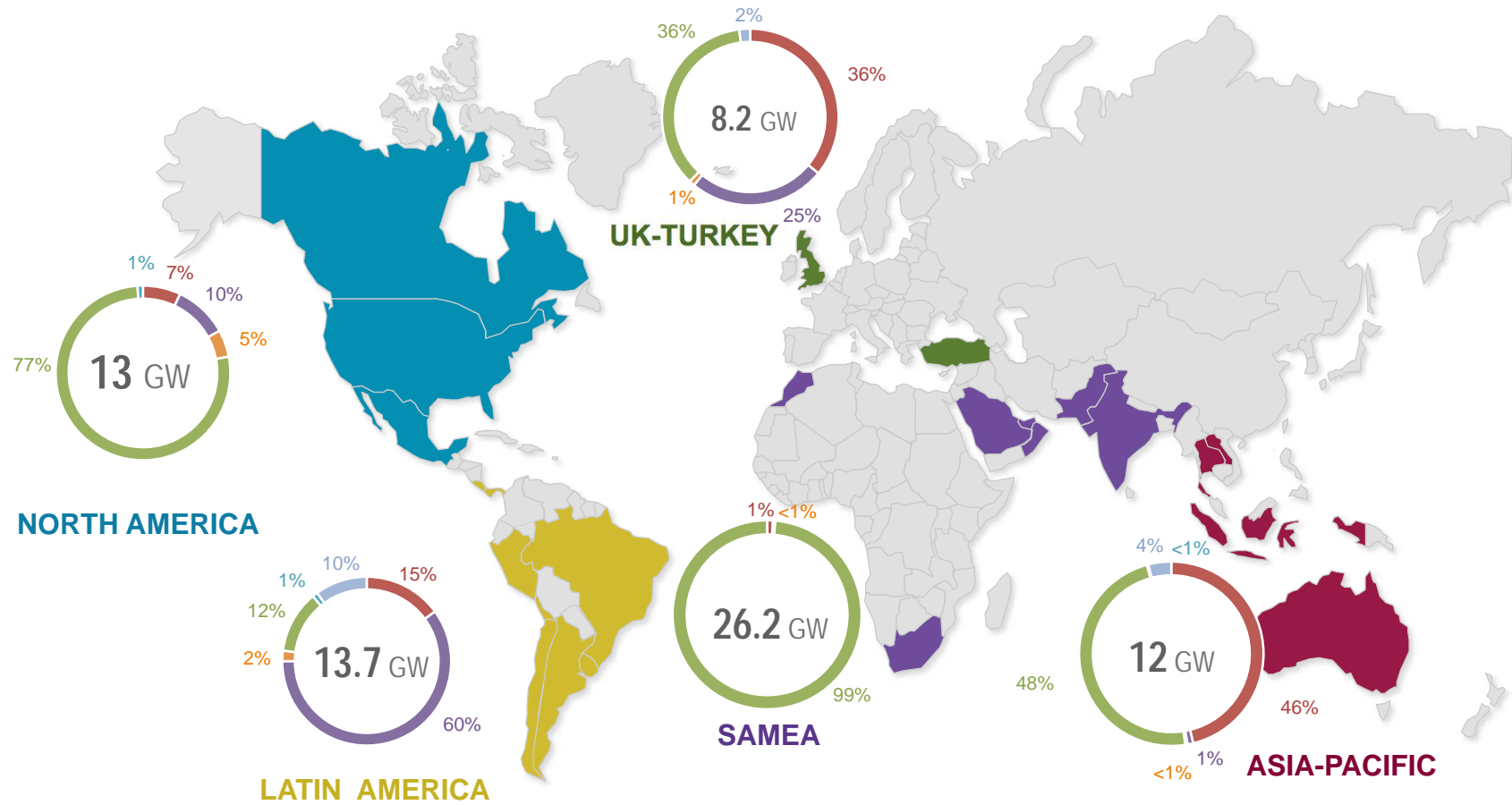
BY PEOPLE FOR PEOPLE

GDF SUEZ supports World Bank & Global Compact in advocating for a global carbon price

- Carbon Pricing is the tool of choice for effective & cost-efficient global mitigation at scale.
- Smart combination of policies allows addressing country specific development needs.
- Developing countries must focus on social inclusion, efficiency and clean expansion.
- Global cooperation is key to ensure preventive mitigation and avoid high costs today and in future.
- Smart policy design attracts investment, ensures recognition of early action and efficient risk management.
- Building on existing mechanisms must ensure smooth evolution towards a global market.



