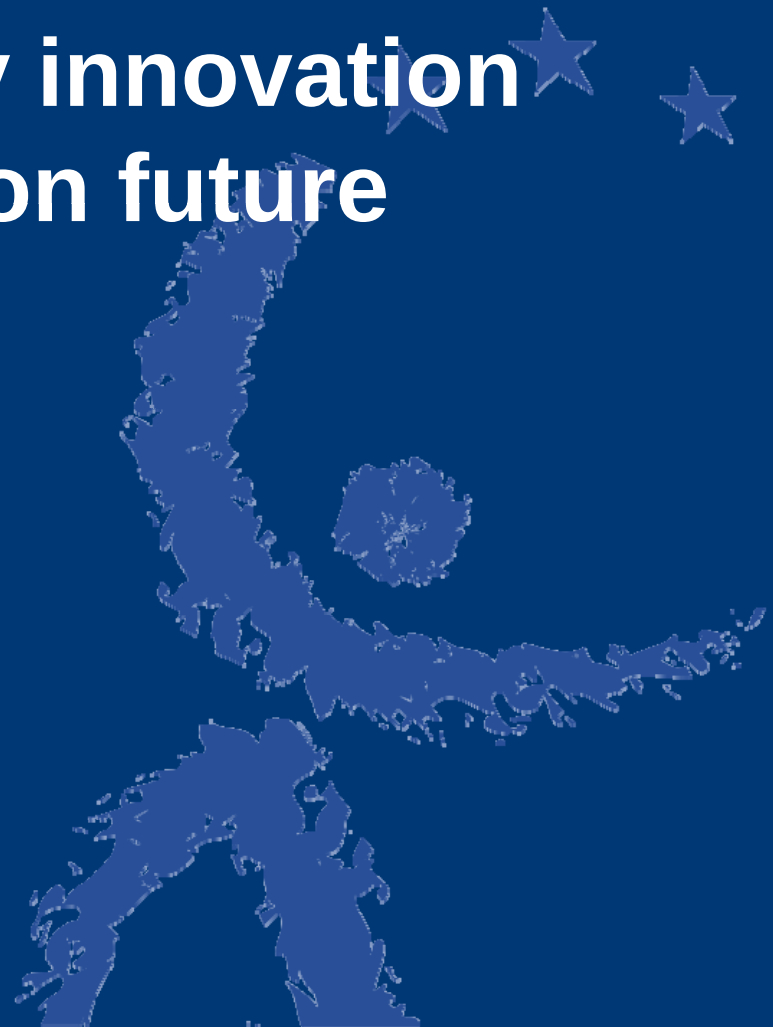
Climate Action
Energy for a Changing World

