

Strengthening the EU climate and energy package

To Build a low carbon, competitive
and energy secure Europe

Emmanuel GUERIN
Director, Climate and Energy
IDDRI

Scope of the report / presentation

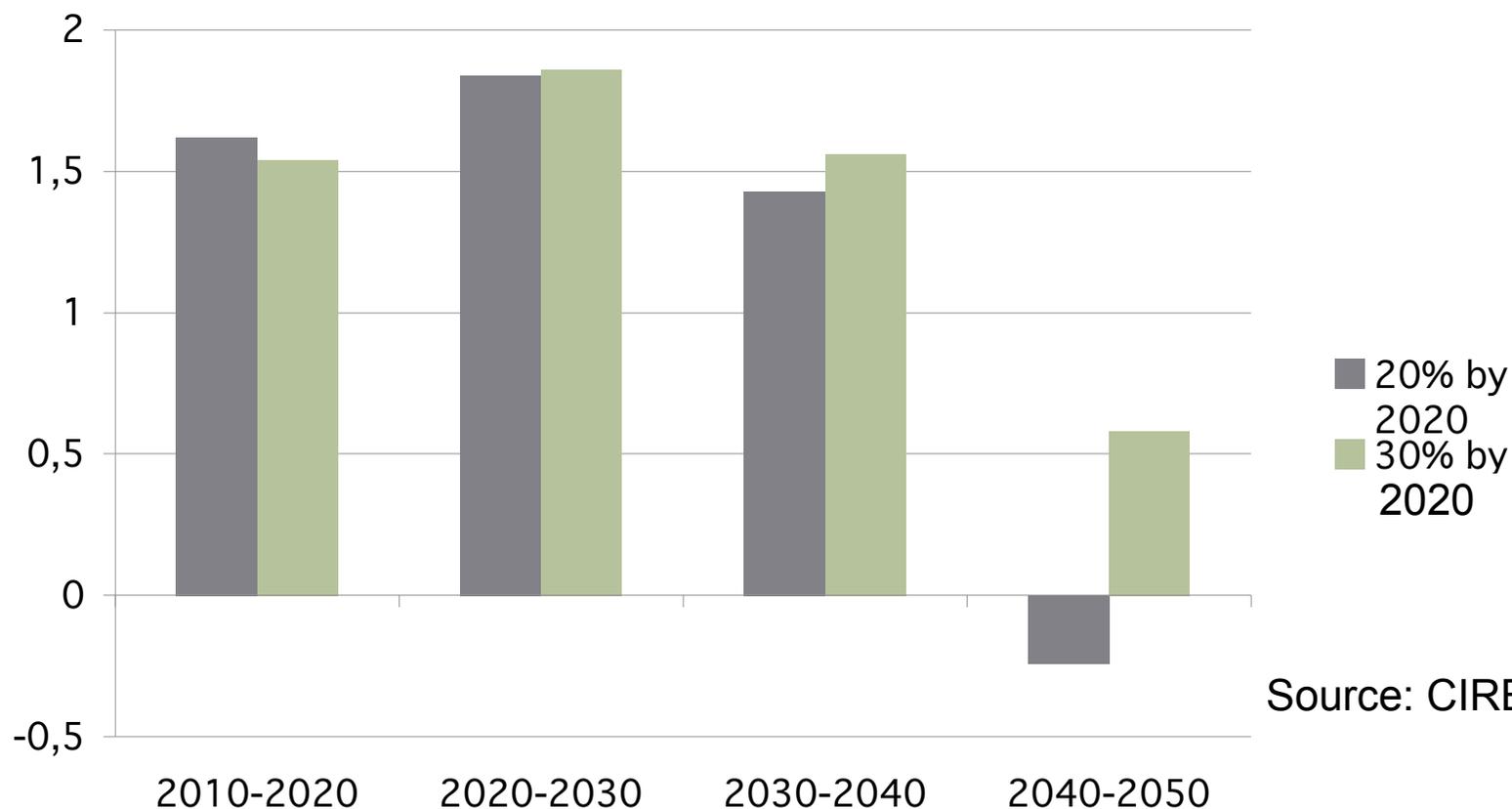
- **2 questions:**
 - Why strengthen the CEP?
 - Why strengthen it now?
- **3 answers:**
 - Reach the LT climate target at acceptable costs
 - Enhance competitiveness
 - Increase energy security
- **3 policy recommendations:**
 - Implement energy efficiency plan targeting existing building and transport infrastructures to reach 20% target
 - Increase stringency and enhance predictability of the EU ETS up to 2030
 - Use auction revenues and EU budget to facilitate transition towards a low carbon economy

