



Bundesministerium  
für Umwelt, Naturschutz,  
Bau und Reaktorsicherheit

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# CLIMATE ACTION PLAN 2050

PRINCIPLES AND GOALS OF THE  
GERMAN GOVERNMENT'S  
CLIMATE POLICY





## "... *IN THE LIGHT OF PARIS*"

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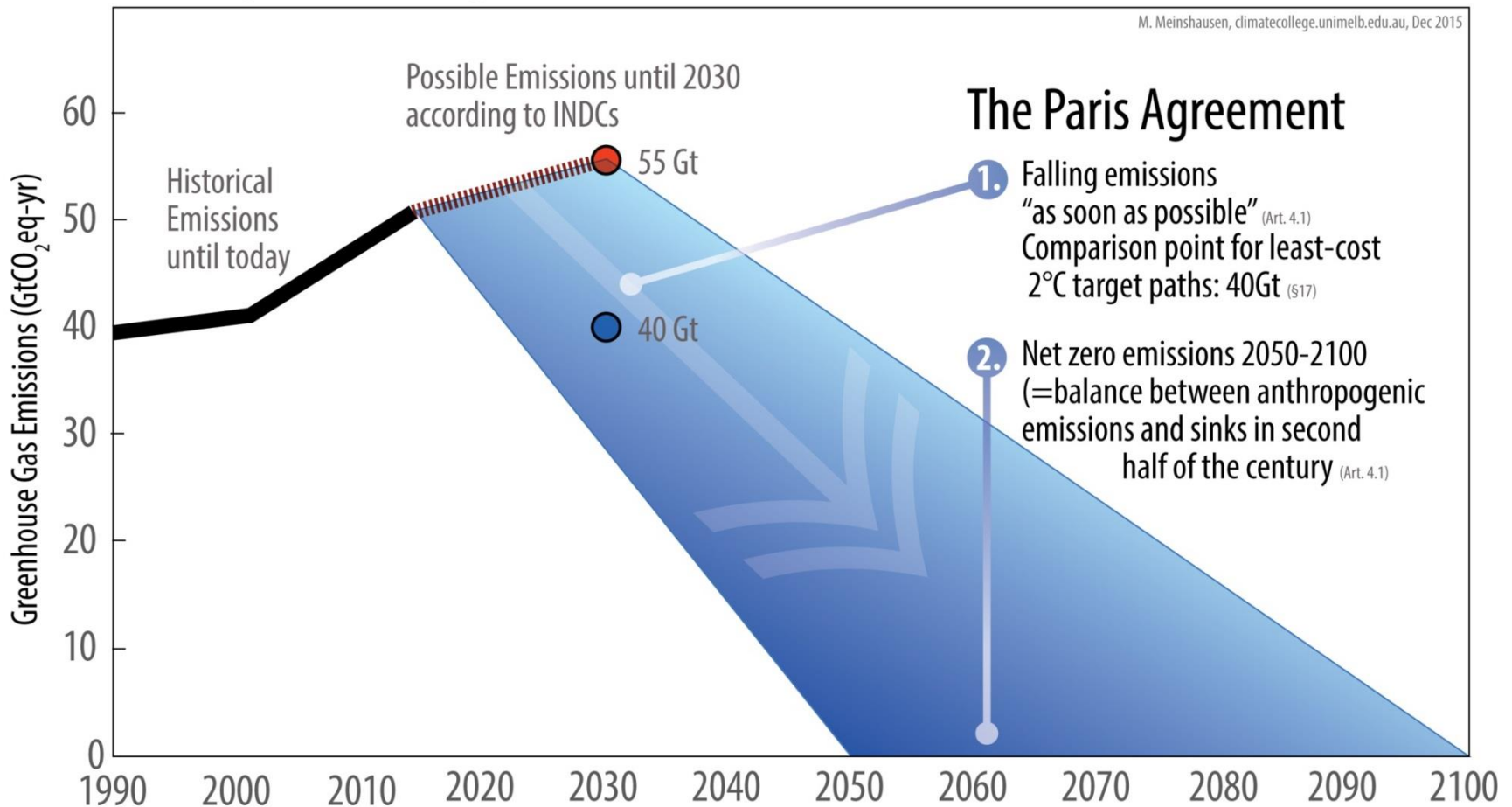
### Paris Agreement of December 2015 – a milestone for international climate action

