Role of the CDM in past & future climate change mitigation: Lessons from the field.

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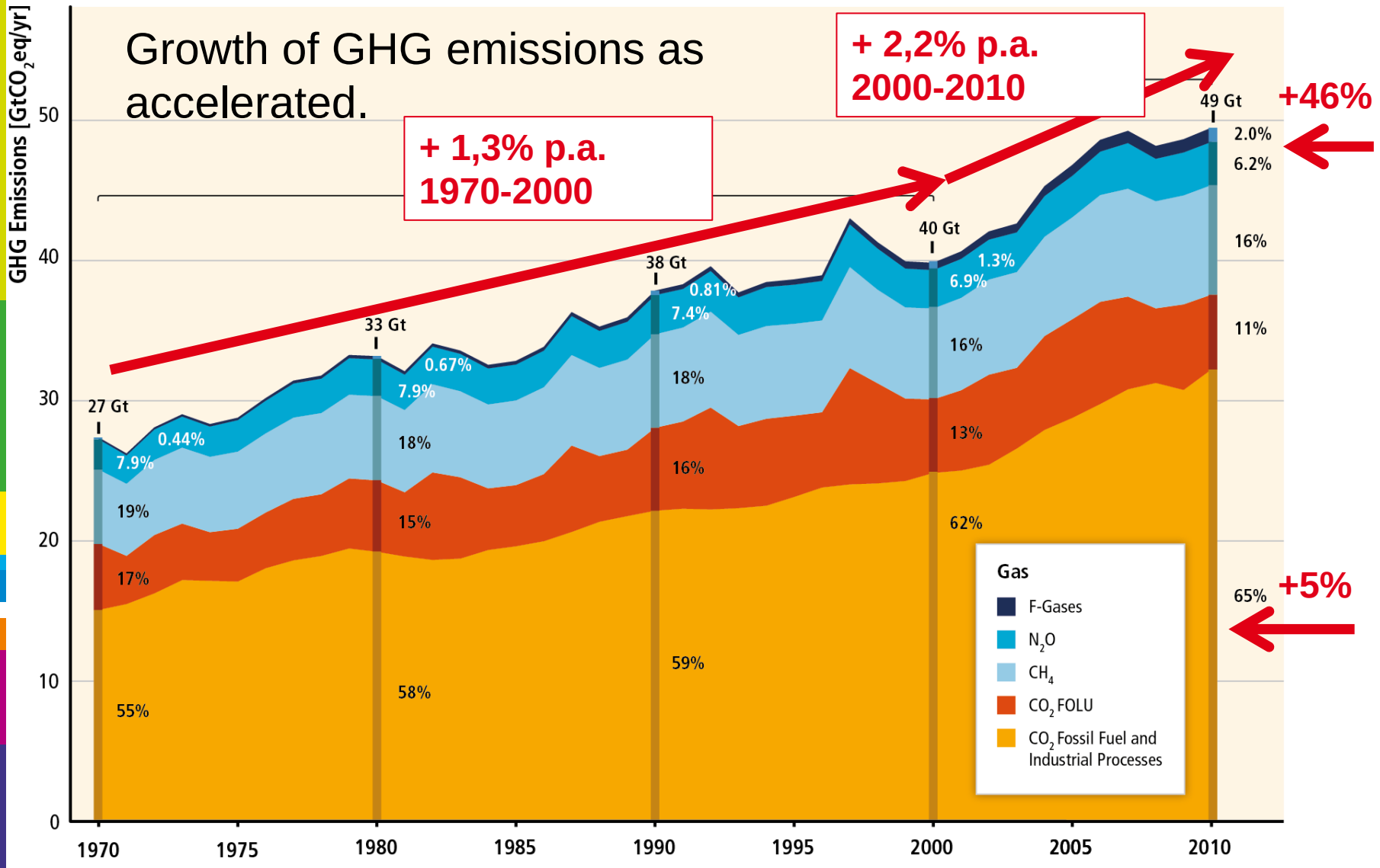
Global climate policy failed by (m)any means