GDF SUEZ Energy International's presence



- Coal
- Natural gas
- Hydro
- Other renewable
- Wind
- Other non-renewable

Ownership capacity at 100% as at 30/06/2014
 Note: Total Gross capacity (100%): 73.2 GW; Total Net Ownership capacity: 37.7 GW

GDF SUEZ Energy Latin America



- Operational asset
- Under construction
- Multiple plants and technologies
- Office
- ▾ LNG regasification terminal
- ▾ Gas distribution
- ▬ Gas pipeline
- Power transmission network

- GDF SUEZ Energy Latin America provides energy solutions in Argentina, Brazil, Chile, Peru and Uruguay, supporting this emerging continent in its economic growth.
- Our operational companies have a strong national identity and benefit from regional support and coordination.
- Two thirds of our portfolio is renewable and we have a strong track record with the implementation of non conventional renewable energies such as wind, biomass and solar generation.

BRAZIL
Tractebel Energia
 GDF SUEZ
 Energia Sustentável do Brasil

Chile
E·CL
 Energía Eléctrica
 GDF SUEZ
 ELÉCTRICA MONTE REDONDO
 GDF SUEZ

Colombia
 Business Development Office
 GDF SUEZ

Peru
EnerSur
 GDF SUEZ
TgP Transportadora de Gas del Perú

Argentina
Litoral Gas
ENERGY CONSULTING SERVICES

Uruguay
GNLS

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⁽¹⁾ Figures as at 30 June 2014

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Transformational Infrastructure Investments

Transmission lines, large HPP & Gas Infrastructure are key for clean & climate resilient growth.

Universal use of NCRE

Maximizing use of NCREs today minimizes structural lock-in with GHG intensive infrastructure.

Energy Efficiency

Improving efficiency ensures economic competitiveness & resource conservation.

