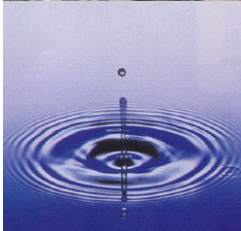


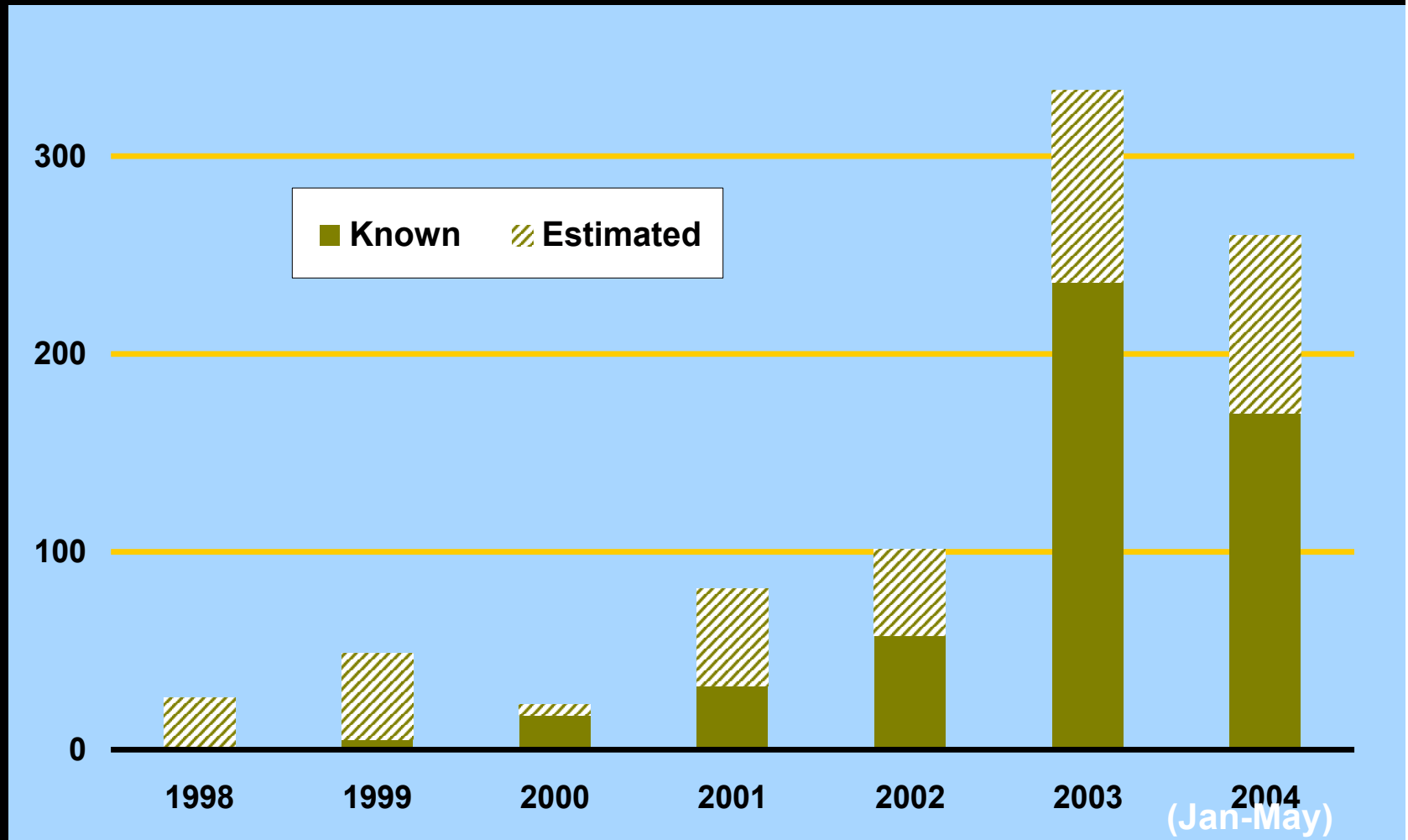
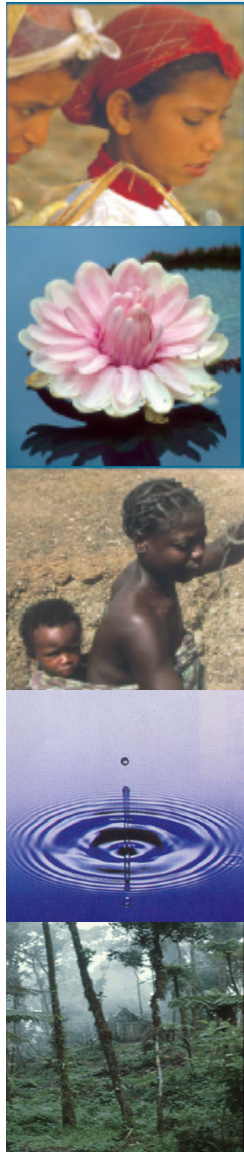
Stock-Take on Market and Compliance Gap as Kyoto Protocol enters into force