Source: IPCC 5th assessment report – WG III

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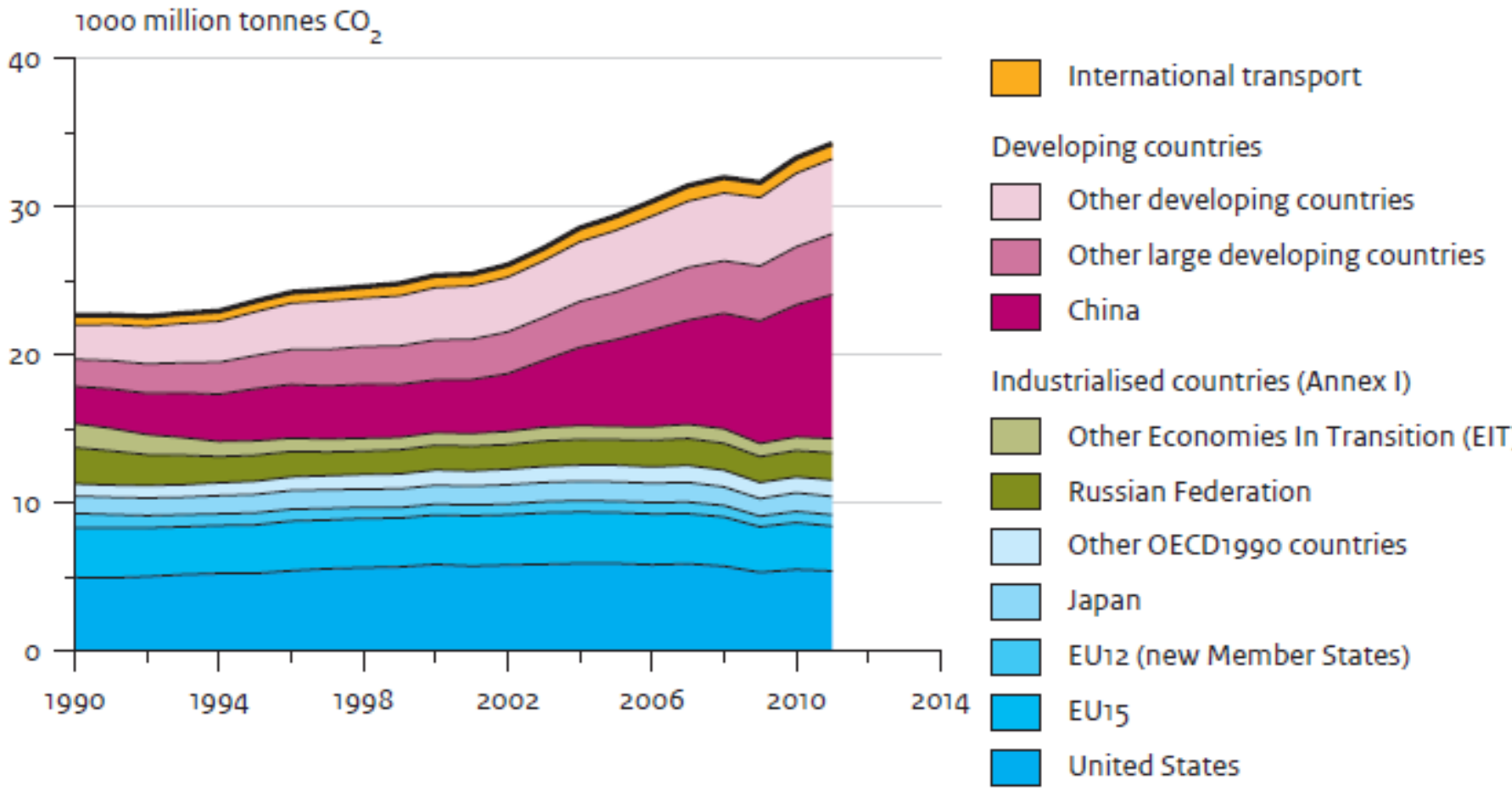
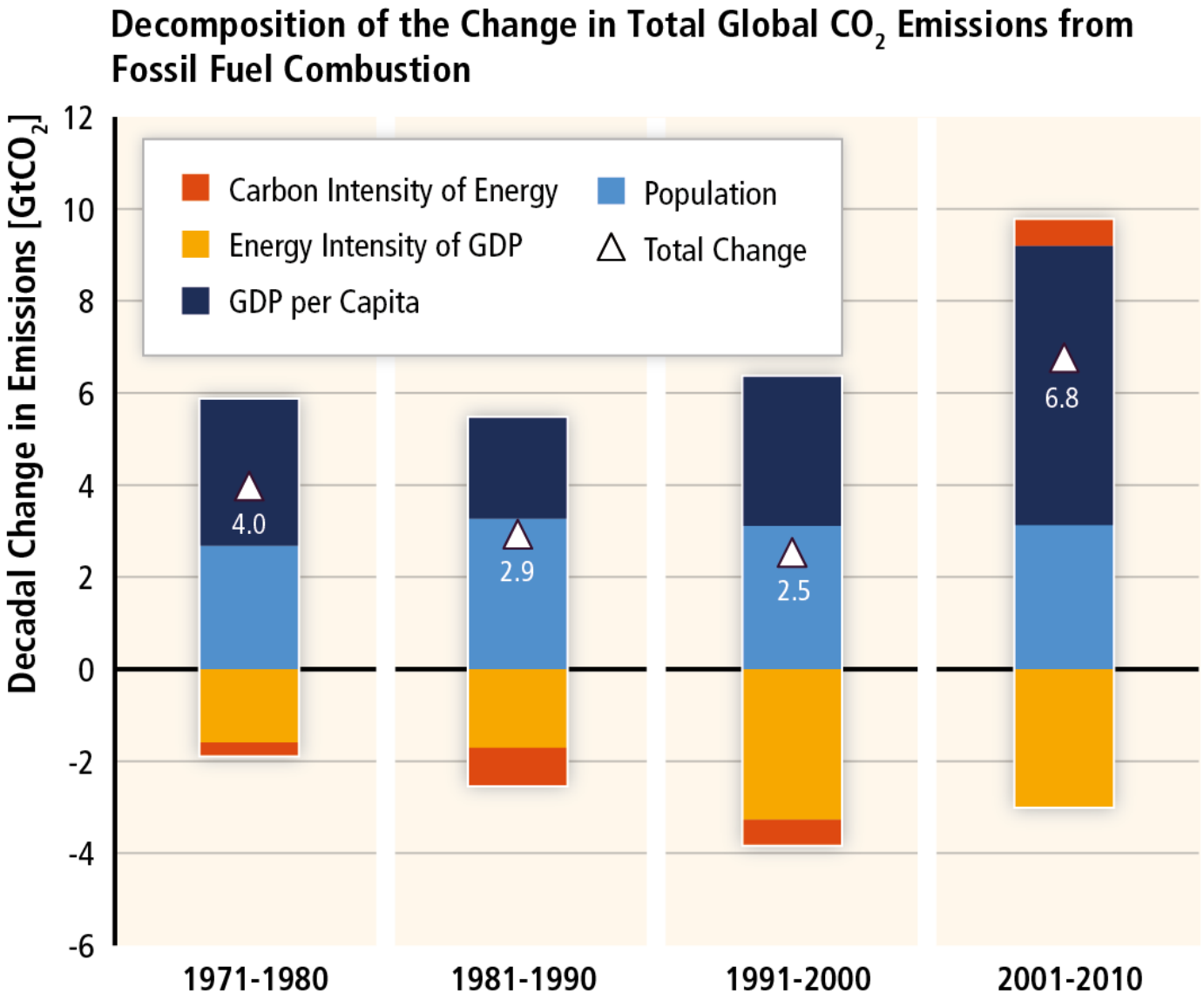
GHG emission growth in developing countries outpaces Annex I mitigation



