



Bundesministerium
für Umwelt, Naturschutz,
Bau und Reaktorsicherheit

CLIMATE ACTION PLAN 2050

PRINCIPLES AND GOALS OF THE GERMAN GOVERNMENT'S CLIMATE POLICY

by

Division KI I 1: Strategic Aspects of Climate
Policy, Climate Action Plan

Federal Ministry for the Environment, Nature Conservation,
Building and Nuclear Safety

8.12.2016

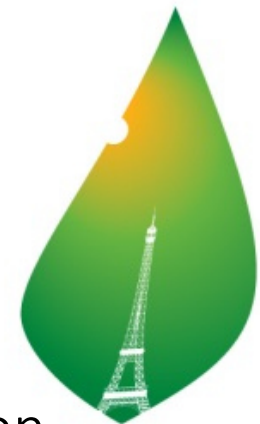




"... IN THE LIGHT OF PARIS"

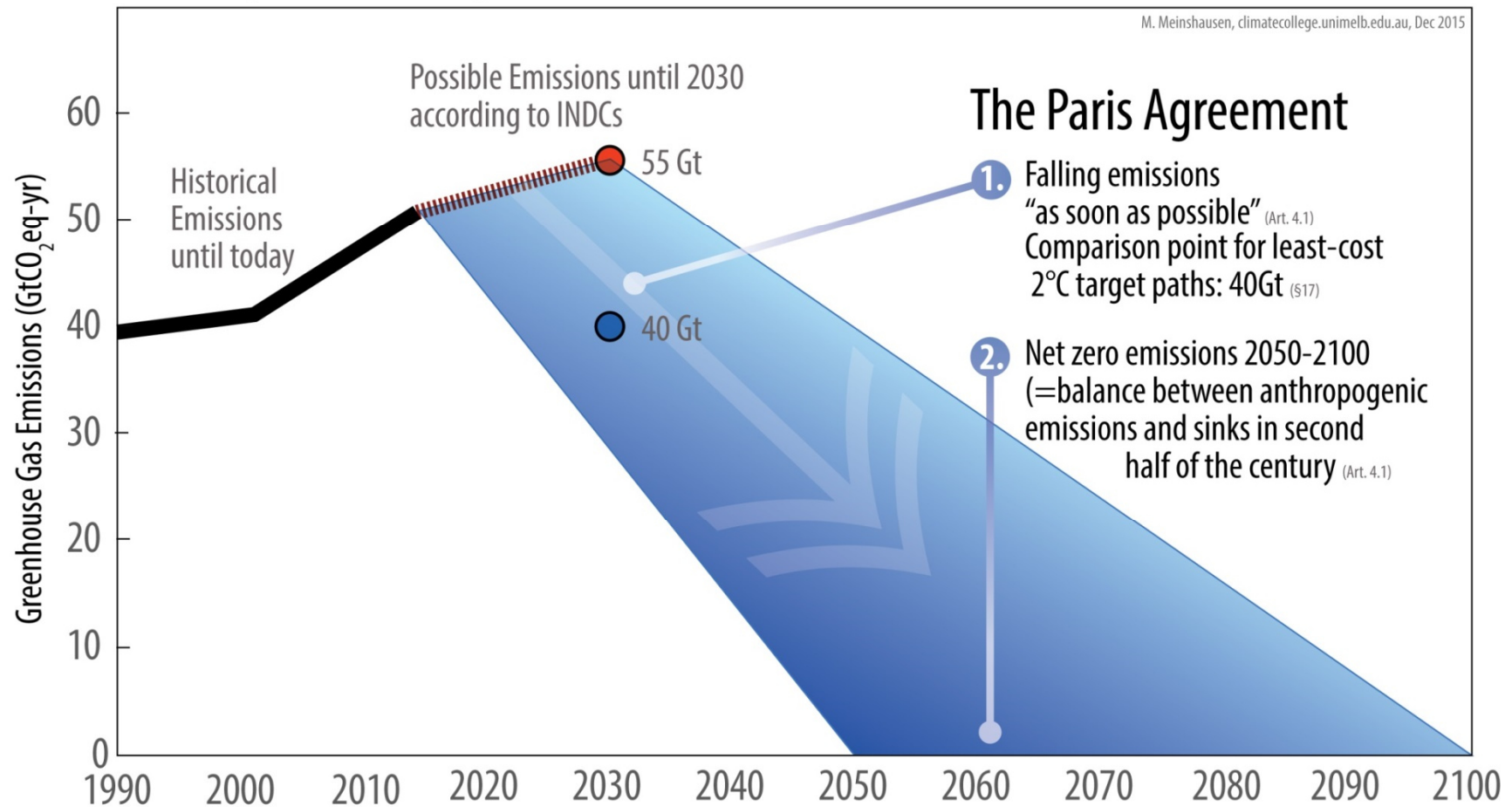
Paris Agreement of December 2015 – a milestone for international climate action