February 15, 2005

HCC Meeting, Washington DC

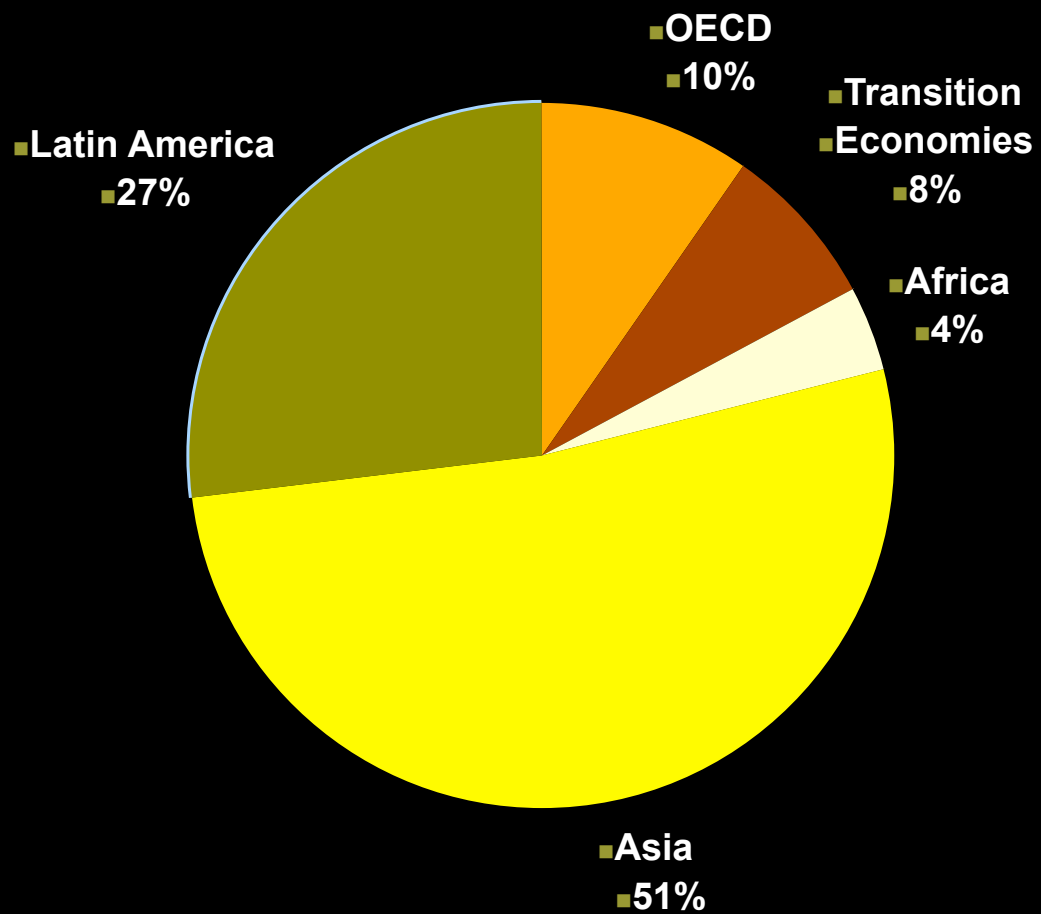
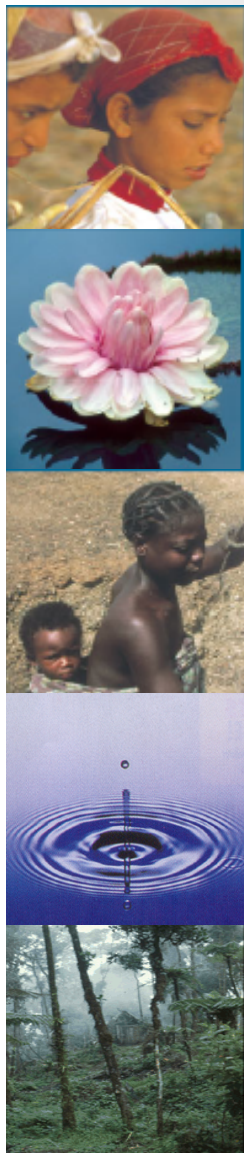


Total Value of Carbon Sales (in million U.S.\$, nominal)



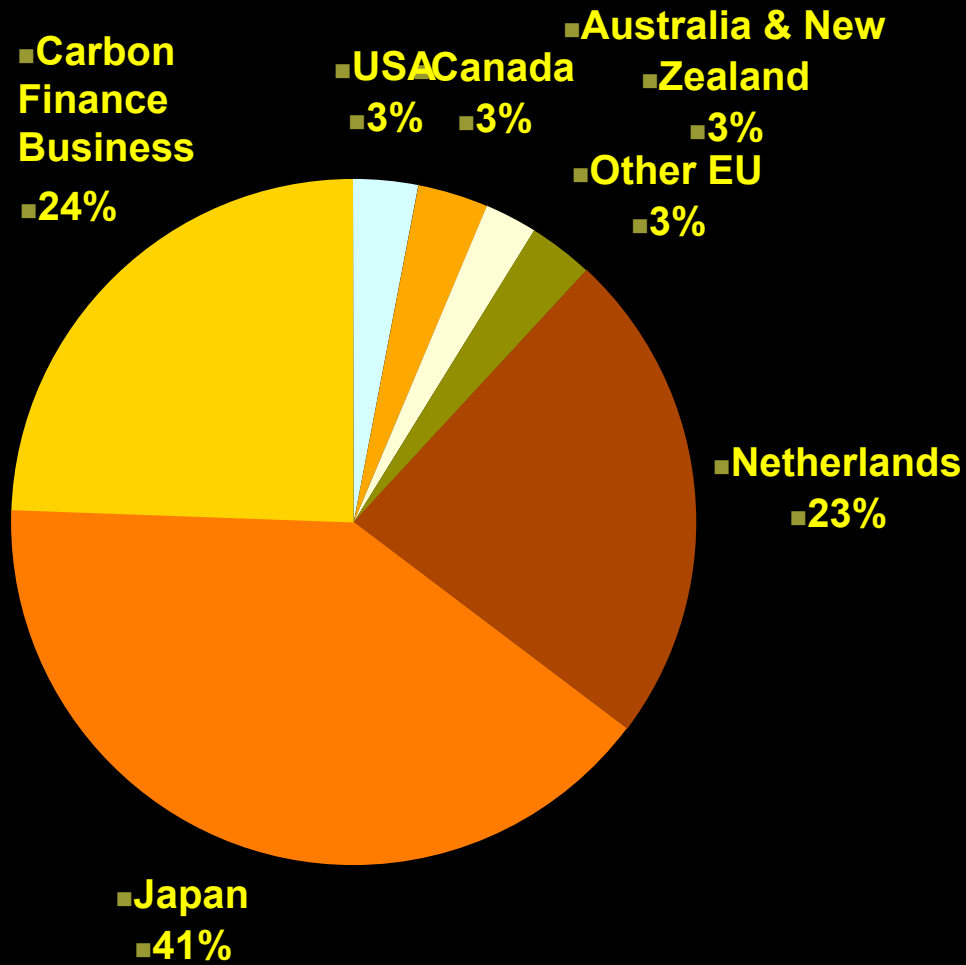
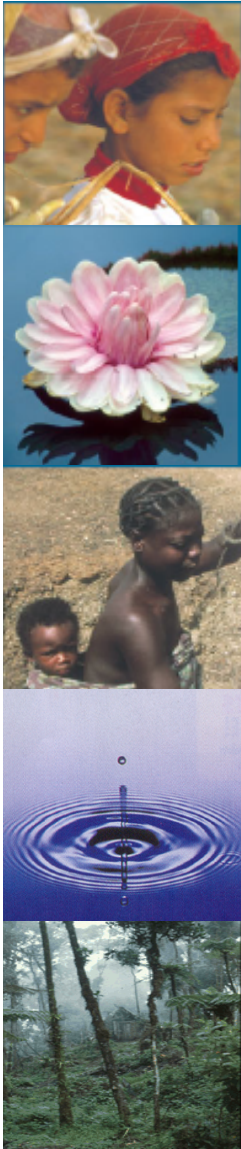
Main Seller: Asia