- **New architecture** of international climate policy
- Clear direction: **net zero greenhouse gas emissions** in the course of this **century**
- **Binding 2 degree limit**
- Efforts geared towards **1.5 degrees**
- **Mechanism for raising ambition** every five years
- Transparent **reporting** and **review**
- Developed countries to take **leading role** in reduction and **climate finance**





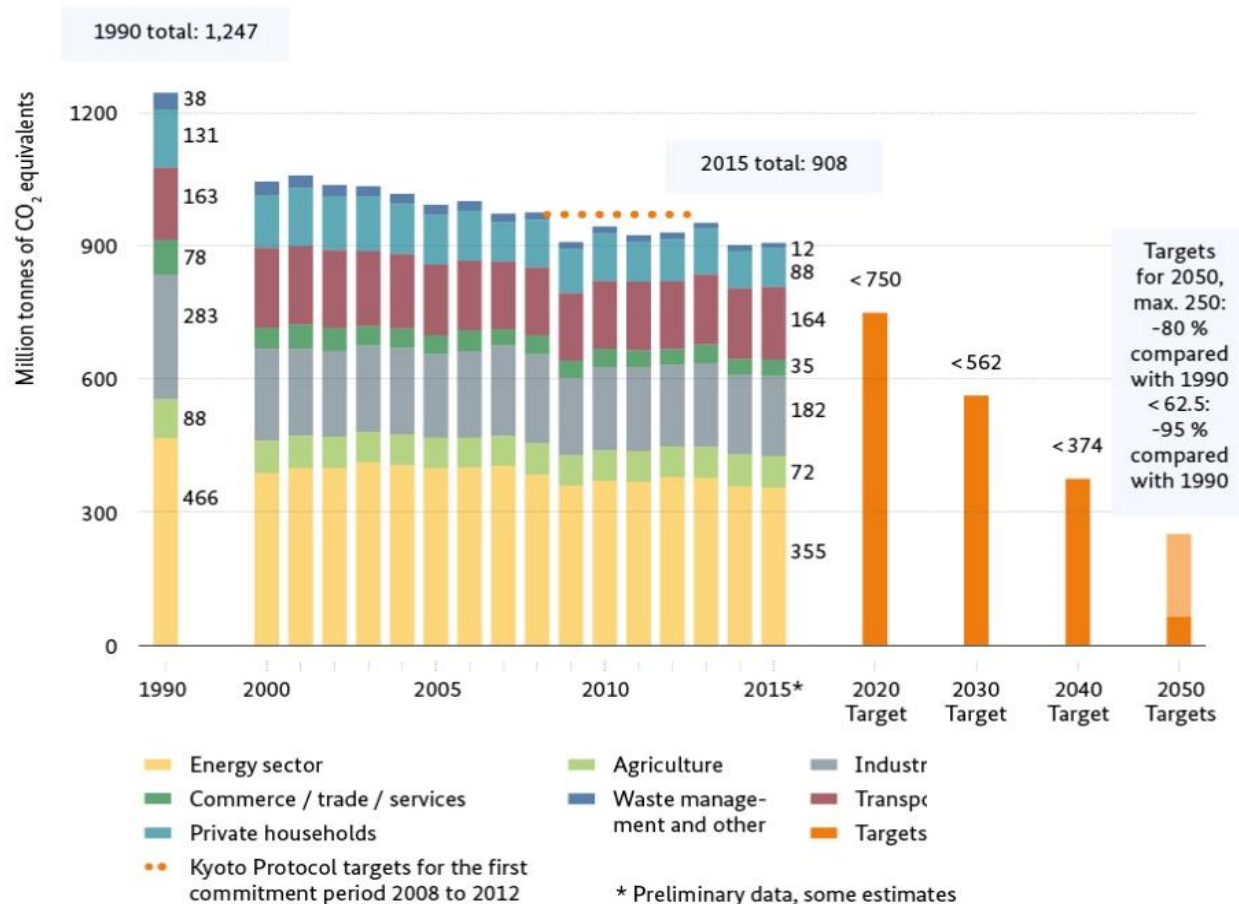
## Global greenhouse gas emissions



Source: M. Meinshausen



# DEVELOPMENT OF GHG EMISSIONS





# PATH TO THE CLIMATE ACTION PLAN 2050

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# GUIDING PRINCIPLE 2050 (I)