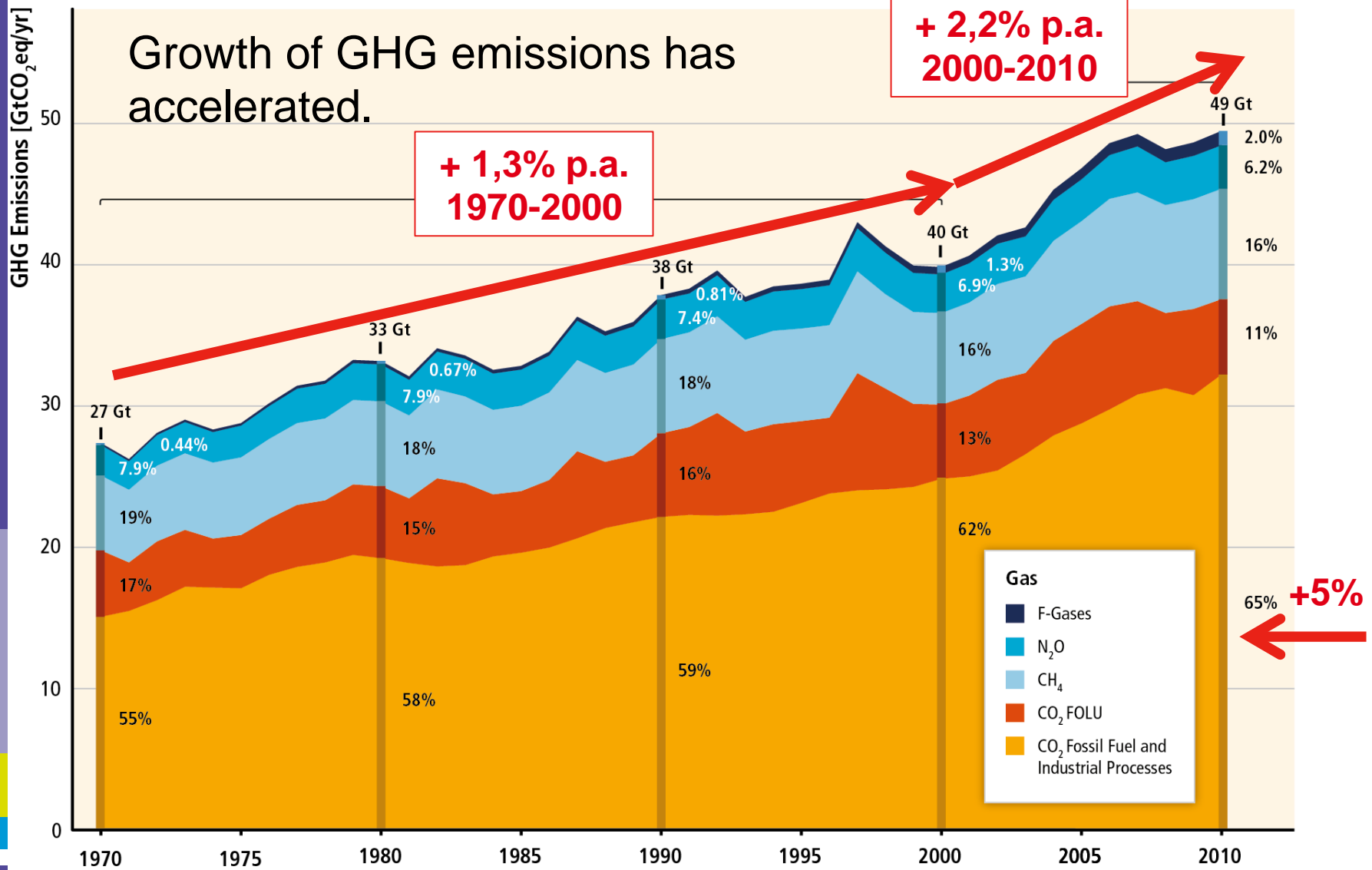
R&D for Innovation

Ideas of today need to be developed as solutions for tomorrow.

Environmental Projects

Environment Conservation is the fundament for adaptation and sustainable development.

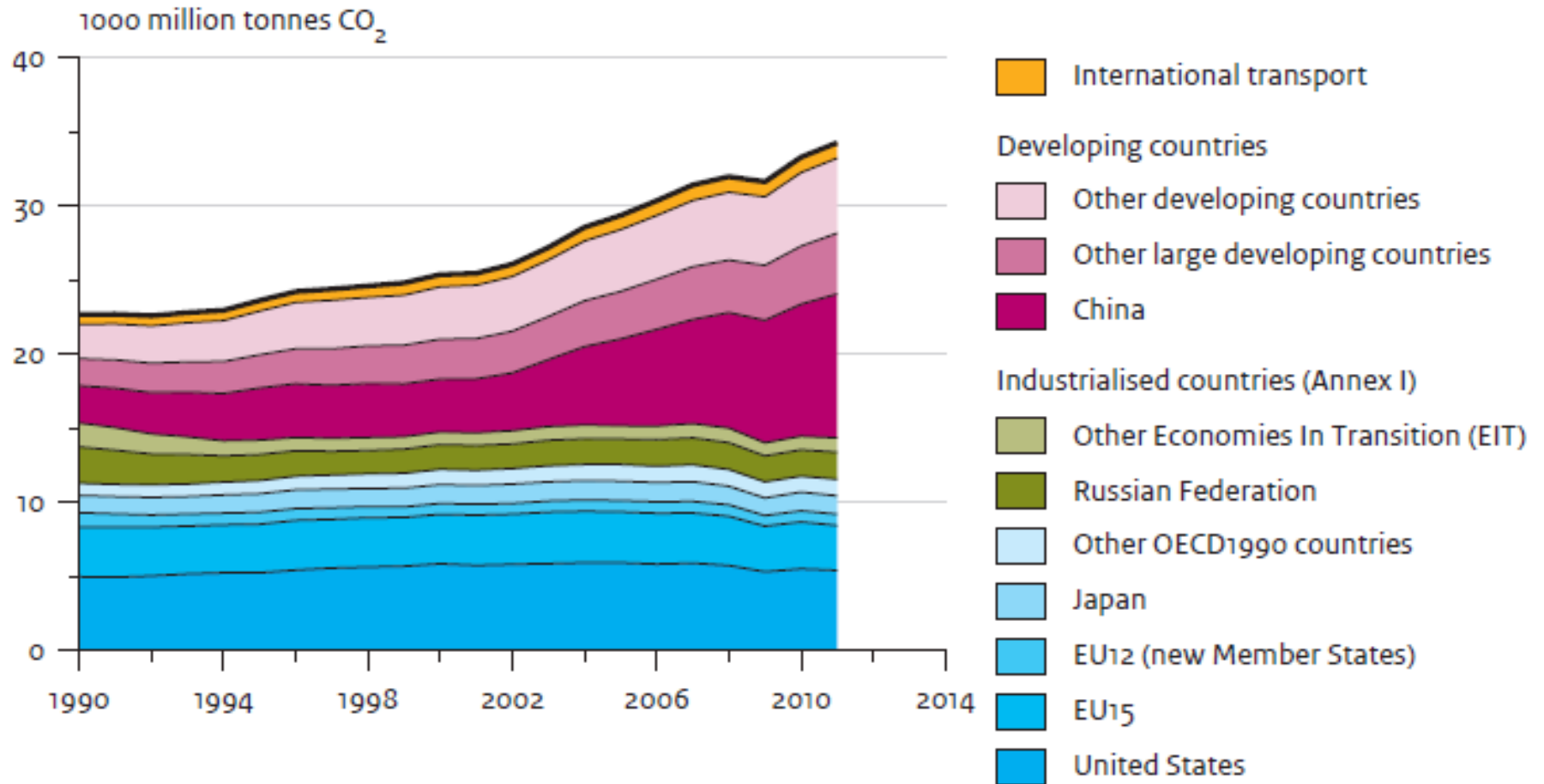
Global climate policy failed by (m)any means



