SCHOOL OF TRANSNATIONAL GOVERNANCE

EU Climate Change Policy

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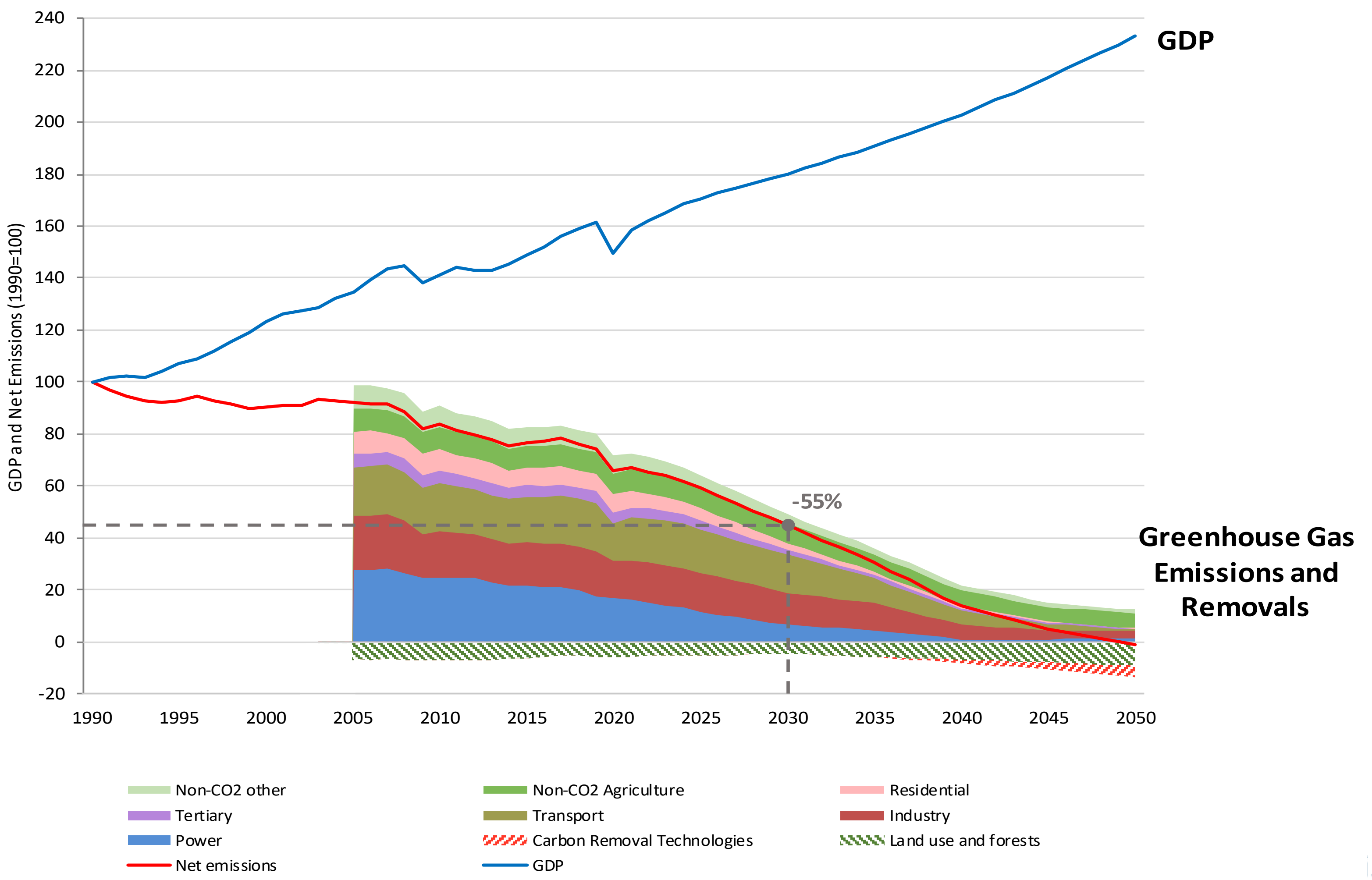
Europe’s International Climate Strategy

- **Today’s climate change is caused by Western industrialisation**
    - Tomorrow’s will be related to the industrialisation of the emerging economies:
    - Accumulated emissions amount to 2/3 or even 3/4 of the 2°C limit
- **Multilateral Approach**:
    - Paris Agreement includes policy action by ALL countries
    - Paris Agreement builds on UNFCCC (1992) and Kyoto Protocol (1997)
- **Europe as a laboratory for ‘low-carbon’ technologies and policies:**
    - Climate responsibility
    - Economic opportunity