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- **Overall**: extensive greenhouse gas neutrality by mid-century
- Almost fully decarbonised **energy** generation
- Climate-neutral **building** stock
- **Transport** system virtually independent of fossil fuels



## GUIDING PRINCIPLE 2050 (II)

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- **Industry:** high-efficiency strategy to reduce energy and resource consumption
- **Agriculture:** under current conditions, not possible to avoid emissions completely by 2050, but significant further reductions after 2030 too



# EMISSIONS IN THE INDIVIDUAL SECTORS

Area of action	1990 (absolute, in mil t CO <sub>2</sub> equiv.) – actual emissions	2014 (absolute, in mil t CO <sub>2</sub> equiv.) – actual emissions	2030 (absolute, in mil t CO <sub>2</sub> equiv.) – target	2030 (reduction in percent as compared to base year 1990)
Energy sector	466	358	175 – 183	62 – 61 %
Buildings	209	119	70 – 72	67 – 66 %
Transport	163	160	95 – 98	42 – 40 %
Industry	283	181	140 – 143	51 – 49 %
Agriculture	88	72	58 – 61	34 – 31 %
Other	39	12	5	87%
<b>Total</b>	<b>1248</b>	<b>902</b>	<b>543 – 562</b>	<b>56 – 55 %</b>





# STRATEGIC MEASURES (SELECTION)

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## Energy sector:

- Commission for growth, structural change and regional development; mix of instruments targeting economic development, structural change and climate action by end of 2018

## Buildings:

- Road map towards almost climate neutral building stock, gradual further development of energy standards for new buildings and refurbishment of existing stock; focusing support for heating systems on renewable energies



# STRATEGIC MEASURES (II)

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## Transport:

- Climate action strategy for road transport addressing emissions from passenger vehicles, light and heavy commercial vehicles; GHG-free energy supply, infrastructure and interlinking of sectors

## Industry:

- Research and development programme aimed at reducing GHG emissions from industrial processes, directed towards the goal of greenhouse gas neutrality



# STRATEGIC MEASURES (III)

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## Agriculture:

- Consistent enforcement of fertilizer legislation, in cooperation with the Länder; aiming to reach target value of 70 kg N per hectare between 2028 and 2032

## Land use and forestry:

- Preservation and improvement of carbon sinks in forests, expansion of forest cover; greater focus on the funding area "forests" contained in the Joint Task for the Improvement of Agricultural Structures and Coastal Protection



# STRATEGIC MEASURES (IV)

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## Overarching measures:

- Reviewing potential for gradually further developing tax system as a way of helping achieve 2050 climate targets
- Strengthening economic incentives for consumers to steer them towards sustainable production and consumption patterns
- Reviewing climate-damaging impacts of various taxes