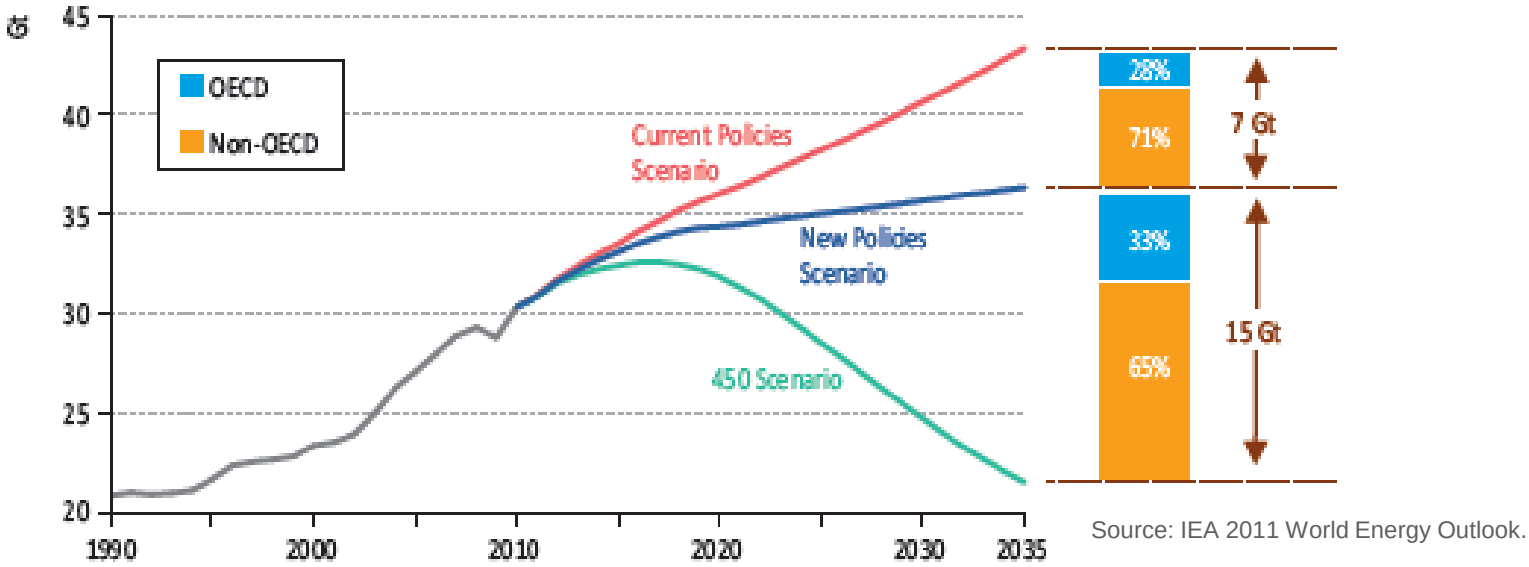
Source: EDGAR 4.2 (1970–2008); IEA, 2011; USGS, 2012; WSA, 2012; NOAA, 2012