Source: IPCC 5th assessment report – WG III

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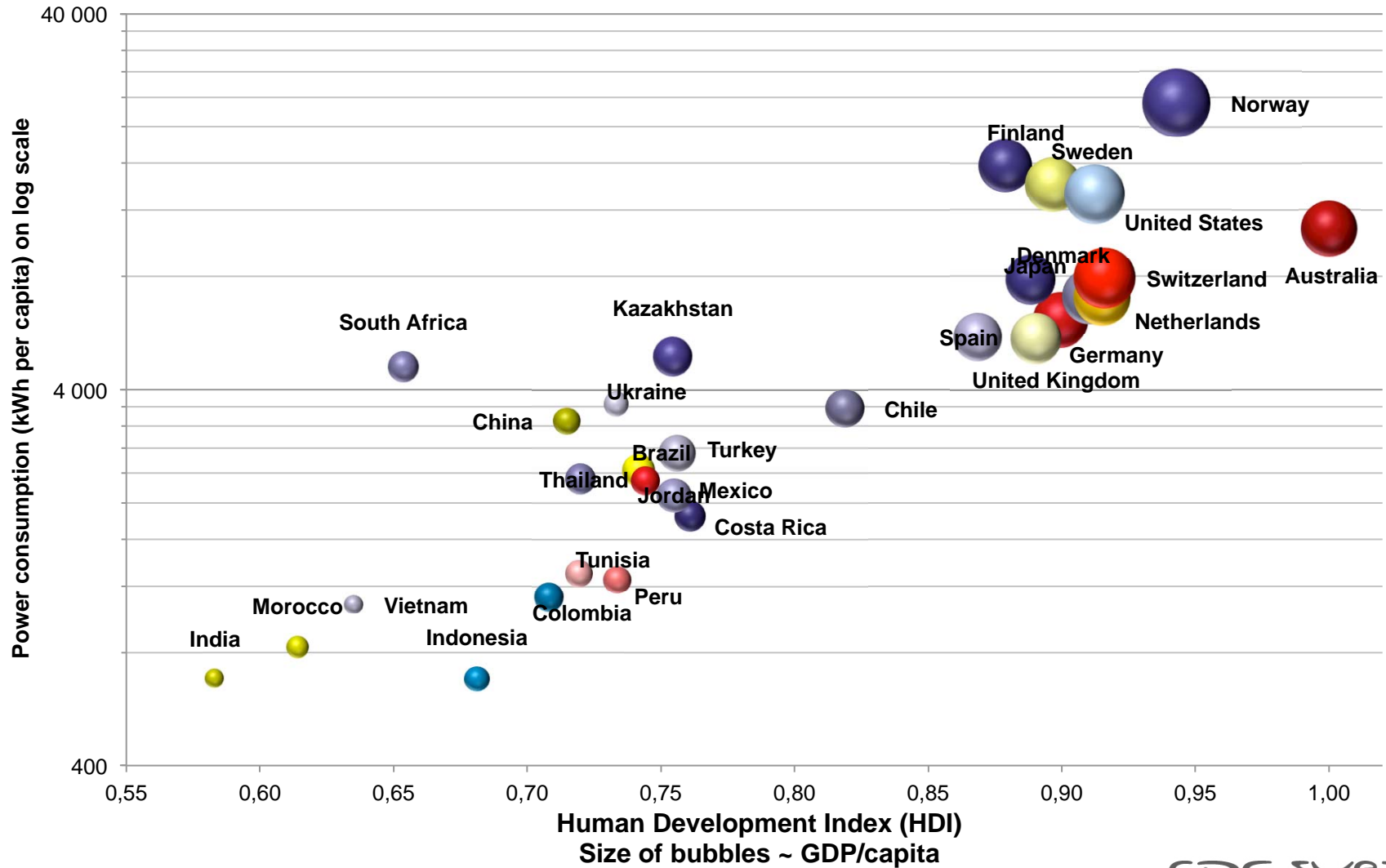
GHG emission growth in developing countries outpaces Annex I mitigation