- 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

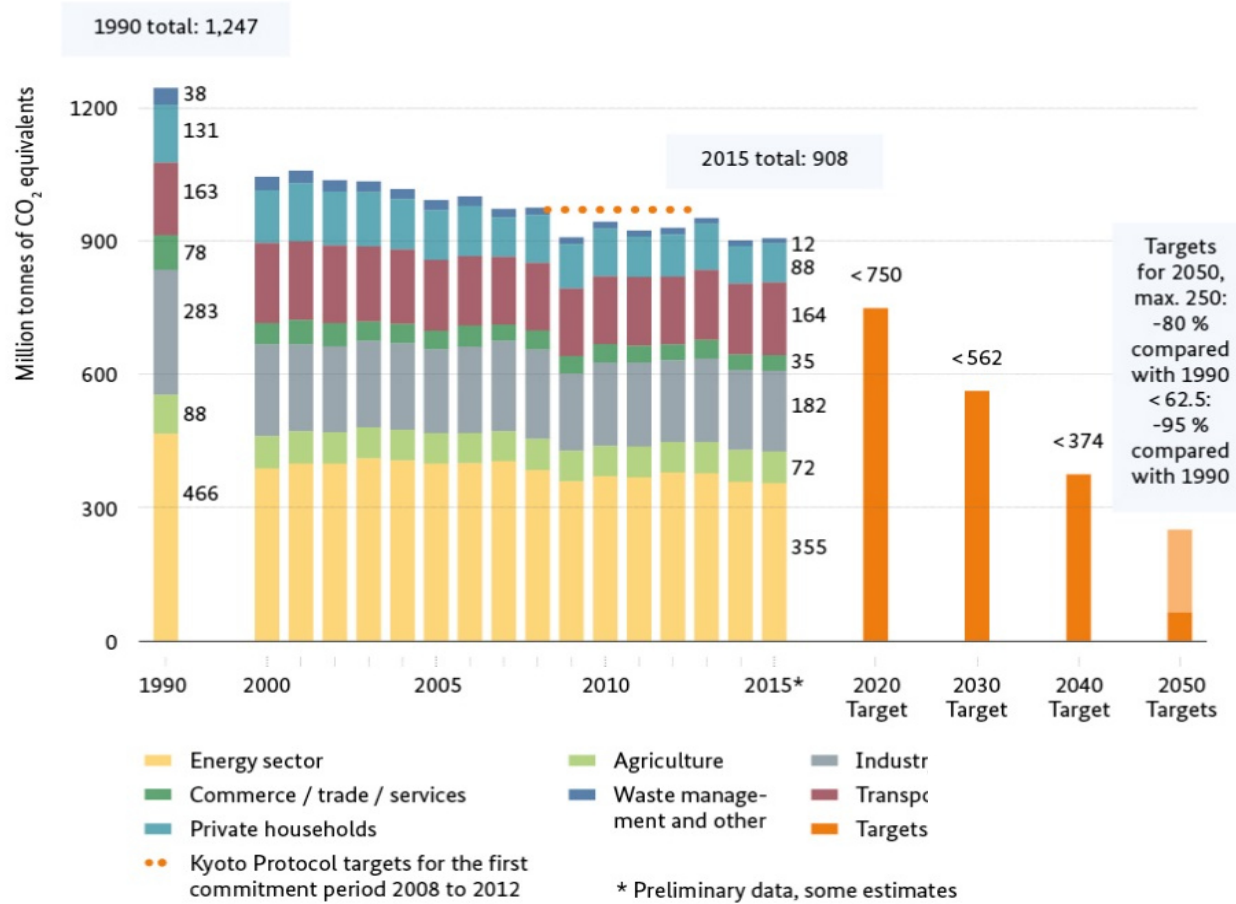


Source: M. Meinshausen

8.12.2016



DEVELOPMENT OF GHG EMISSIONS





PATH TO THE CLIMATE ACTION PLAN 2050





STRUCTURE OF CLIMATE ACTION PLAN 2050 (I)