Past progress is being reversed



Source: IPCC 5th assessment report – WG III

The uneven challenge to limit Climate Change to 2˚C
WHAT DO WE NEED TO BRIDGE THE GAP?



Source: IEA 2011 World Energy Outlook.

- Non-OECD countries as they 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.

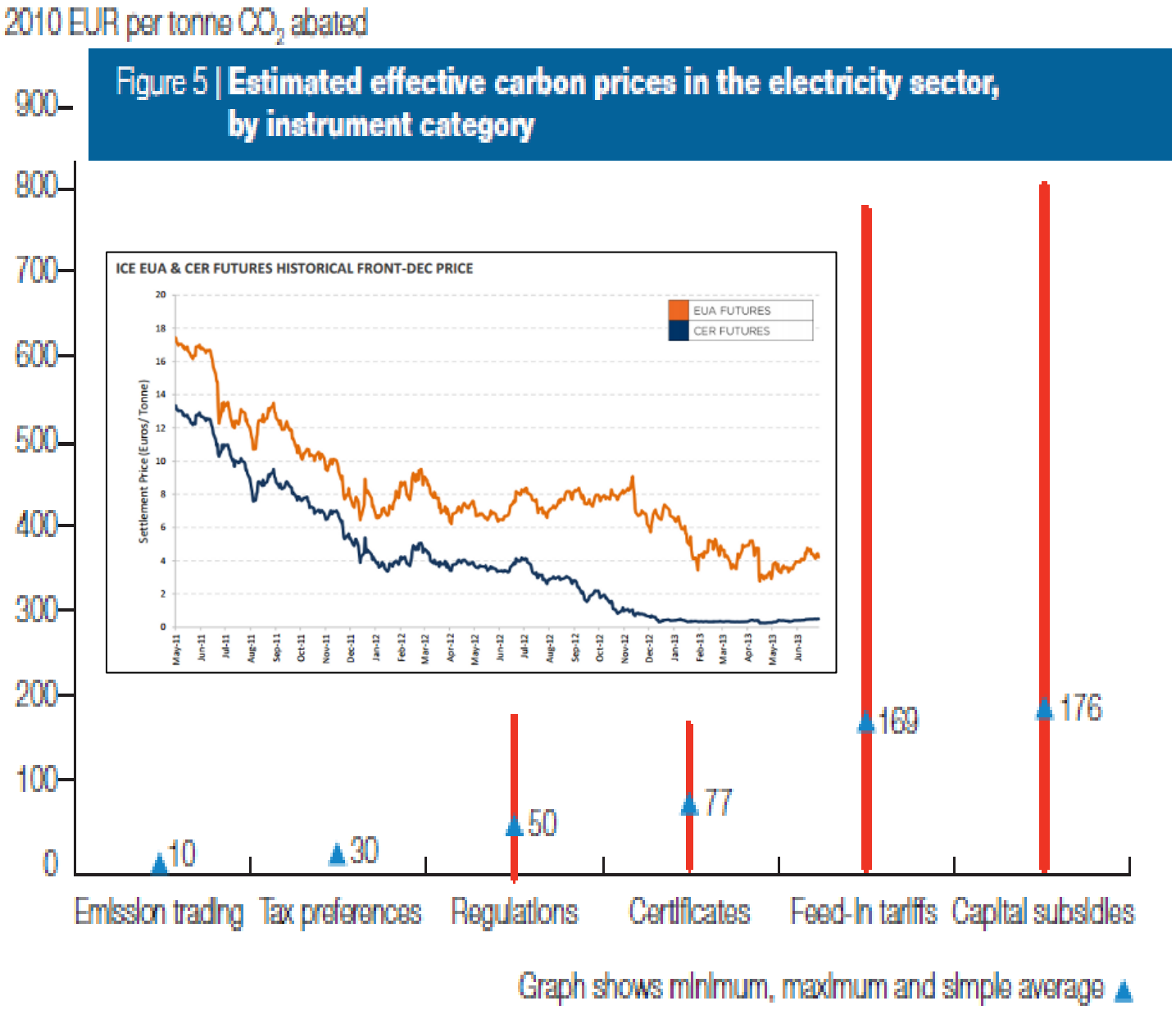
The challenge ahead according to the WEO 2011