Financing energy innovation for a low carbon future



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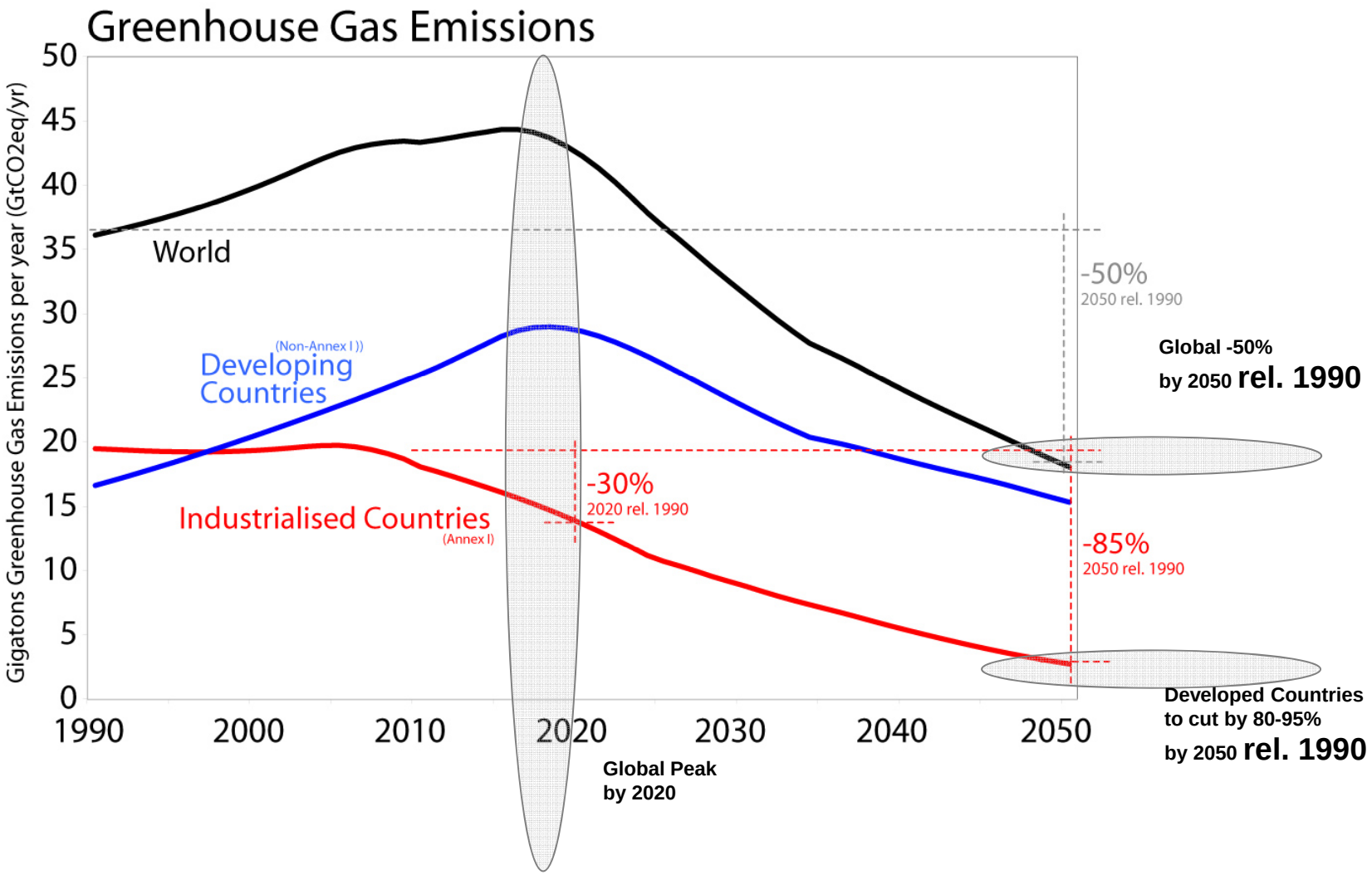
Climate Policy Challenges

- Globally
  - **Going for a 2°C Objectives**
  - **Cancun and beyond**
  - **International carbon market: top down or bottom up?**
- Within the EU
  - **Europe 2020: Leadership on climate & innovation**
  - **-20 % or -30 %?**

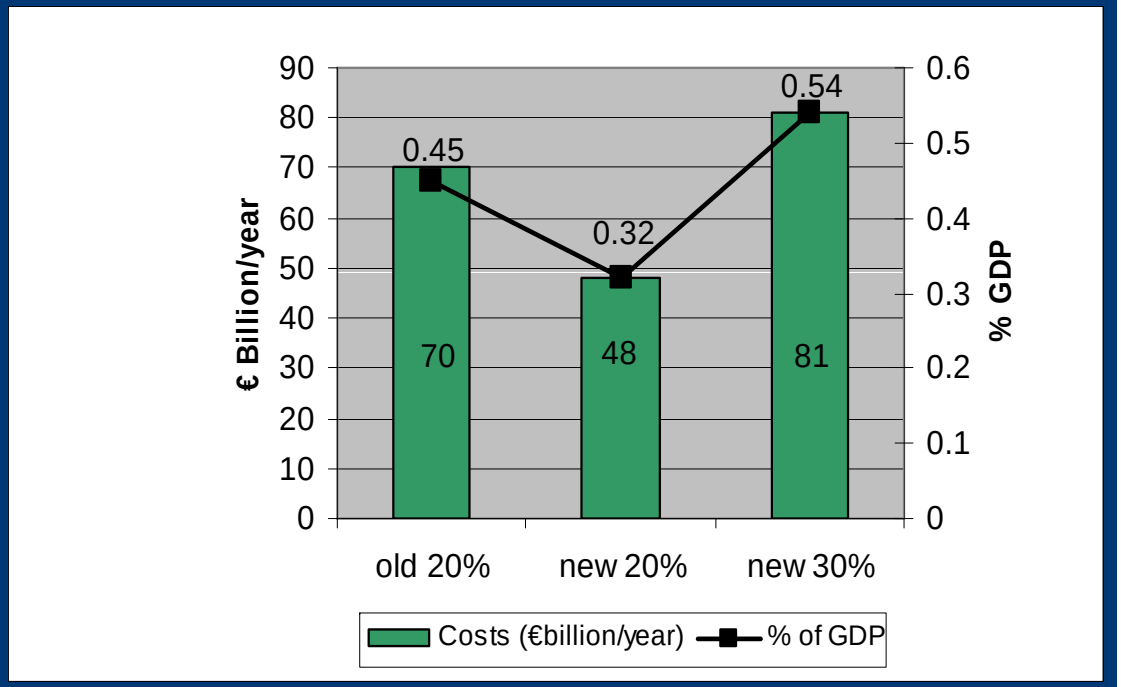
Staying below 2 degrees: Global carbon budget until 2050