Preamble and introduction

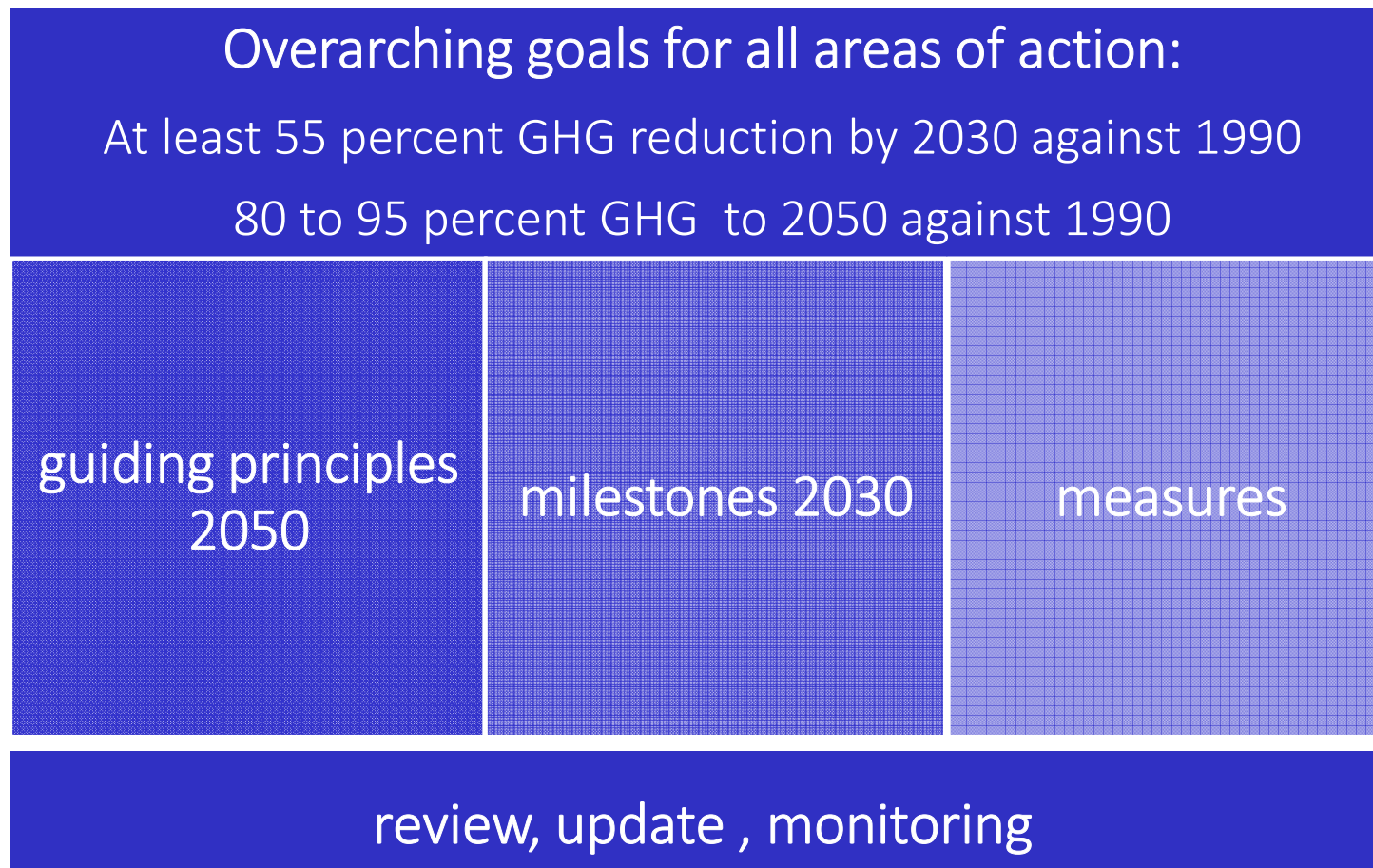
Climate action as a strategy
for modernising our economy

International context (global and EU)

Path towards greenhouse gas neutrality in Germany



STRUCTURE OF CLIMATE ACTION PLAN 2050 (II)





GUIDING PRINCIPLE 2050 (I)

- 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)

- 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 ₂ equiv.) – actual emissions	2014 (absolute, in mil t CO ₂ equiv.) – actual emissions	2030 (absolute, in mil t CO ₂ 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%
Total	1248	902	543 – 562	56 – 55 %



STRATEGIC MEASURES (SELECTION)

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)

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)

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)