Source: EDGAR 4.2 (1970–2008); IEA, 2011; USGS, 2012; WSA, 2012; NOAA, 2012

Countries show huge differences in development needs

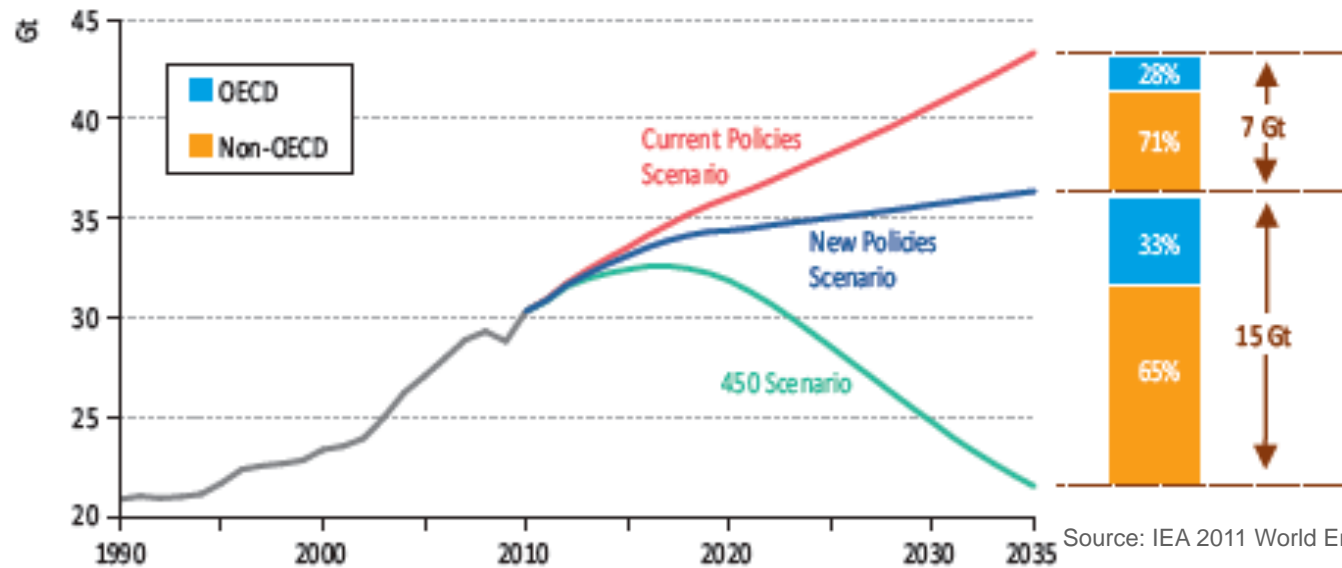
Capita specific Power Consumption, GDP & HDI on log scale



Source: UNDP and World Bank Data Bank

The uneven challenge to limit Climate Change to 2°C

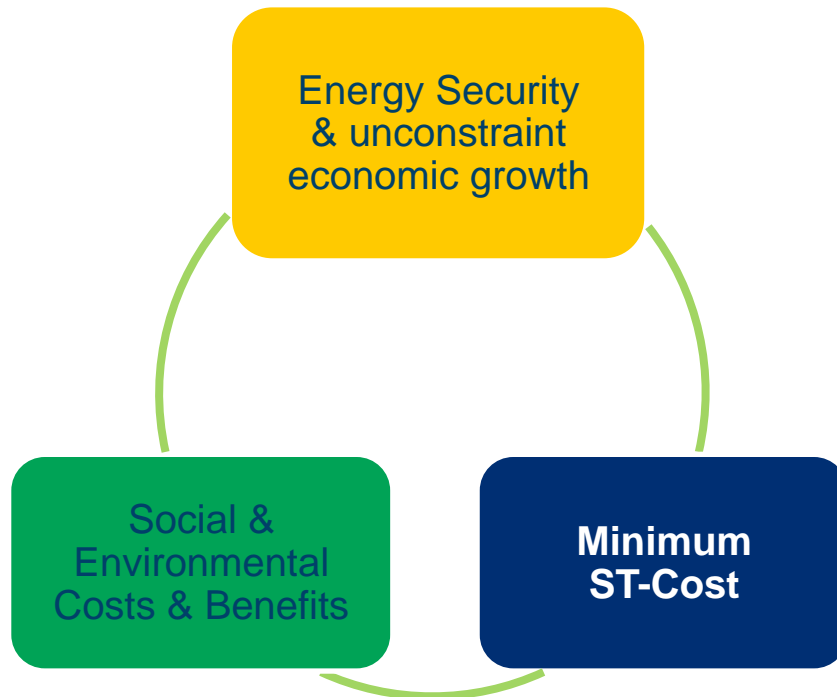
WHAT DO WE NEED TO BRIDGE THE GAP?



- Non-OECD countries account for 90% of population and energy demand growth and require huge investments in infrastructure and mitigation
- Energy causes 66% of global GHGs & non-OECD account for 100% of growth;
- The 450 (ppm) scenario requires additional investments of \$11.6 trillion;
- GHG intensive thermal expansion is still the baseline and leads to a technological lock-in which is capable to close the door to 450 ppm.