De-coupling economic growth from emissions



EU Green Deal: Investment Challenge

- **€350bn additional** annual investment in 2021-2030 (compared to 2011-2020)

- **Energy**
  - Renewable: solar and wind
  - Grid
  - Digital, transport, construction (buildings)

- **Transport**
  - Electrification of car fleet

- **Construction**
  - Energy efficiency
  - Electrification of heating – heat pumps

- **Industry**:
  - Low-carbon innovation based on **hydrogen, CCUS, bio-chemicals**, …

EU Climate policy combines policy instruments

- **Market-based** approach: flexible and cost-effective
  - ETS: putting a price on carbon (since 2005)
  - Disclosure of climate/sustainable information by private companies and banks

- **Mandatory standards/benchmarks**: administratively more complex
  - Renewables
  - Energy efficiency
  - Fluorinated Gases
  - Car emissions
  - …

- **Governance**
  - Member State targets for non-ETS emissions: MRV (monitoring, reporting, verification)
  - National Energy and Climate Plans (including on Social Climate Fund)

EU target 2030: 55% domestic emission reduction (based on 1990)

Emissions Trading System

-61 %

(based on 2005)

Including: Power/Energy Sector and Industry, Aviation

limited flexibility

“Non-ETS”

ESR

-40 %

(based on 2005)

Including: road transport, buildings, waste, agriculture non-CO2

limited flexibility

LULUCF

"No-Debit"

1. Carbon pricing: EU ETS

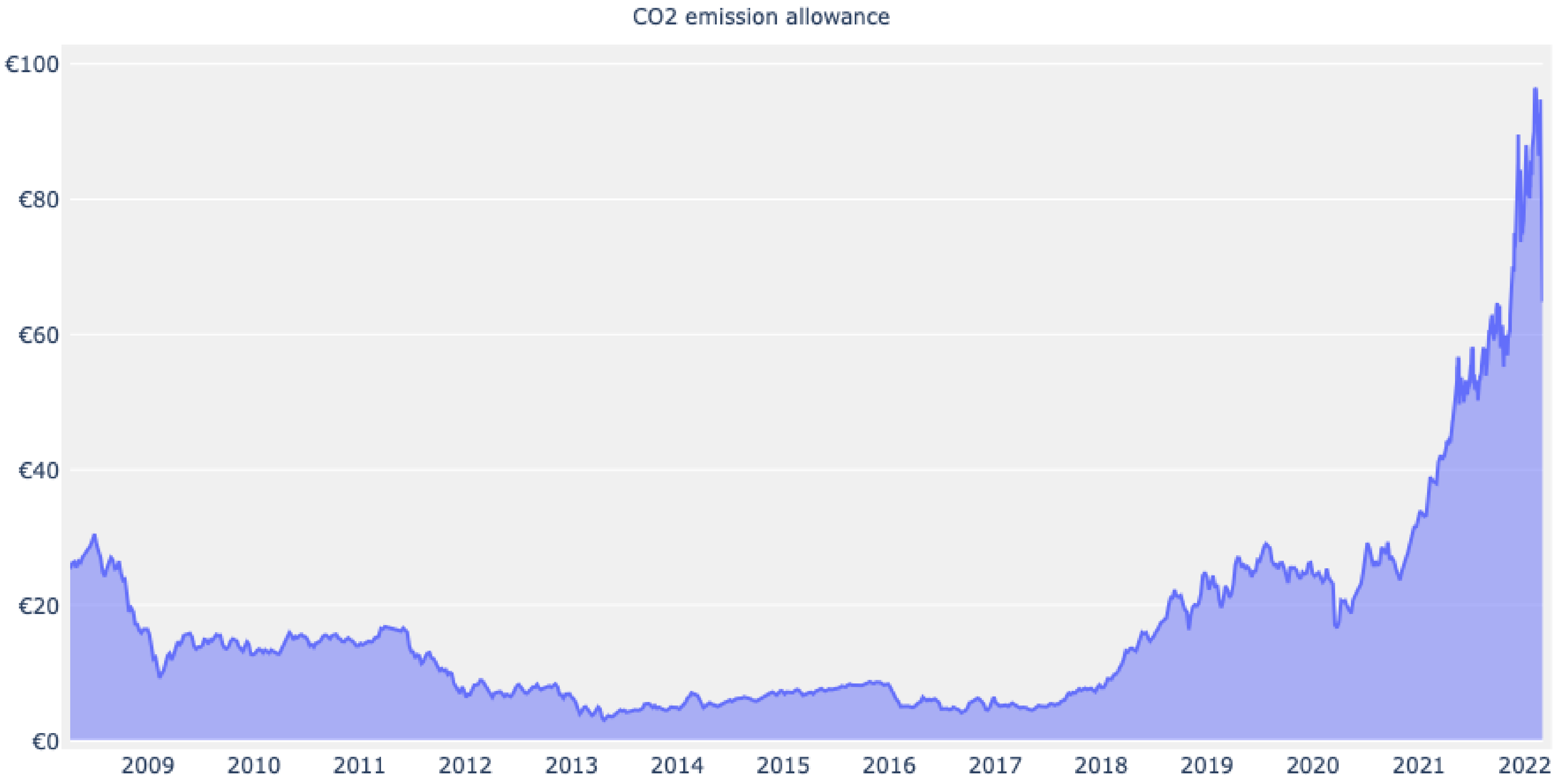
- **A price on carbon is key: W. Nordhaus** (Nobel prize Winner Economics 2018)
  - Either through taxes or through carbon market (P or Q approach)
  - EU tried a tax approach, and then switched to carbon market