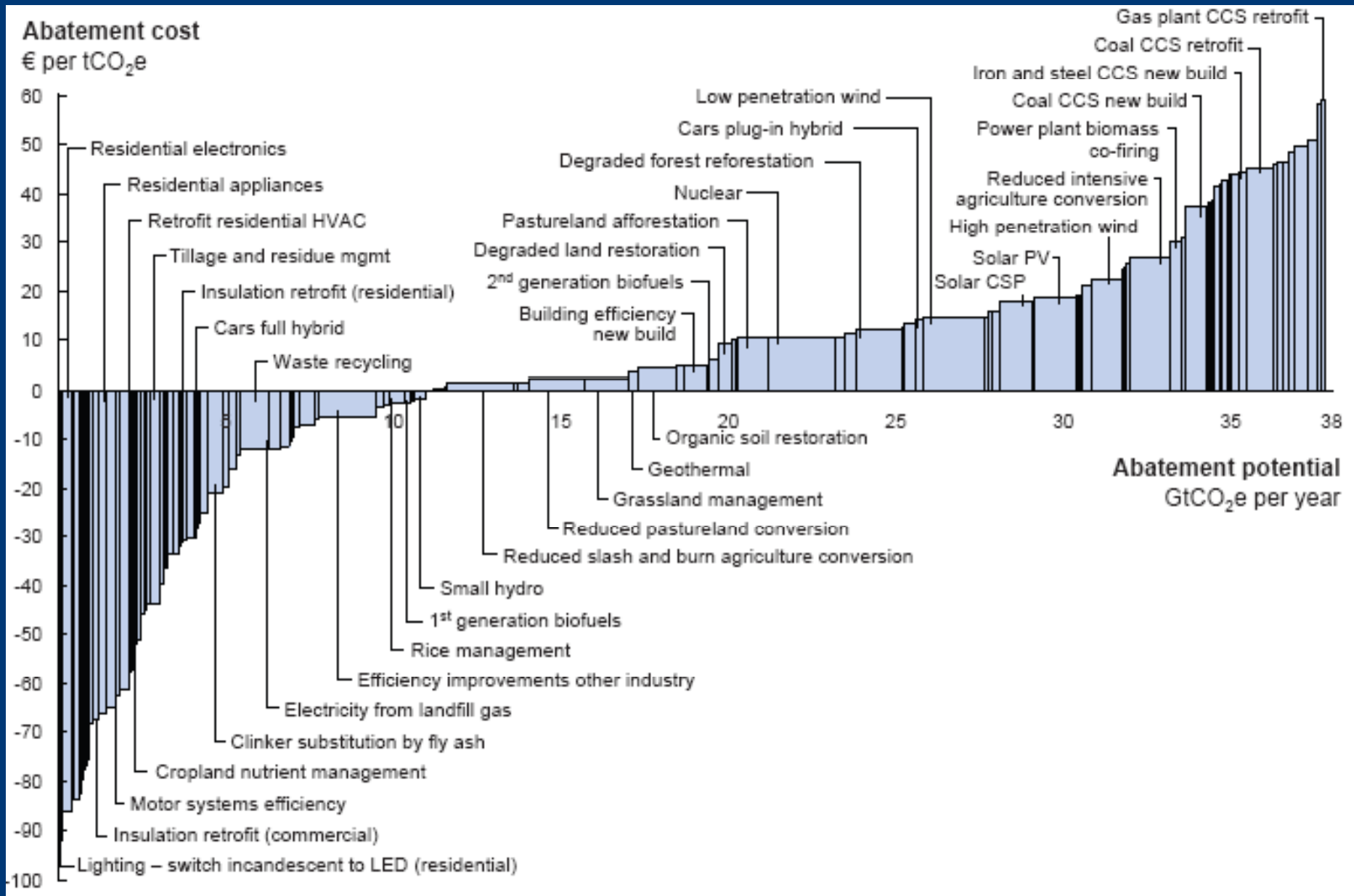
EU: Continue to « lead by example »?