Importance of a global carbon market

Perspective and objectives of emerging countries:

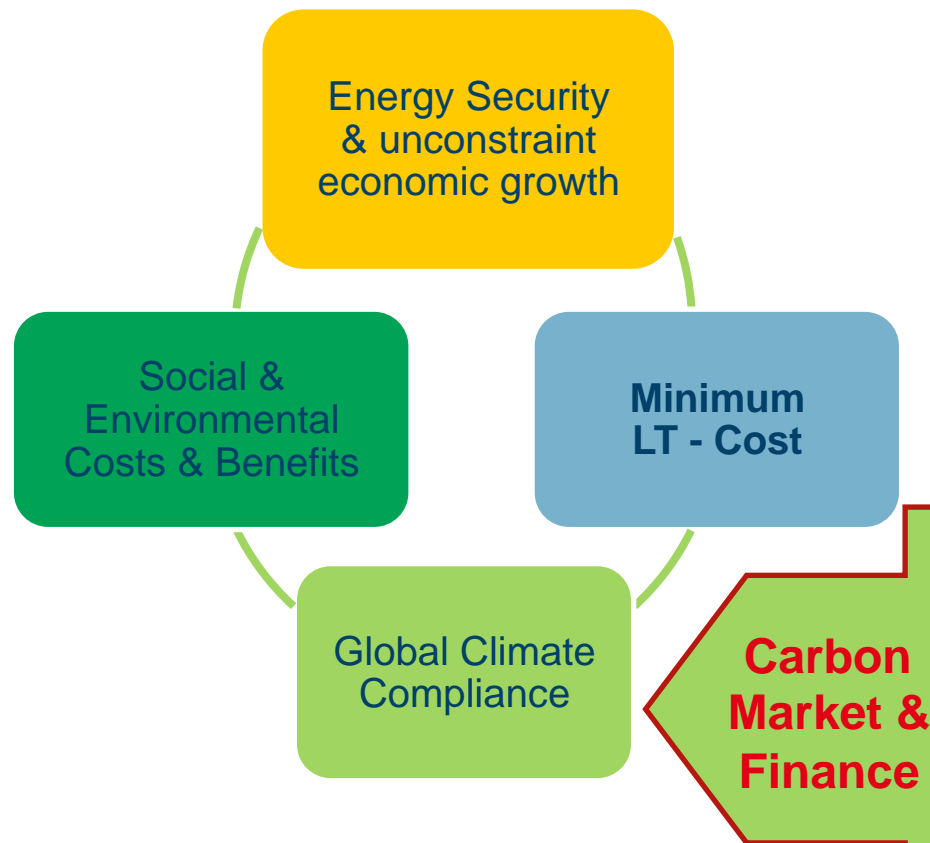


■ OECD perspective:

- Mitigation requires gradual reform of infrastructure
- Mitigation cost to be contained by substituting depreciated assets with new technologies
- Mitigation Potential is insufficient when compared to emission grow of non OECD countries

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- **OECD needs time for smooth transition and asset rotation**
- **Non OECD needs immediate incentives for clean growth**

How to use existing tools & minimize cost

According to Economic Theory each market failure requires a specific instrument.

Quantify external cost and benefits

Sound MRV for GHG emissions and emission reductions ensure global comparability

Pricing external costs & benefits

CDM & NMM are globally coherent steps to build an international carbon market.

Inefficient Capital Markets

Development Banks & Green Climate Fund can bridge financial barriers.

Lack of enabling environment

NAMA policies with international support need to improve clean investment environment

Lack of access to technology and organizational knowledge

CTCN and bilateral organizations are available to support host countries on request

Build on and combine existing & emerging policies

Value GHG Reduction

- Carbon Market Instruments identify “least cost options” and assure profitability

CDM
→ ET

Provide Funding in Least and Less DC's

- Development Banks & GCF finance clean growth & attract Private Sector

MDBs
&
GCF

MRV

- CDM offers well established principles for MRV & bottom up baseline setting
- Unparalleled DOE and PD capability is (still) available