- **ETS (Emissions Trading System) in place since 2005**
  - Covers more than 10.000 installations, i.e. more than 40% of EU's $CO2$ emissions
  - In power generation, manufacturing, and intra-EU aviation
  - Treats companies inside the EU in an identical manner through a 'waterbed' effect

- **Reduced emissions by 43% by 2021** compared to 2005
  - without reduced economic activity (decoupling)

- **Importance of Revenues**: almost 60% of allowances are auctioned
  - Today's annual revenues: roughly €50bn
  - To finance innovation and social concerns

EU ETS: prices range €60-€90 per tonne CO_2



EU ETS policy proposals

- **Carbon Price will remain significant**
  - Cap being strengthened from 43% to 61% reduction by 2030 (based on 2005)

- **Carbon Border Adjustment Mechanism (CBAM)** to prevent Carbon Leakage
  - Gradual phasing out of free allocation

- **Scope extension**:
  - Maritime, international aviation (CORSIA)

- **Separate (adjacent) ETS system for heating and transport fuels**:
  - Broadening the carbon price signal to the entire economy
  - Generating revenues for ‘Social Climate Fund’ i.a. to address fuel poverty
  - €72bn to be topped up by Member States to €144bn

EU CBAM Proposal by EU Commission

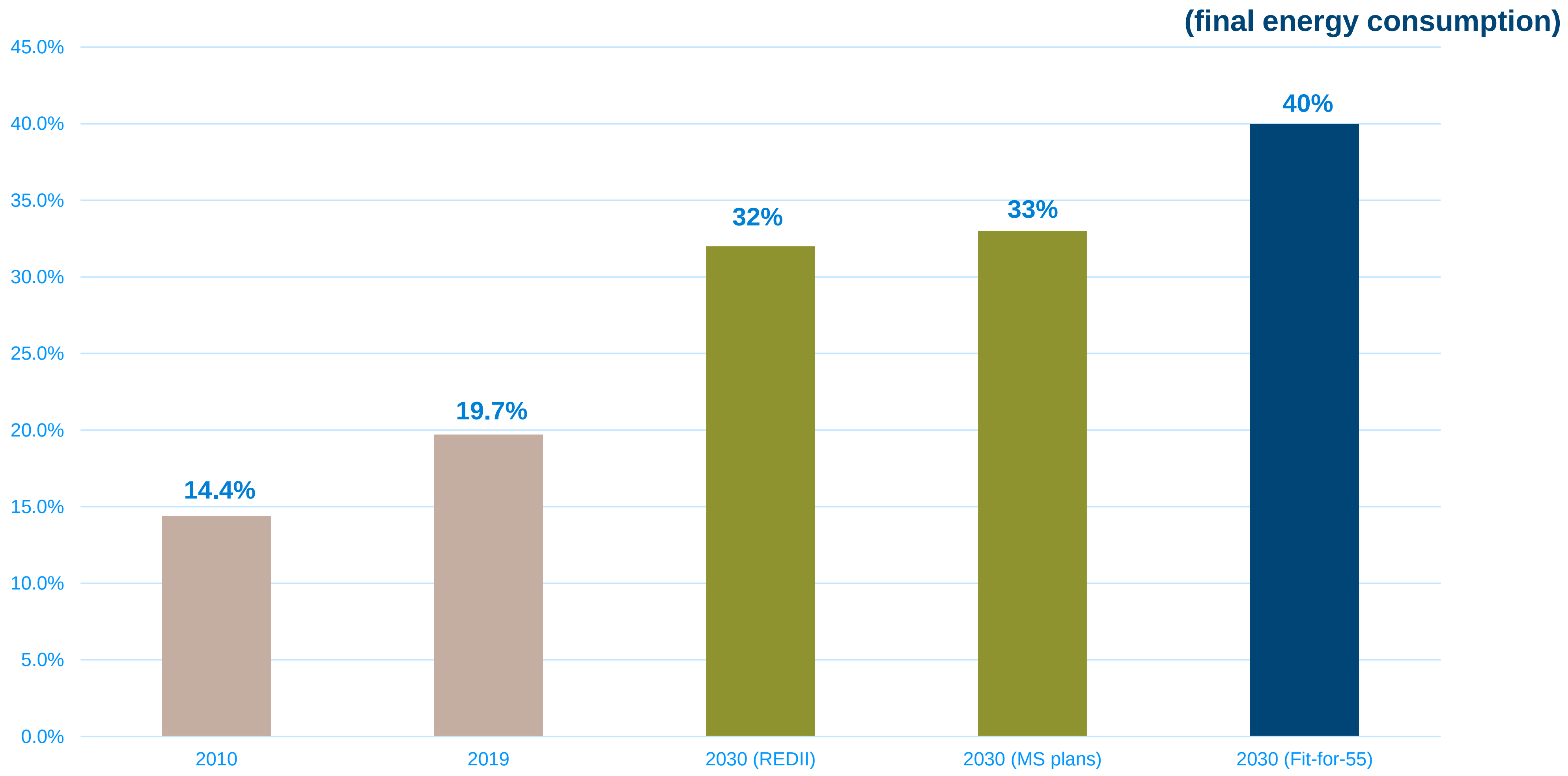
- **Mechanism**
  - Importers surrender CBAM certificates, priced weekly on basis of EUAs (notional ETS)
  - Based on actual emissions (and verified) – options for default values still available
  - No export rebates envisaged
- **Sectorial scope**
  - 6 sectors initially – cement, steel, electricity, aluminium, fertilizers & some chemicals (nitric acid, ammonia, nitrates of potassium)
  - Includes simple goods (e.g. clinker) and more complex (e.g. pipes, tubes, rails)
- **Emissions scope**
  - Only direct emissions (scope 1) covered
  - Emissions from electricity and heat (scope 2) may be considered in a future review (by end 2025)