Reach the LT climate target at acceptable costs

- EU politically committed to reach at least 80% emissions reduction by 2050
- Reaching only 20% emissions reduction by 2020 leads to **declining GDP** during the last decade to reach the 80% 2050 target
- Moving to 25% by 2020 (plus 5% offsets, 30% overall) increases **significantly** the GDP trend in the last decade, at a marginal GDP cost during the first two decades.

Reach the LT climate target acceptable costs

GDP Mean
annual growth rate



Source: CIRED

Reach the LT climate target acceptable costs

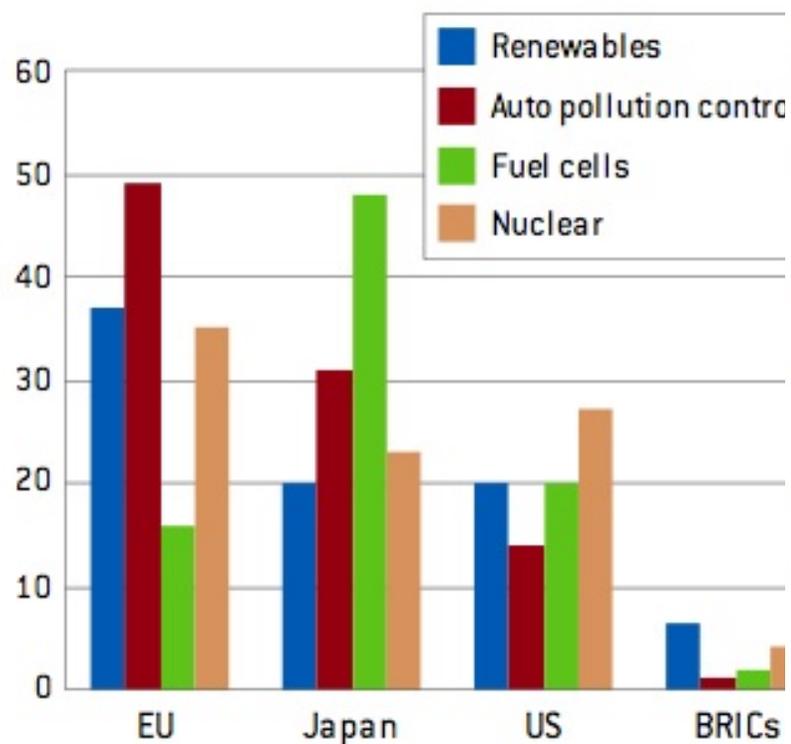
- 2 key explanations:
 - Tackle **inertia** in sectors with long lived capital stocks and characterized by market failures and regulatory barriers (building and transport infrastructures)
 - Shape **expectations** and provide RD&D support for low carbon products and services innovation

Enhance competitiveness

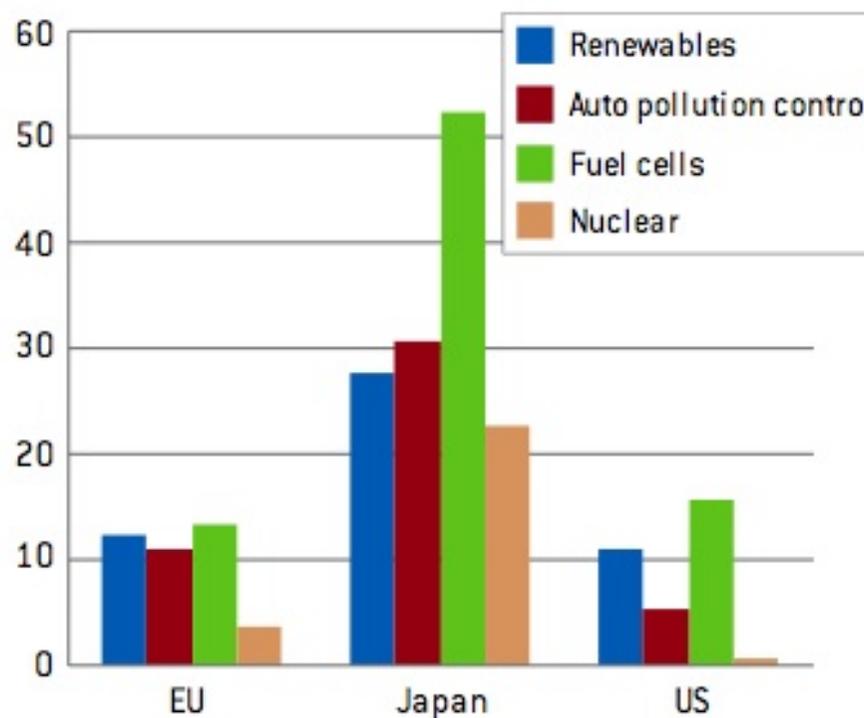
- Firms producing energy efficient and low carbon products
 - Low Carbon and Environmental Goods and Services (LCEGS): market already worth close to **3,5 trillion euros a year**
 - Growing faster than most of other sectors (4% a year for next 5 years)
 - EU has the highest share of global **environmental patents**,
 - But growth has been higher in Japan during the past 10 years
 - Korea and China, have **higher specialization** in environmental patenting.