MRV

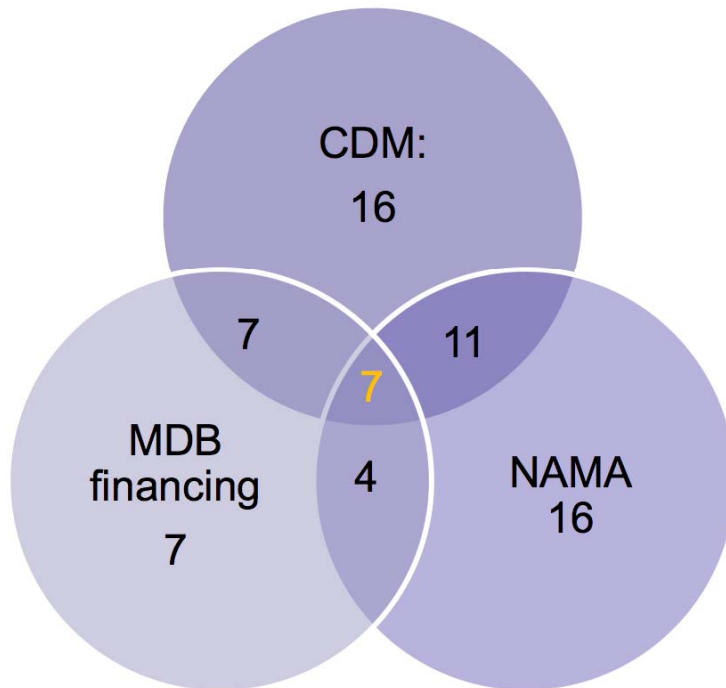
NAMA

Domestic Efforts:

- Emerging countries & private sector finance NAMA investments
 - NAMAs facilitates sectoral activities
- National demand for credits to offset Tax or C&T

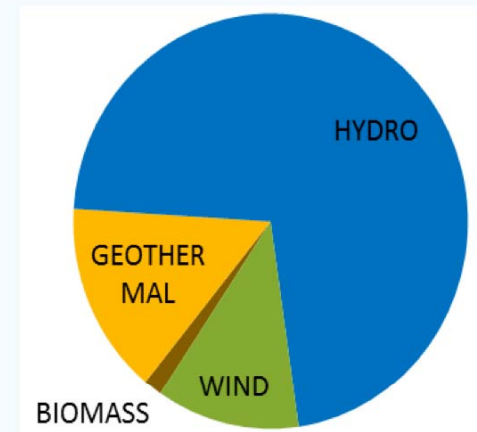
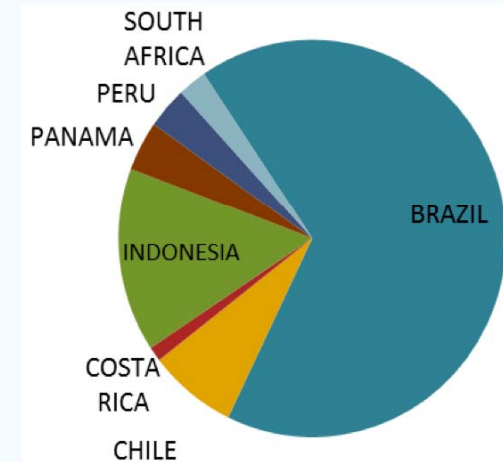
GDF SUEZ Experience with clean energy & support policies

- 16 Projects registered under the CDM
- 16 Projects are supported by national policies (NAMA)
- 7 Project financed by Multilateral Development Banks
- Uruguay NAMA LNG project seeking MDB financing