Options for reaching 30%

- Inside the Emission Trading Scheme
  - reduction of allowances (1400 MT over period 2013-2020)
  - Reward fast movers
- Technological options (e.g. Product standards, smart grids)
- Carbon taxes



Use of EU policies: Cohesion funds, energy efficiency, land use change and forestry, improve environmental integrity of the CDM & sectoral crediting and maritime emission



Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO_2e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.

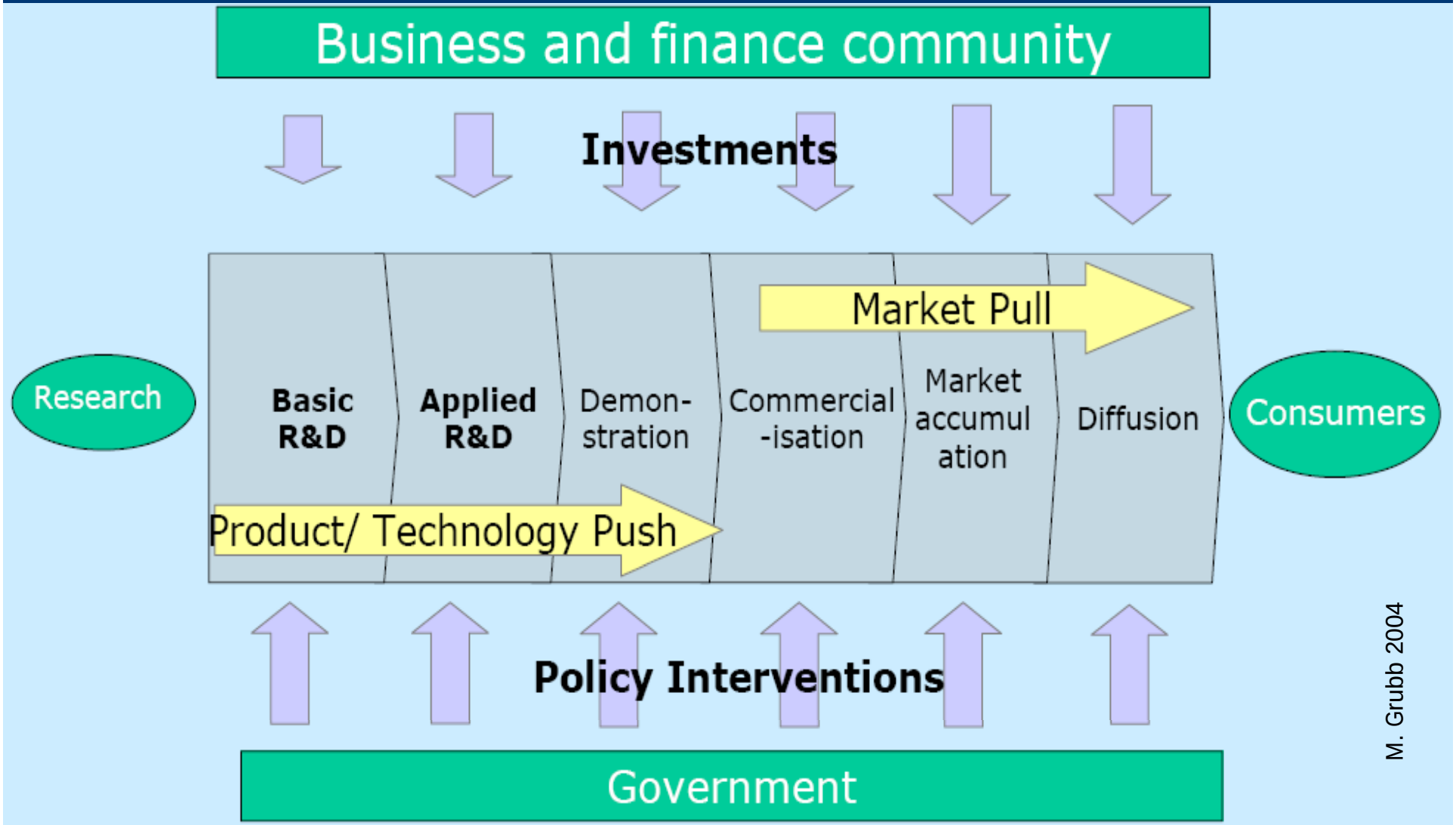
Source: Global GHG Abatement Cost Curve v2.0