In percent of volume sold from end 2003 to May 2004

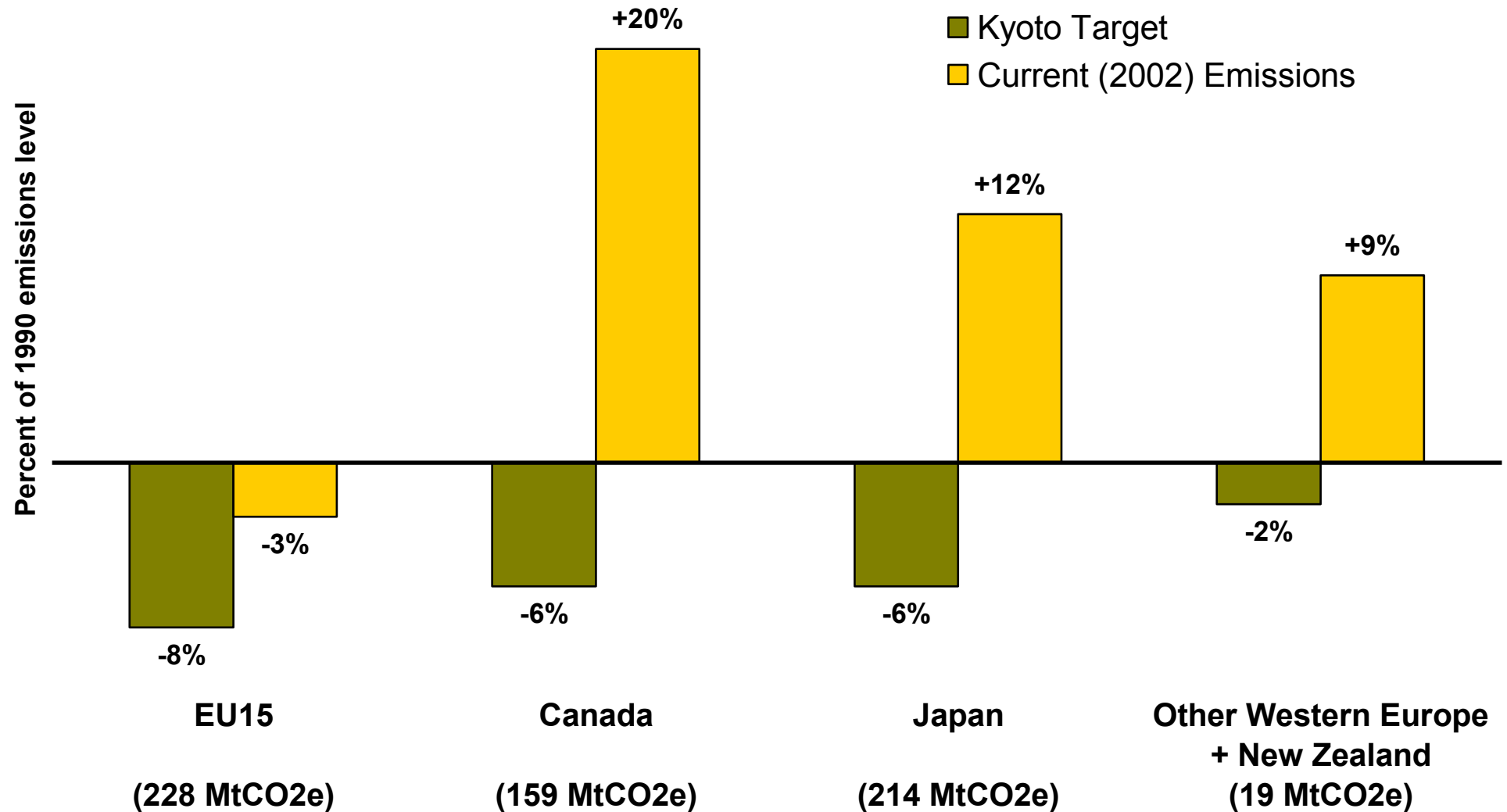


Main Buyers: Japanese Firms

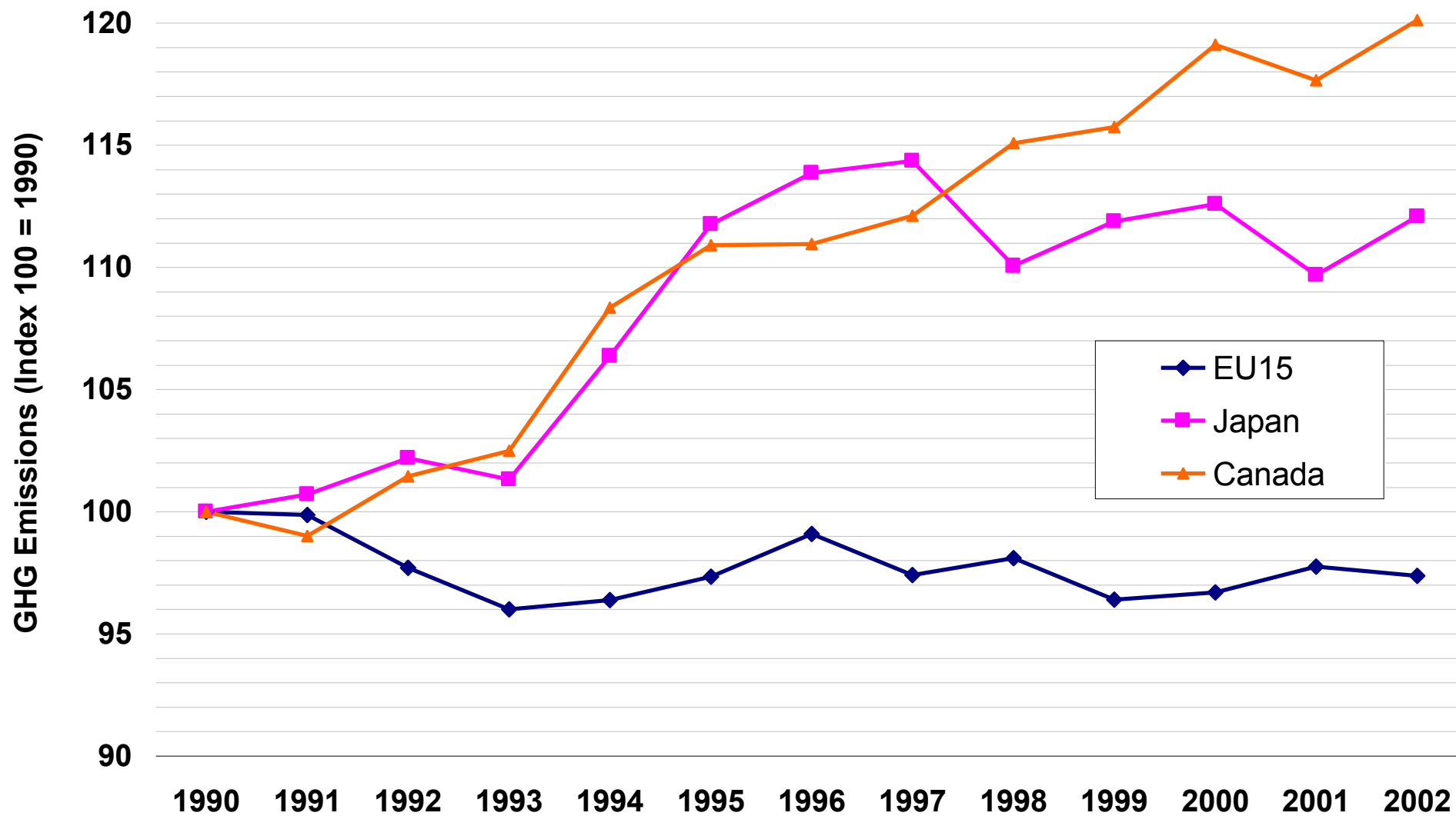
In percent of volume purchased since Jan.2003