■ Combination of incentives mitigates individual policy risk

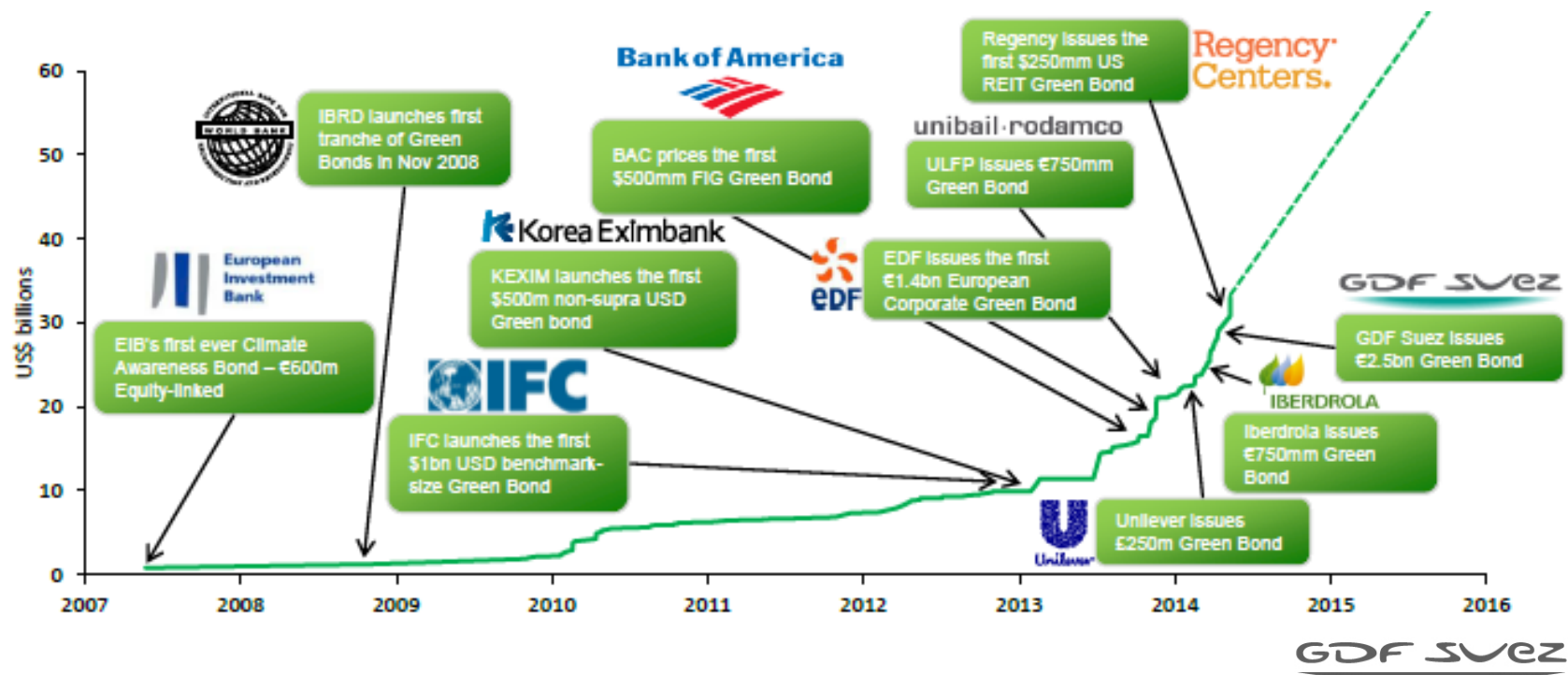
Distribution of technologies & countries: 10 Mio CER p.a.



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GDF SUEZ innovative capital market instruments

- To support its ambitious development strategy in renewable energies and energy efficiency, GDF SUEZ issued a Green Bond of €2.5 billion.
- The bond was 3-times oversubscribed and very successful with [French, German and UK] institutional investors.
- The strong demand came from investors focused on environmental and socially responsible investing (SRI) who bought 64% of the issue.



GDF SUEZ Green Bond: main characteristics

Commitment on Use of Proceeds

GDF SUEZ Green bond will finance projects that contribute to fight climate change
Selected projects are not linked to energy production from fossil fuels or nuclear sources
(this is one of the criteria set to select projects)


Renewable Energy Projects

- Renewable energy projects
- Acquisitions in Renewable Energies

Energy Efficiency Projects

- Investments to reduce energy consumption per unit of output
- Acquisitions in Energy Efficiency

Transparency & External validation

- Criteria set to select projects developed and validated by 
- GDF SUEZ's auditors report on Green bond proceeds' allocation
- Reporting on Green projects financed with the Green Bond proceeds with environmental indicators

Standard Financial Characteristics

- A GDF SUEZ credit risk and rating
- Bonds will be launched off the Euro Medium Term Notes (EMTN) program
- A benchmark size providing liquidity to investors

GDF SUEZ Green Bond: Sustainability Criteria



Solid criteria ensure best-in-class projects

Environment protection

Fight climate change, environmental management and biodiversity protection

Community involvement

Contribute to local development and to communities well-being

Ethics and business behavior

Promote ethical practices throughout the supply chain and sustainable relationships with suppliers

Human resources

Ensure responsible relations and working conditions

Project Governance

Ensure internal ESG assessment and positive recommendation



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Conclusions and suggestions for discussion

Problem: *Capital Intensity and long term maturity of clean infrastructure is the biggest barrier to green growth and a risk to our climate.*

Urgency: *Early action needed to avoid fossil fuel lock-in.*

Solution: *Transformational change now, requires global cooperation and use of existing mechanisms to address all market failures at once.*

Role of the CDM to leverage climate finance and NAMAS:

Offer comparable & solid MRV & flexible mechanism,

i) in support of national policies (NAMA, etc.)

ii) in complement to Carbon Financing (RBF)

iii) for domestic offsetting and indirect linking between countries to ensure transformational investments and a move towards an incrementally global carbon market.

Important CDM reforms and elements of the ADP text:

- 1) Recognize KP mechanisms & results under the future climate agreement.
- 2) Open access to & promote early action by all parties, IMO & ICAO.
- 3) Reduce costs & bureaucracy to attract use by developing countries.
- 4) Establish due tracking and accounting of units.