"If we do not change course, by 2017, 100% of the permissible energy sector emissions will be locked in.

Maria van der Hoeven - Executive Director IEA

- **In a policy driven scenario to achieve 450 ppm CO_2 prices in:**
  - **OECD will converge to $120/t in 2035;**
  - **BRICS is to rise from $10/t in '20 to $95/t in '35.**
- Cost is time dependent and increasing: ***Each US$ investment delay will cost 4.5 US$ investment in 2020.***
- Though no direct link between markets expected before 2035, **all systems have access to offsets (indirect linking),** leading to price convergence
- If all countries began **immediate mitigation, establish a single global carbon price and use of all technologies**, economic costs is limited to 0,06% reduction in annual consumption growth until 2100 (IPCC 5th AR WG III)

Outright Carbon Pricing is out of fashion, but costs are rising



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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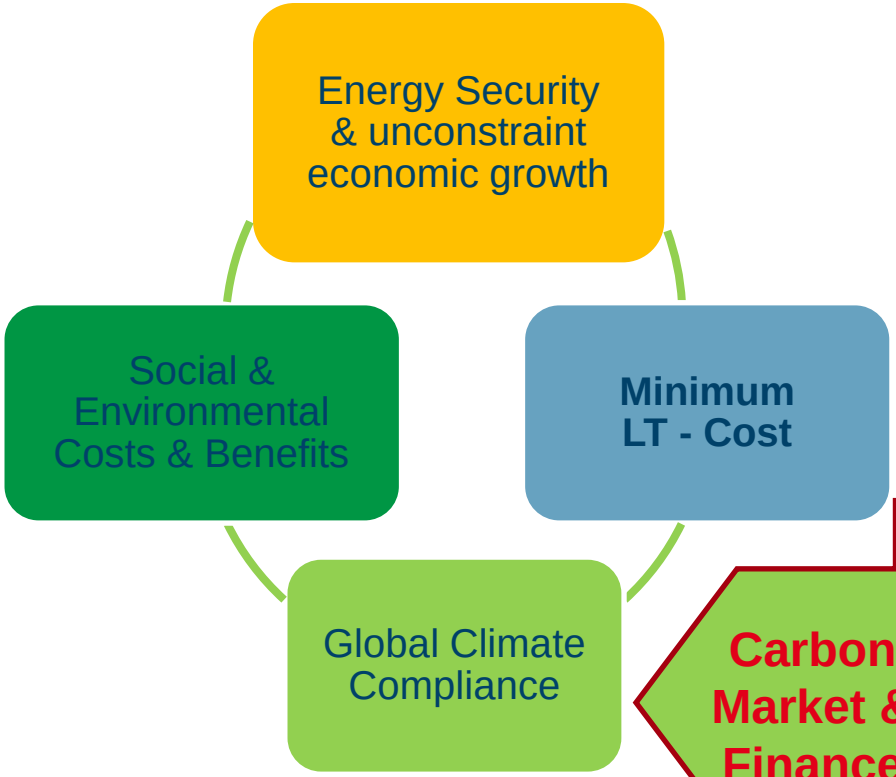