- **Free allocation**
  - Gradual reduction with CBAM implementation
  - 10-year transition from 100% in 2025 to 0% in 2035 in covered sectors
  - CBAM applies to emissions above the free allocation handed out – methodology to be set out by EC

- **Policy crediting**
  - Only explicit carbon pricing policies in the exporting country to be considered
  - Prices of these policies to be deducted from the CBAM charges

- **Timing**
  - “Pilot” or “transitional” phase in the period 2023-2025 – mostly reporting (quarterly) and data gathering, no payments to be collected
  - By end 2025 review by EC and possible proposals on extending scope (indirect emissions and other goods)
  - Full implementation of CBAM from 2026

2. Renewable energy: 40% by 2030



EU energy mix (hotly debated in context of Ukraine crisis)

- **By 2030:**
  - Renewable energy (mostly solar and wind) increases spectacularly
  - Coal becomes marginal
  - Nuclear remains stable
  - Oil and natural gas remain significant
- **By 2050:**
  - Oil and gas decline: imports decrease with 60-80% (compared to 2015)
  - Continued growth of renewables; breakthrough in energy storage and digital technology facilitating decentralized production
- Steady **increase in energy efficiency and electricity use**
  - In heating, industry, transport (EV's)

3. EU Sustainable Finance

- **Taxonomy** Regulation: which activities are 'green'?

- **Sustainable Finance Disclosure Regulation** (SFDR): for all financial companies

- **Corporate Social Reporting Directive** (CSRD): applicable to all major companies (50000)
  - Sustainability information that investors and other stakeholders need
  - Follow-up to Non-Financial Reporting Directive (NFRD) since 2018

Conclusions

1. **A market-based approach allows for a cost-efficient strategy**
    - Carbon Pricing through ETS
    - Mandatory disclosure of sustainable and climate risks by companies
        - Financial sector and Industrial corporations

2. **The EU Green Deal is a massive investment program**
    - Support by EU budget, NextGenEU, EU ETS revenues
    - Innovation and Modernisation Fund: deployment of low-carbon investment
    - Social and Just Transition Funds: dealing with energy poverty

3. **Energy is key: less use of fossil fuels**
    - Renewables, storage, dealing with increasing flexibility (digital)
    - Energy efficiency: accelerate renovation rate of existing buildings

Thanks and …. more to read

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