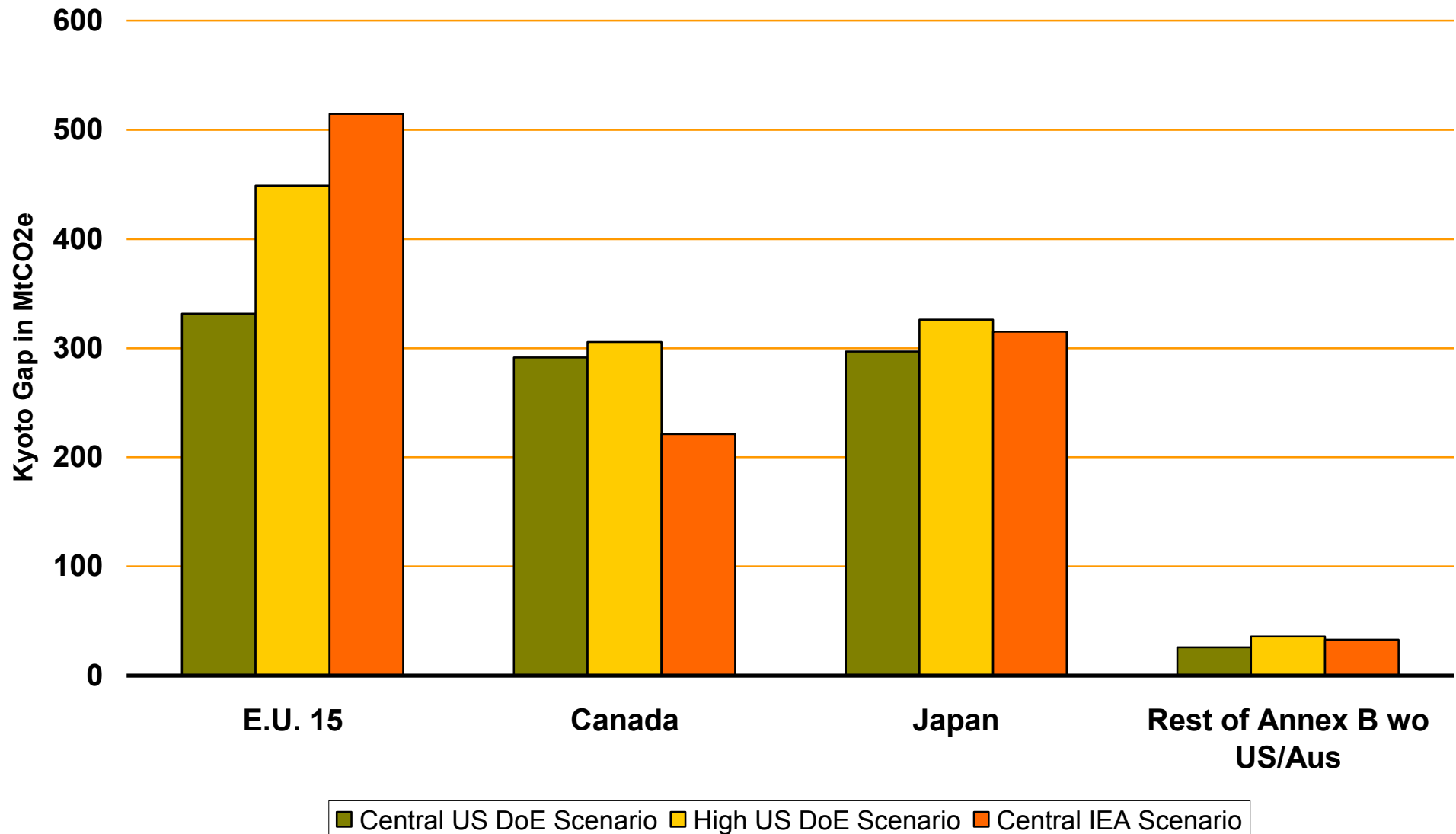
Current Kyoto gap of Annex II: 620 MtCO₂e



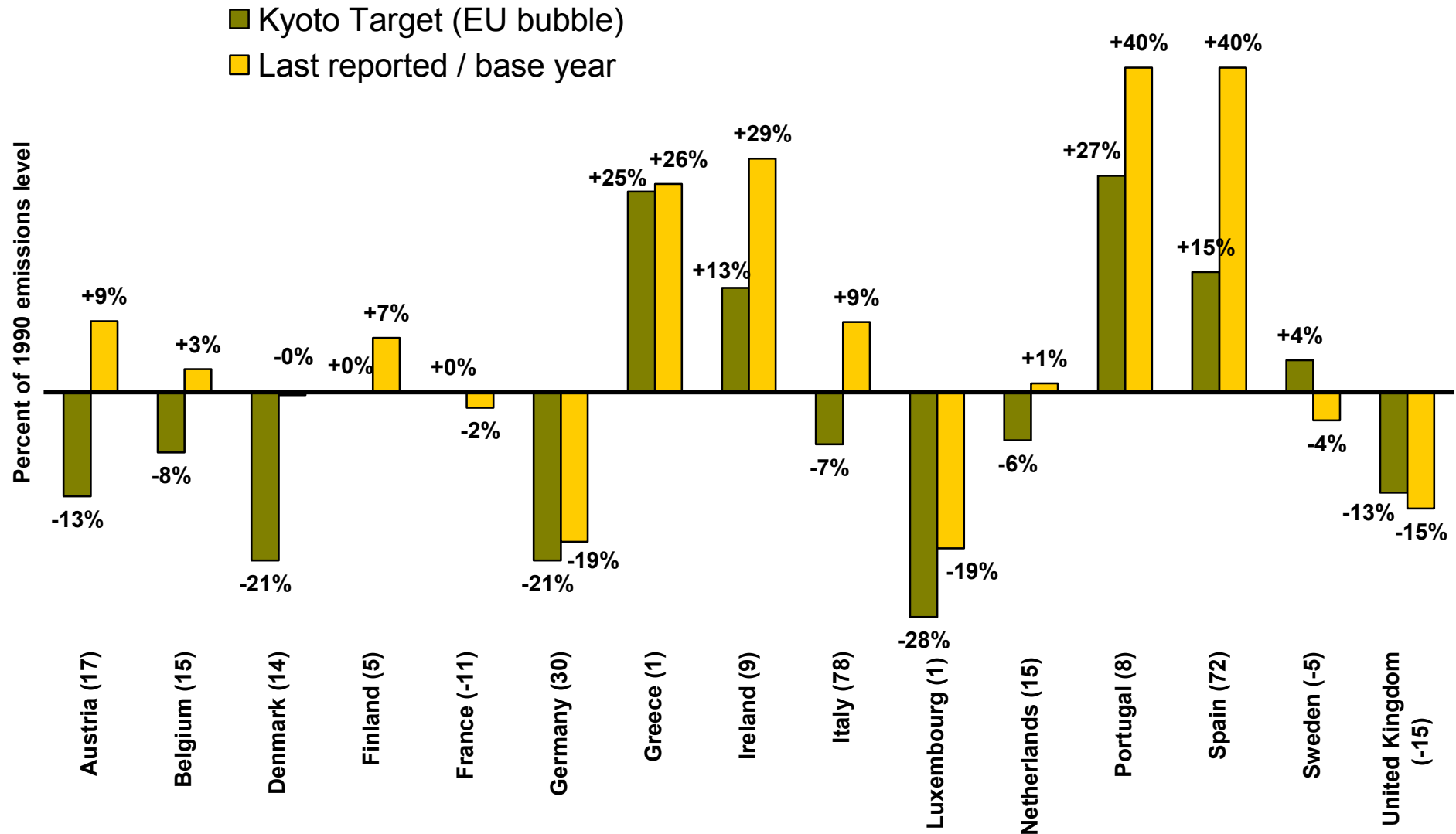
Emission Trends 1990-2002 in EU15, Japan and Canada