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Carbon Market & Finance

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

Results of the CDM in KP 1

Indicator	HFC	N_20	Others	RE
Issuing	19	57	389	2151
Registered	20	104	1.057	6.355
Specific Invest US$/$tCO_2$p.a. – UNEP	0,72	13.5	384	572
Invest MUSD (from UNEP data)	59	797	37.477	425.922
Issued (MCERs)	507	258	281	375
Revenues (75%sCER price)	4,779	2.355	2.497	2.878
Revenues/project MUSD	238	22,6	2,3	0,45
Non Annex I emissions 2001/2011 (CAIT)	+140% (F-gases)	+19% (N20)	Energy: +70% CH4: +18%	

- 38% of resources spent on 19 projects in a sector that in 2000 represented 1,3% (102 Mtin Non-A1) and grew to 2% of global GHG emissions (319 Mt in Non-A1in 2011).
- Thousands of clean infrastructure investors were left with financial impairments that weaken investment capacity going forward.

Market barriers and solutions at hand

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 is available to support host countries on request**

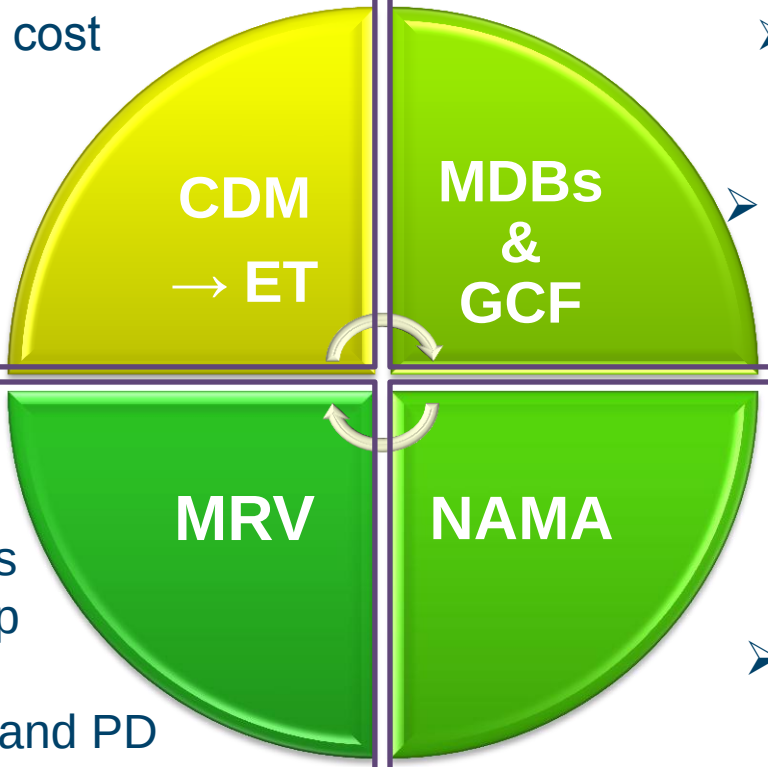
Build on and combine existing & emerging policies

Value GHG Reduction

- Carbon Market Instruments (CMIs) identify "least cost options" and assure profitability

Provide Funding in Least and Less DC's

- MDBs & GCF finance clean growth & attract Private Sector
- CDM adds credibility & assures profitability