Innovation:

- The pace and cost of any response to climate change concerns will depend critically on the cost, performance, and availability of technologies that can lower emissions in the future (…)
- Sources of technological change are R&D, learning and spill-overs.
- The general drivers ‘supply push’ (e.g., via R&D) or ‘demand pull’ (e.g., via learning) are not simply substitutes, but may have highly complementary interactions.

IPCC 4th Assessment Report 2007

Innovation



M. Grubb 2004

NER 300: Main features

- **Substantial fund for demonstration of low-carbon power, at the moment worth around €4.5bn**
- **Builds on financing under European Energy Programme for Recovery (EEPR) (including €1bn for CCS awarded to six projects)**
- **Public-private partnership: 50% funding of extra costs from NER and EEPR combined - the remainder from projects and Member States**
- **Targeting key technologies of the future with a good technological balance - minimum of 8 CCS projects and 34 RES projects**
- **Major support for European leadership in clean technology, green growth and jobs**
- **European Investment Bank will assist in swift implementation**

Projects to be supported

Good balance between CCS and RES, determined by demonstration needs:

- Minimum 8 CCS projects in four categories
  - At least one and at most three of pre-combustion, post-combustion, oxy-fuel, industrial applications
- Minimum 34 RES projects
  - In eight categories: bioenergy, concentrated solar, photovoltaics, geothermal, wind, ocean, hydropower and distributed renewable management (smart grids)
  - Where MSs have no project above the threshold for a given sub-category, they can propose projects below the threshold
  - If there are no projects in some sub-categories, additional projects can be funded in others

Coherence with the SET Plan

- **Alignment of NER300 objectives with the SET Plan and MS priorities.**
- **NER300 is not part of the EU budget**
- **NER300 is linked to the EU ETS and has different procedures and interlocutors compared to FP7**
- **National support structures and signposting of FP7 National Contact Points**

Next steps

- **Submission of applications by projects to MS – 9 February 2011**
- **Submission of applications by MS to EIB – 9 May 2011**
- **Award decisions 2012**
- **One further call, most likely in late 2012 or early 2013**

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Back-up

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European approach to project selection

European selection to ensure a comprehensive technology portfolio and geographical balance, but with a strong Member State role

- Member States assess eligibility and identify which projects they wish to submit
- EIB assesses the financial and technical robustness of proposals, and ranks according to cost per unit performance
- Ranking based on cost to the public per unit performance incentivises operator contribution, as the higher the contribution the lower the cost per unit performance
- Commission confirms overall funding package with Member States, consults the Climate Change Committee, and makes the final award decisions
- At least one, but no more than three, projects per Member State to ensure geographical balance

Organisation

- Two sets of calls for proposals
  - First covers 200m allowances, launched on 9 November 2010
  - Second covers 100m allowances
  - Decision will be reviewed and can be adjusted after first call, with a view to achieving overall technological and geographical balance
- Funding is in principle 50% of extra investment and operating costs for demonstration
  - But will take account of funds received under EEPR and funds from operator
- Investment decisions and permits need to be in place within 24 months, extension for saline aquifers to 36 months

Monetisation by the European Investment Bank

Centralised monetisation to streamline conversion of allowances and confirm available funding

- EIB will sell allowances and manage the revenues
- EIB will pass revenues to MSs as required for project financing
- Amount of funding available is clear at time award decisions are made, so removing carbon price risk
- EIB reimbursed for its services from income generated from its management of revenues