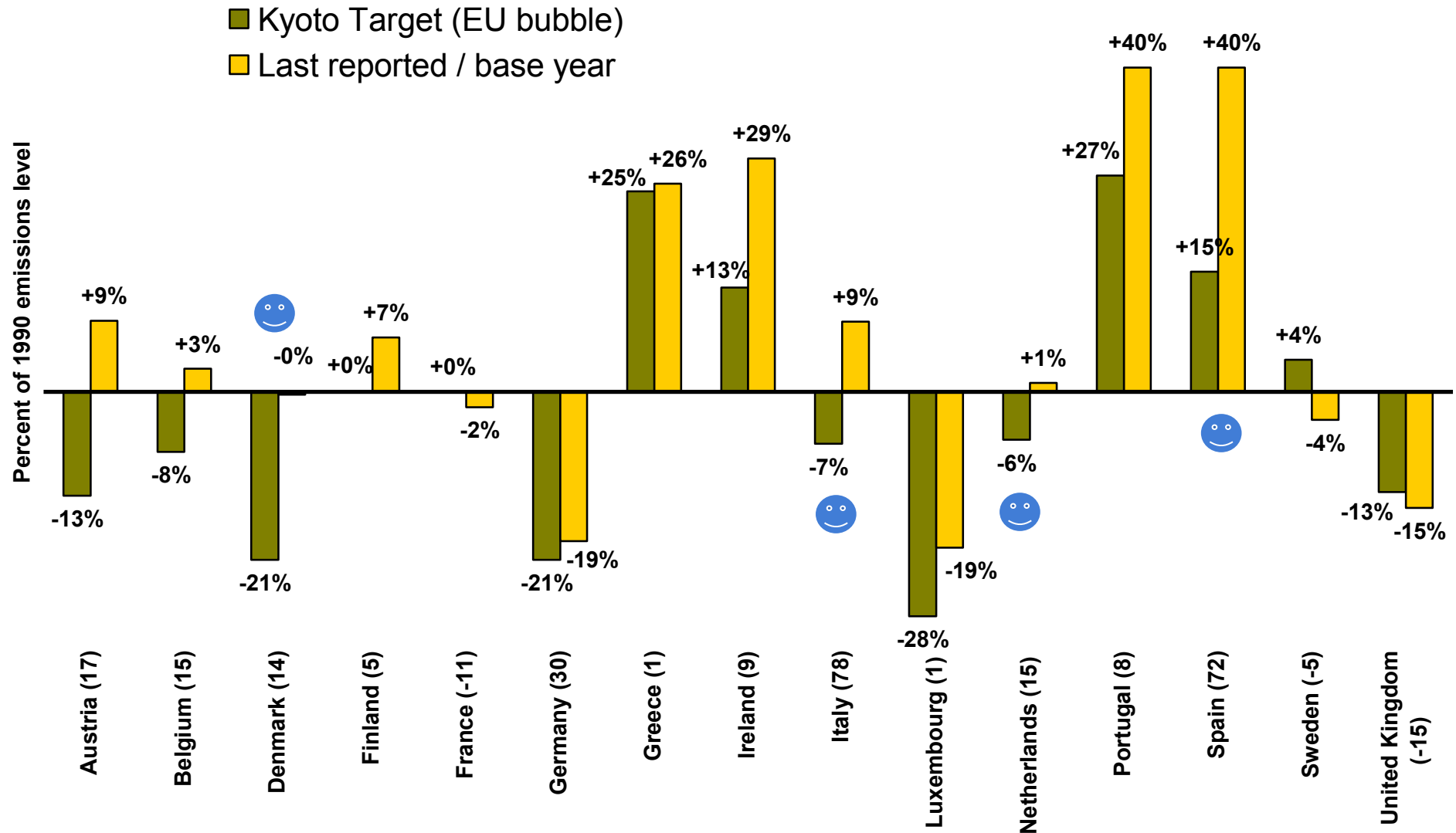
Projected Gap of Annex II: 945 – 1116 Mt/yr