Enhance competitiveness

Share (%) of world environmental patents by type



Growth 1990 - 2005 (%) of world environmental patent



Source: Bruegel

Enhance competitiveness

- Sectors at risk of carbon leakage
 - Scope of potential carbon leakage is **narrow**, impacts on competitiveness are **small** on average
 - But, despite **free allocation**, **some industries** might be significantly impacted by an increase of the 2020 emissions reduction target (cement, steel, aluminum...).
 - Current approach of free allocation is **not a sustainable strategy** for decarbonising carbon-intensive industry
 - Review of leakage risks will take place in 2014: this will be the time to adopt more sustainable strategies, taking into account:
 - Comparability of mitigation efforts by 2014
 - **Dynamics** of global actions

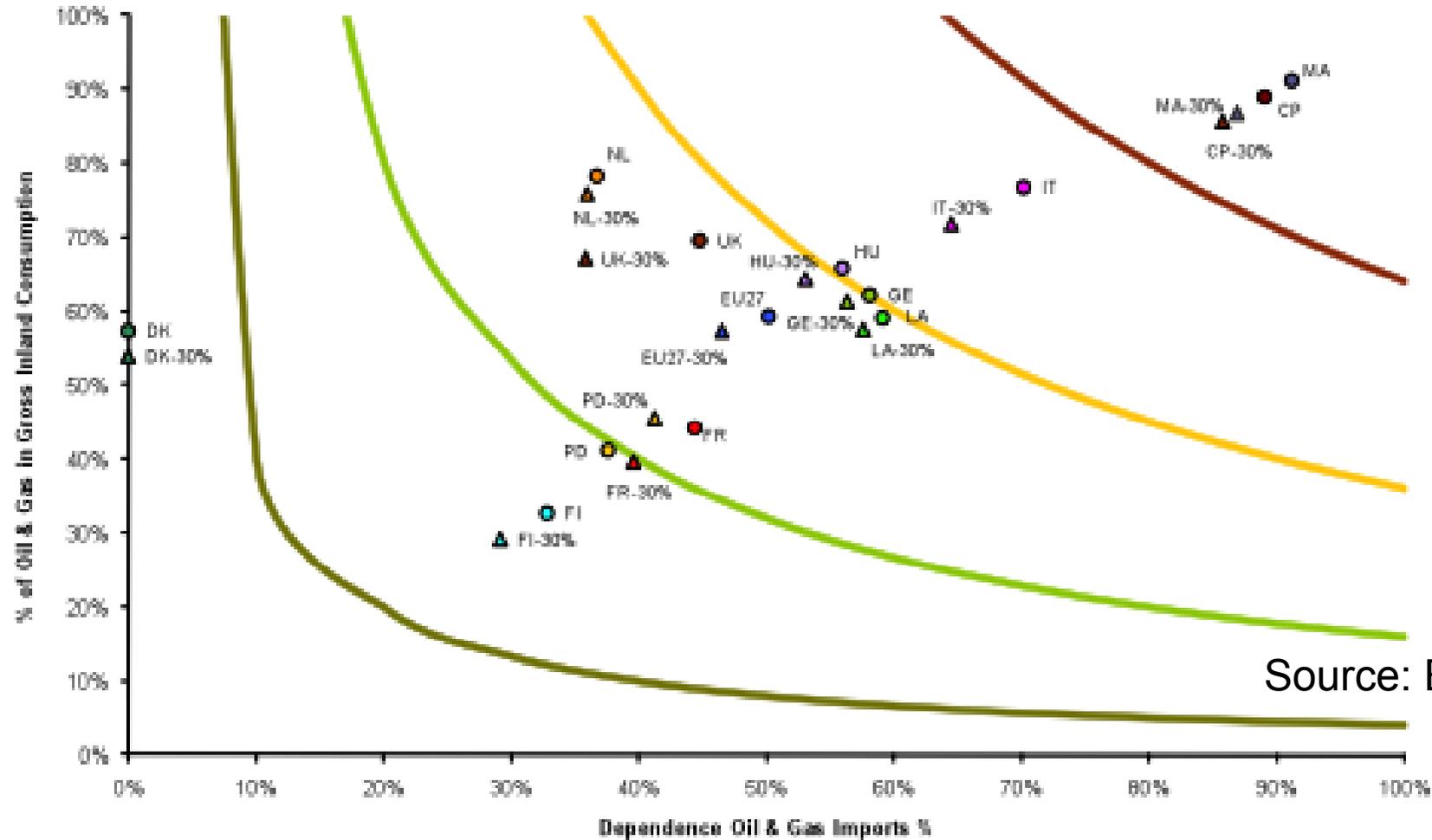
Enhance competitiveness

- For the economy as a whole
 - **High carbon competitiveness** is a **contradiction** in terms in the long run
 - In a world of unequal global carbon prices, enhancing competitiveness through climate policies is a **balancing act** between:
 - Short / long term
 - Market pull / technology push instruments
 - Economically optimal / politically feasible

Increase energy security

- A strengthening of the CEP focusing on reducing energy demand through targeted action on building and transport infrastructures would:
 - Reduce **dependence** on gas and oil imports
 - Especially in the **transport** sector
 - 30% emissions reductions by 2020: oil consumption in the transport sector reduced by 59.5 Mtoe compared to BAU
 - Gross savings of approximately 35 billion Euros per year up to 2020.

Increase energy security



Source: Ecofys

Increase energy security

- Facilitate the transition towards a low carbon power sector
 - Reduction of final energy demand
 - Lower quantity of final energy to be electrified
 - Reduction of gas used for heating
 - More gas can be used for power generation

Policy recommendations

- Implement energy efficiency plan targeting existing building and transport **infrastructures** to reach 20% target
