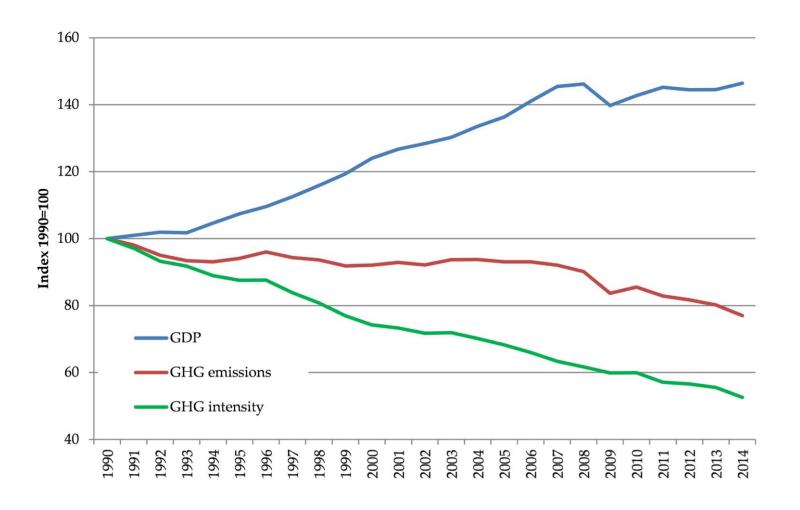
## European Union and the Paris Agreement

Miranda A Schreurs
Technical University of Munich

 European Union reduced GHGs by 22% between 1990 and 2017 while the economy grew by 58%

 But emissions grew by 0.6% between 2016 and 2017 Changes in GDP (in real terms), GHG emissions, and emissions intensity of the economy (ratio between emissions and GDP) Index (1990 = 100)



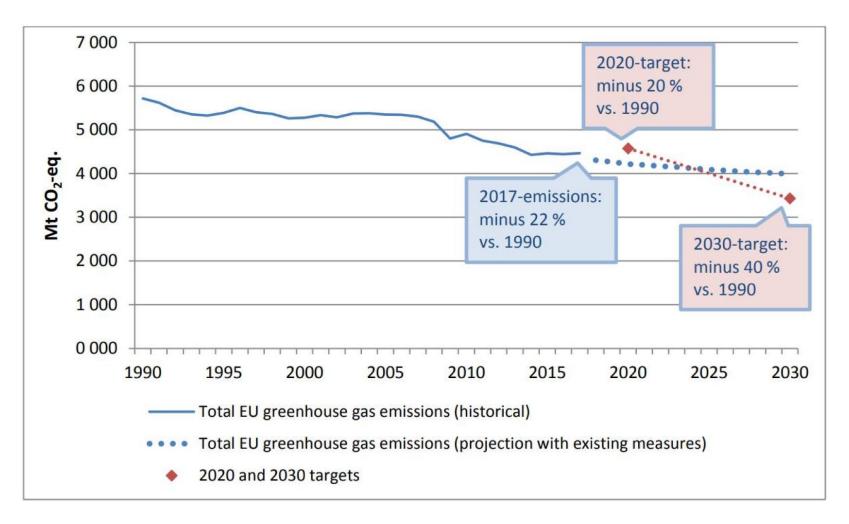
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:716:FIN

#### EU 2030 Targets (old → new)

- 40% reduction compared to 1990
- 27% → 32% renewals in final energy
- 27% → 32.5% energy efficiency

(if fully implemented, this would cut emissions by about 45%; with current policies projection is 30% cut)

### Current versus Needed Policies for 2030 Goals



https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2018:716:FIN

#### **EU Emissions**

- Emissions have decreased by about 3% in the last 4 years...
- But transport emissions have increased by about 7% from 2013 (to 2017)
- Aviation emissions grew by 4.5% 2016 to 2017

 2017 20% of the EU budget was spent on climate change

#### **Energy Union**

 Member states agreed to prepare national climate and energy plans for 2021-2030, which are to be reviewed every two years

Long term strategies to cover the next 30 years are also to be produced

# German Commission on Growth, Structural Change and Employment (Coal Commission)

- 28 member body: representatives from industry, trade unions, environmental groups, academia
- Coal capacity 45GW
- Coal to be phased out by 2038 (or sooner). Phase out by 2035 possible if security of supply and industry allow
- State of progress to be reviewed in 2023, 2026, 2029

#### **Targets**

- 12.5 GW to be disconnected by 2022 (about 24 larger coal units). In 2030, 9 GW brown coal still to be allowed on the network
- North Rhine-Westphalia, Brandenburg, Saxony, and Saxony-Anhalt are to receive Euro 1.3 Billion per year for help in converting their industry, plus 700 million per year not linked to projects
- Key point plan to be released in April
- 1.5 billion through 2021 for transportation
- Electricity price compensation for heavy industrial users through 2030

#### Germany: Climate Protection Law

- To be formulated this year
- Aim is to set targets for specific sectors