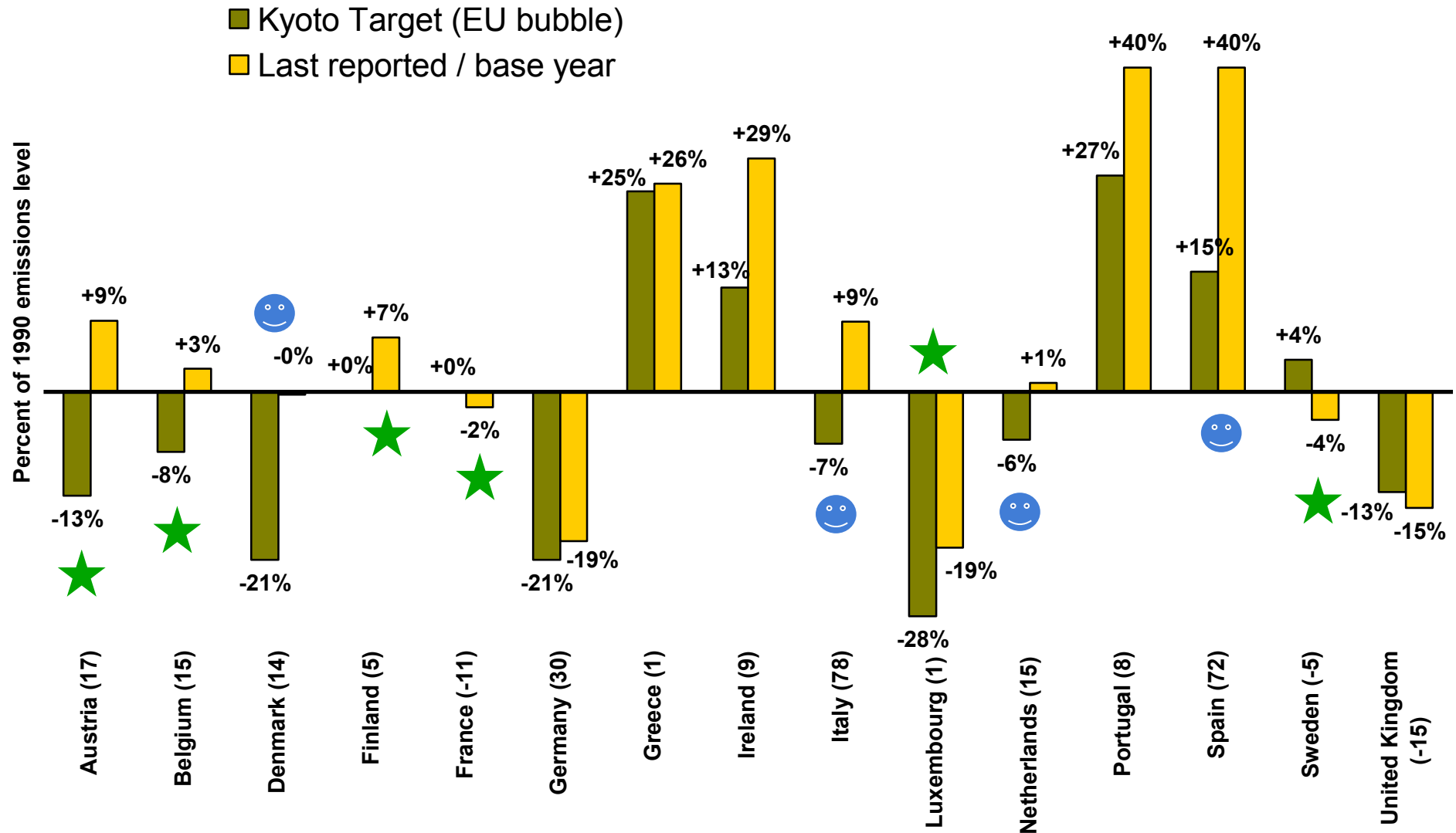
Current Kyoto gap of EU15: 228 MtCO₂e



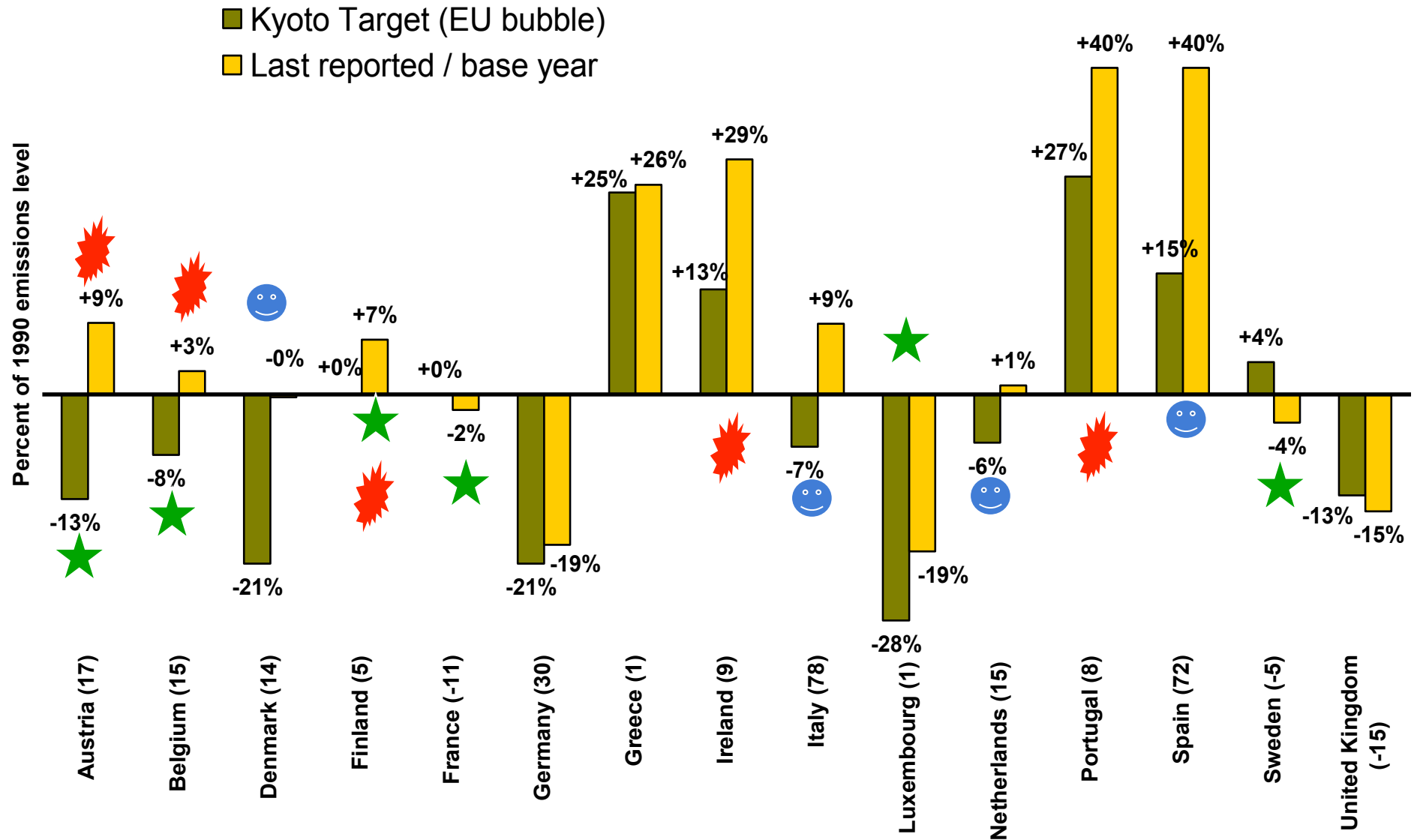
Current Kyoto gap of EU15: 228 MtCO₂e



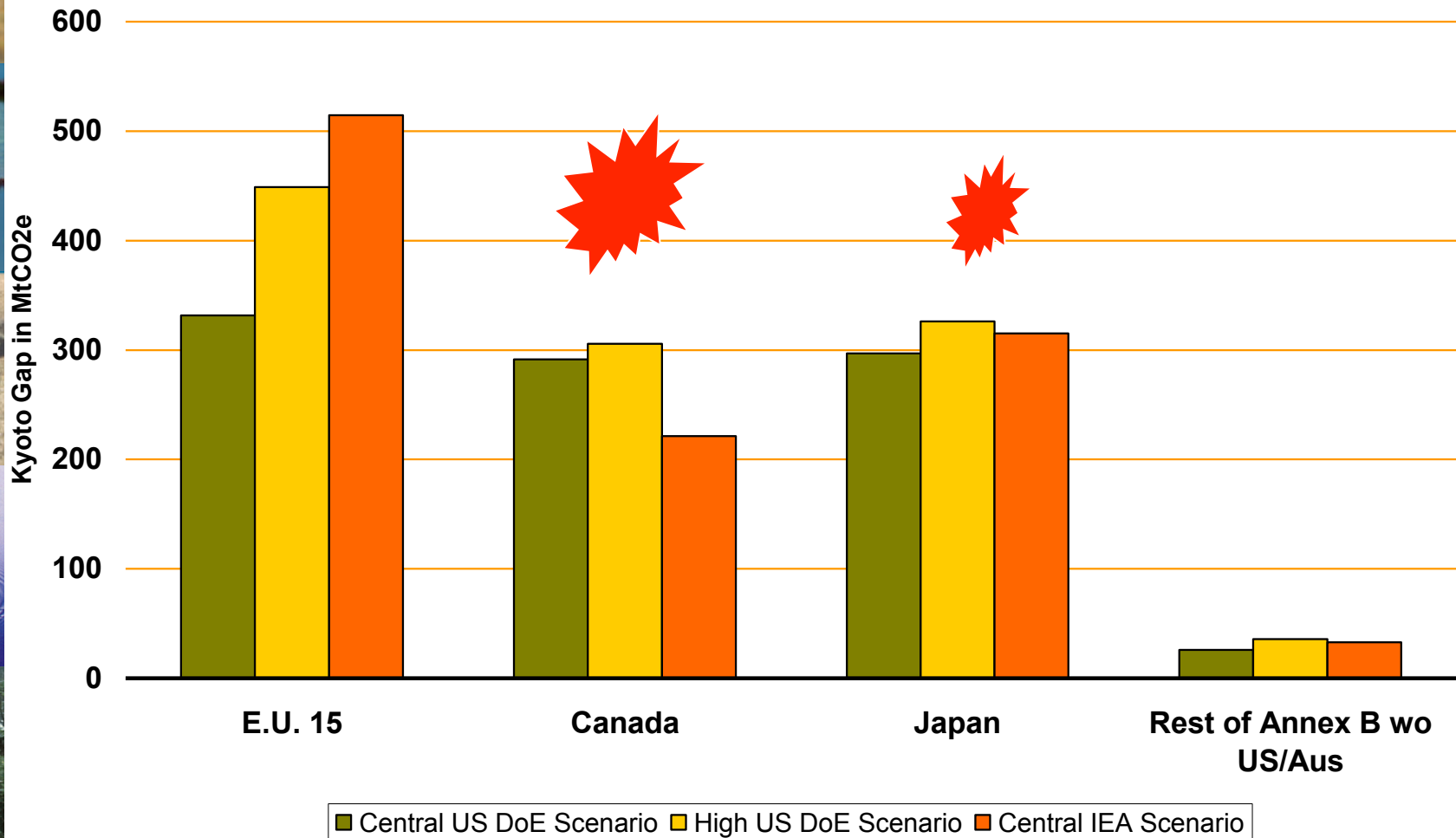