# ECONOMIC ASSESSMENT

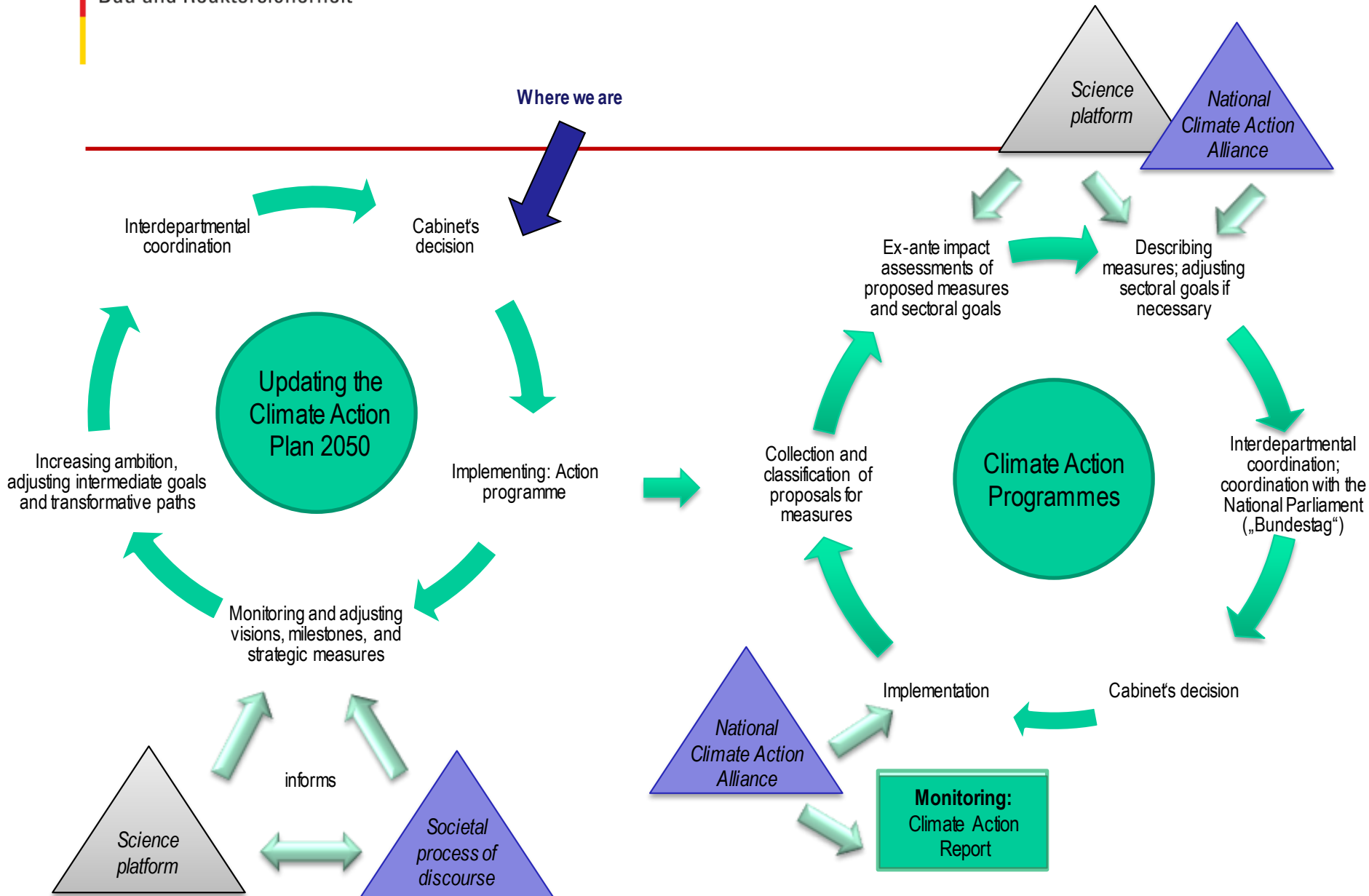
- Ambitious climate strategy as a combination of efficiency policy, electricity from renewables and product innovation is a no-regret strategy which would pay off for Germany in the long-term.
- The resulting employment gains would mainly be in the construction, transport and energy sectors.

Macroeconomic effects in climate action scenario (56% GHG reduction by 2030):

	2030	2050
	Change vs reference	
<b>GDP</b>	<b>+2.7 %</b> (+ 76.8 bn € <sub>2010</sub> )	<b>+4.4 %</b> (+150 bn € <sub>2010</sub> )
<b>Employment</b>	<b>+ 1.9 %</b> (ca. 600,000 jobs)	<b>+ 1.3 %</b> (ca. 500,000 jobs)



# LEARNING PROCESS





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THANK YOU FOR YOUR ATTENTION

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