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

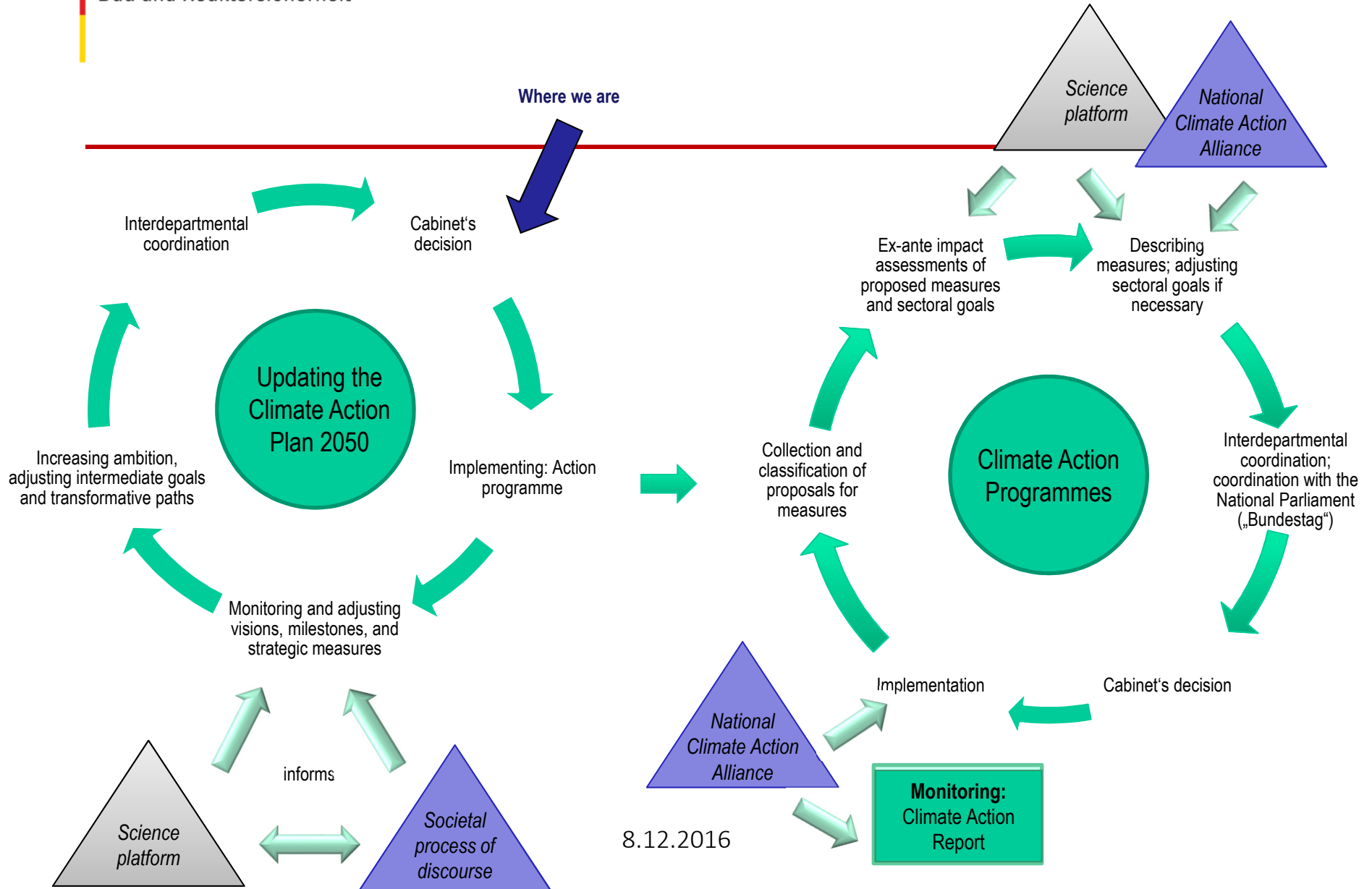
- Ambitious climate strategy as a combination of efficiency policy, electricity from renewables and product innovation is a no-regret strategy which would pay off for Germany in the long-term.
- The resulting employment gains would mainly be in the construction, transport and energy sectors.

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

	2030	2050
	Change vs reference	
GDP	+2.7 % (+ 76.8 bn € ₂₀₁₀)	+4.4 % (+150 bn € ₂₀₁₀)
Employment	+ 1.9 % (ca. 600,000 jobs) ^{8.12.2016}	+ 1.3 % (ca. 500,000 jobs)



LEARNING PROCESS





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THANK YOU FOR YOUR ATTENTION

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