Current Kyoto gap of EU15: 228 MtCO₂e



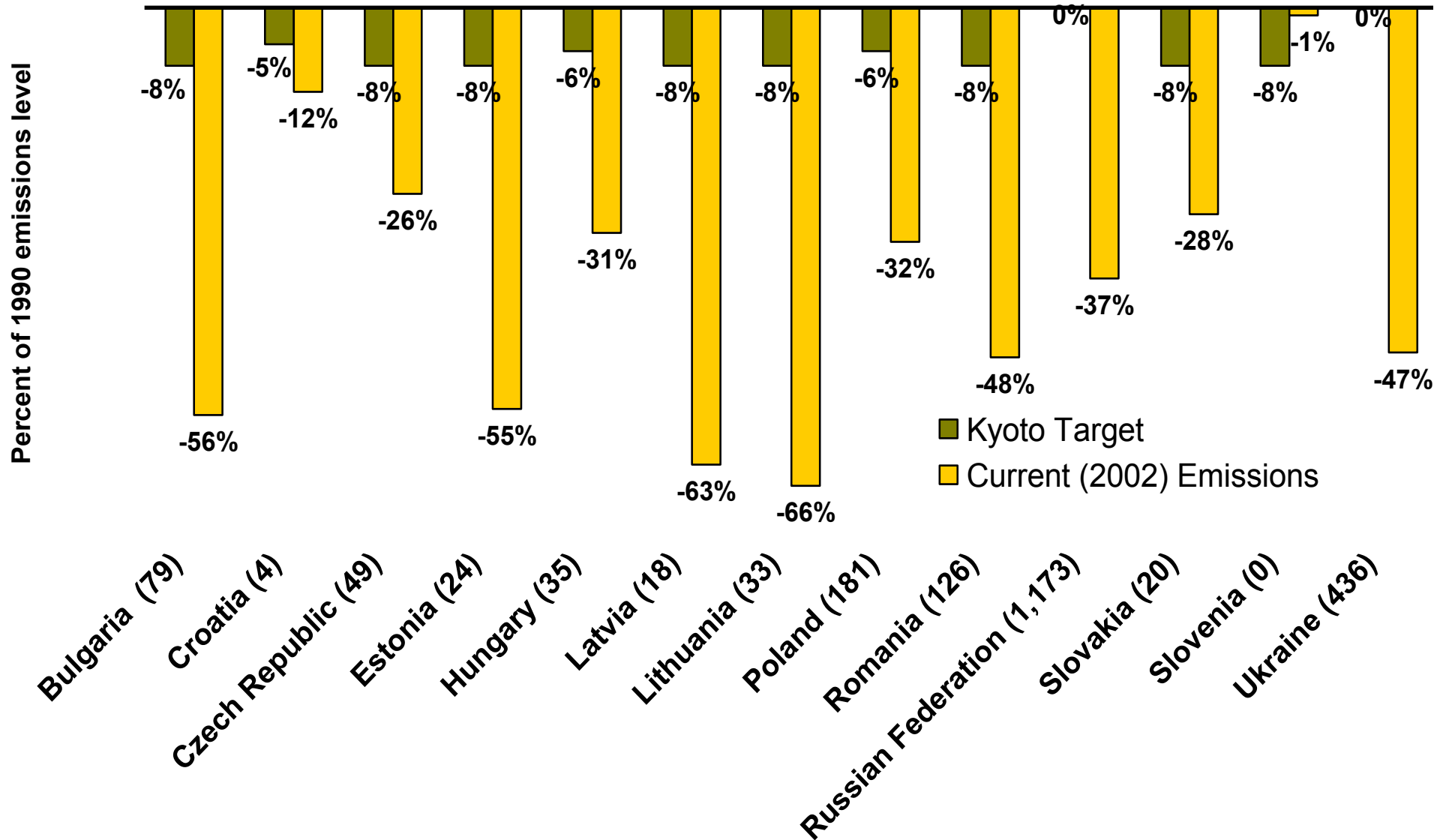
Current Kyoto gap of EU15: 228 MtCO₂e



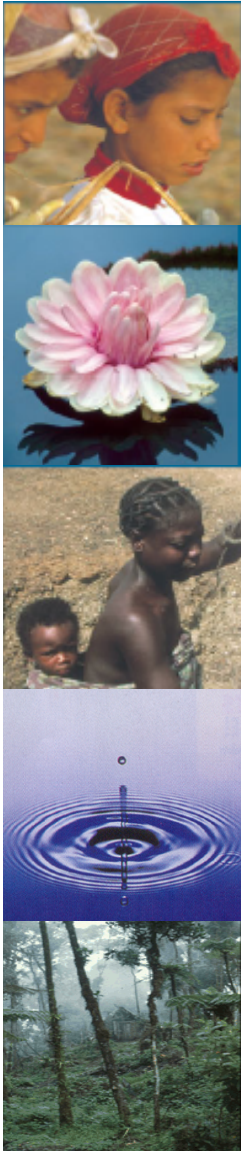
Projected Gap of Annex II: 945 – 1116 Mt/yr