 - Existing **building** stock (**deep retrofit**)
 - **Transport** infrastructures (**modal shift**)
- Increase **stringency** and enhance **predictability** of the EU ETS up to 2030
 - Take into account increased action on energy efficiency
 - Reassess carbon leakage risks
- Use **auction revenues** and **EU budget** to facilitate transition towards a low carbon economy, in particular in **CEE MS**

Conclusions

- To reach these three objectives
 - Time consistency
 - Competitiveness
 - Energy security
- Increasing EU short term emissions reductions targets is **necessary, but not sufficient**. It needs to:
 - Be inscribed in a consistent **emissions reduction pathway**
→2050 roadmap (panel 2)
 - Target the **key areas**, esp **infrastructures** in the building and transport sectors
→energy efficiency plan (panel 3)
 - Come with the **appropriate complementary policies**, esp public support **RD&D**
→multi annual financial framework (panel 3)

Participants to the project

- The Center for International Research on Environment and Development (**CIRED**), on the time **consistency** of the EU emissions reduction pathway, and the the competitiveness and leakage impact of moving to 30% by 2020
- **E3G**, on the global race towards **low carbon technology** competitiveness
- **ECN**, on the low carbon technology **innovation and diffusion** implications of moving to 30%
- **ECOFYS**, on the **consistency** on the EU emission reduction, renewable energy and energy efficiency **targets**, and on the **energy security** impacts of moving to 30%
- The International Consulting on Energy (**ICE**) on the **employment** impact of climate policies
- **IDDRI** on the investment dynamics in the **electricity** sector
- The Finish institute of International Affairs (**FIIA**) on the **energy security** impacts of moving to 30% for **Poland, Czech Republic and Latvia**, and on the use of the **EU budget** to support the transition towards a low carbon economy in Central and eastern European (CEE) countries