MRV

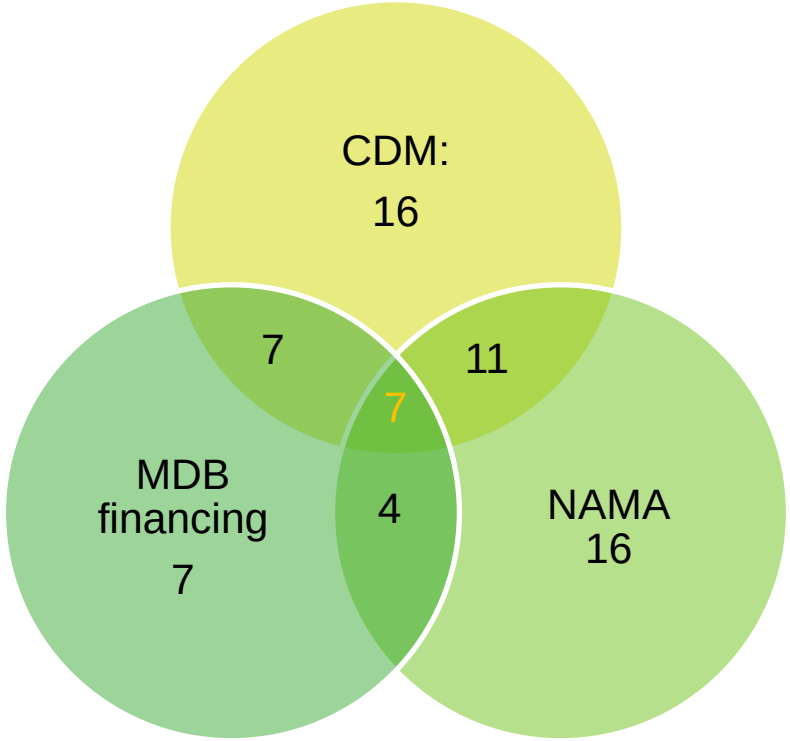
- CDM offers well established principles for MRV & bottom up baseline setting
- Unparalelled DOE and PD capability is (still) available

Domestic Efforts:

- Advanced DC's & private sector finance NAMA investments
- National policies allow sector wide programs & activities
- National demand for offsets to Tax or C&T

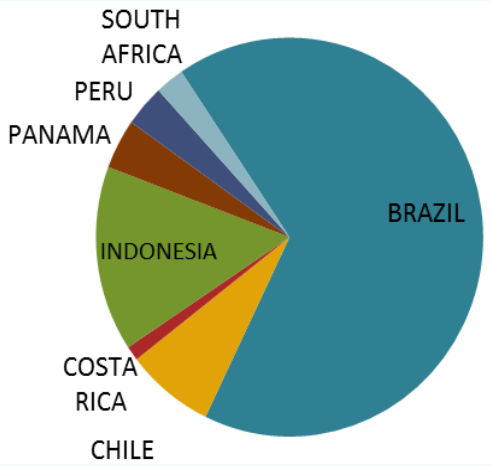
GDF SUEZ Experience with clean energy & support policies

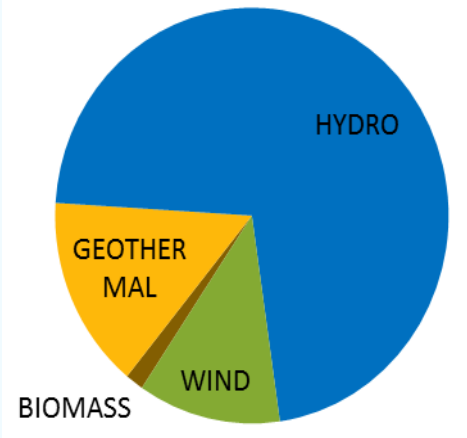
- 16 Projects registered under the CDM
- 16 Projects are supported by national policies (NAMA)
- 7 Project financed by Multilateral Development Banks
- Uruguay NAMA LNG project seeking MDB financing



- Combination of incentives mitigates individual policy risk

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





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.***

Solution: ***Transformational change is a result of global cooperation to address all market failures at once.***

Role of the CDM : ***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:

1) **Open access to & promote early action by all parties, IMO & ICAO.**
2) **Recognize early action but ensure LT commitment of buyers.**
3) **Additionality to target efficient use of resources to deviate from BAU and prevent global GHG intensive lock-in.**
4) **Develop sectoral mechanisms based on sectoral NAMA policies.**
5) **Reduce costs & bureaucracy to attract developing countries.**
6) **Establish due tracking and accounting of units (CDM->JI).**