Current Surplus of Transition Economies: 2,180 MtCO₂e

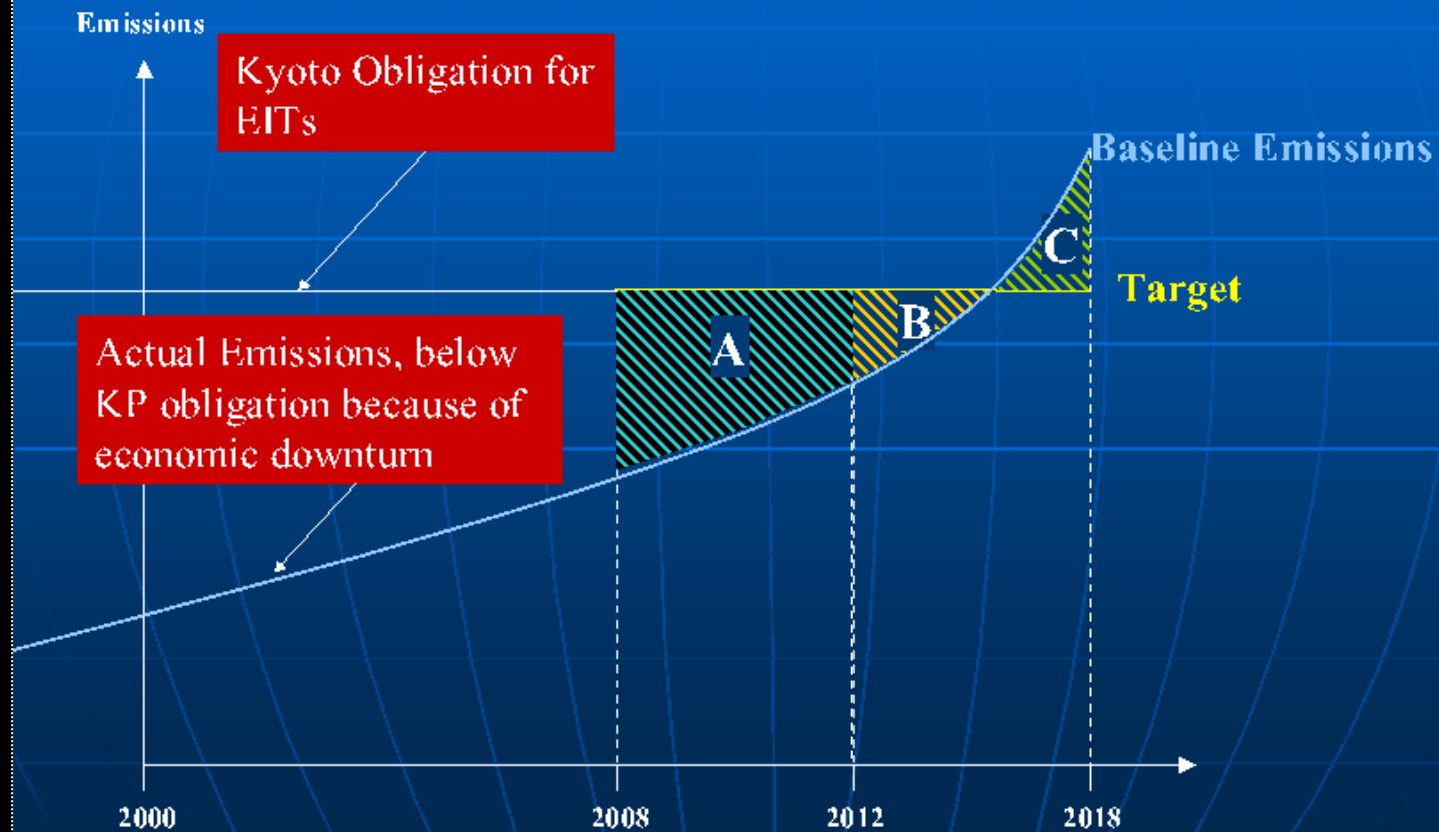


Explaining the Special Case of the Transition Economies



Baseline – EIT Hot Air

Hot Air, 1st Period: A
Hot Air, 2nd Period: B - C



OECD Compliance Gap



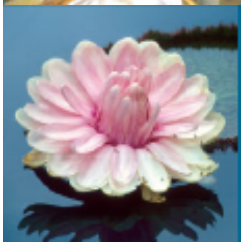
- Ratifying OECD cumulative target reductions will be **5-5.5 billion tons of carbon dioxide** below 1990 levels by 2012 based on their Kyoto obligations
- If half emissions reductions are achieved domestically the “compliance gap” to be met through trade with developing countries and transition economies through 2012 would be 2.5 billion tons – **10 times current carbon purchase contracts**
Current gap over domestic action suggests need for > 3 billion t/CO₂e
- Carbon is currently selling for about \$5 ton of carbon dioxide, but likely to increase to about \$10 ton
- At a selling price of \$5-\$10 per ton carbon payments to developing countries and EITs between now and 2012, **trade value will be between \$12.5 billion and \$25 billion**

Sources of Supply to fill the Compliance Gap



- Carbon contracts with developing countries (Clean Development Mechanism) today are <200 MT for 2012 delivery.
- **Its too late for conventional investment projects to more than double this amount.**
- Emissions trading with EITs (Assigned Amount Units) has to be **at least 2 billion tons** (the EITs have the potential to trade about 7 billion tons because their emissions are significantly below their allocation under the KP due to the economic downturn)
 - **“Greening” the AAUs to OECD Sovereign buyers will be essential** - implies about \$30 billion of new investment over the next 4-5 years
 - The balance of about **1 billion tons** will probably be made up of trades involving industrial gases: HFC-23 and N₂O (primarily with China – CDM) **where “greening” is also required**

Bank Carbon Finance Business Programs Representing Sellers



■ Economies in Transition and Greening of AAU Trade

- Green Investment Schemes designed for Bulgaria and planned for Czech and Slovak Republics and Latvia in collaboration with commercial banks
- Dialogue beginning with Russia and Ukraine

■ China Industrial Gases Greening

- Partnership with China to assure buyers of the sustainable development benefits of trade in HFC23 that is vital to supply of compliance grade carbon assets to ratifying OECD. Trade value is \$3 billion plus

■ Argentina – request for Bank assistance to develop and present high quality carbon assets to global market

- **20 developing countries** supported under CF-Assist to develop carbon assets for sale to others at/around Carbon Expo. Bank as buyer of last resort