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GIZ China study tour

“Low carbon development – the German experience”

Welcome to the
Ecologic Institute

Thursday, December 13th 2012

Ecologic Institute: Who we are

- ▶ Think tank for applied environmental research, policy analysis and consultancy
- ▶ Founded in 1995
- ▶ Offices in Berlin, Brussels, Washington D.C., San Mateo
- ▶ 120 staff in total
- Private, not-for-profit, independent, non-partisan
- Among top 10 "Environmental Think Tanks" in the University of Pennsylvania's Global Index in both 2010 and 2011
- Long standing experience in bridging the gap between science and environmental policy



Examples of the different types of projects we undertake

- ▶ RADOST: economics of adaptation to climate change on the Baltic Sea coast.



- ▶ CLICO: case studies on climate-induced conflicts around access to water in Ethiopia, Egypt,...



- ▶ Policy advisors: e.g. analysis for German ETS authority on access to auctioning processes

- ▶ CALAMAR: international dialogue



CALAMAR
Cooperation Across the Atlantic for
Marine Governance Integration

- ▶ ICAP Training Schools

On our website: Ecologic, “the movie”



Our gift to you: fair trade sports balls



Visit also: <http://www.fairdealtrading.com/>



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Any questions?



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Low carbon development in Germany

Matthias Duwe
Ecologic Institute



EU reduction goals

- ▶ Emission reduction commitment under the Kyoto Protocol
 - ▶ 8% Reduction by 2012 based on 1990-levels
 - ▶ Burden sharing within the EU: e.g. Germany: - 21%, Spain: +15% by 2012
- ▶ European Council's 20-20-20 decision in 2007
 - ▶ 20% reduction of GHGs by 2020
 - ▶ 20% share of renewables in the EU energy mix by 2020
 - ▶ 20% improvement of energy efficiency by 2020

German Climate and Energy Policy - Targets and Timetables

		2020	2030	2040	2050
Climate	Greenhouse gases (vs. 1990)	- 40%	- 55%	- 70%	- 80 to - 95%
	Share of electricity	35%	50%	65%	80%
Renewable energies	Overall share (Gross final energy consumption)	18%	30%	45%	60%
	Primary energy consumption	- 20%▶		- 50%
Efficiency	Electricity consumption	- 10%			- 25%
	Energy consumption in buildings	20% heat demand		80% primary energy	

Source: BMU

Germany's key policy instruments: main elements

- ▶ GHG emission reductions:
 - ▶ Emissions Trading: participation in EU system (all industry sectors)
 - ▶ Performance standards for cars (EU legislation)
- ▶ Renewable energy:
 - ▶ Renewable energy law (EEG) – a feed-in tariff system with > 20 years experience
- ▶ Energy efficiency (more in the next presentation)
 - ▶ development of energy services
 - ▶ Promoting energy management in industry
 - ▶ new energy efficiency fund (up to 300 million €/year)
 - ▶ CO2 Building Modernisation Programme + codes & standards for new built
 - ▶ National Climate Initiative (funds innovative projects)
 - ▶ CHP support act

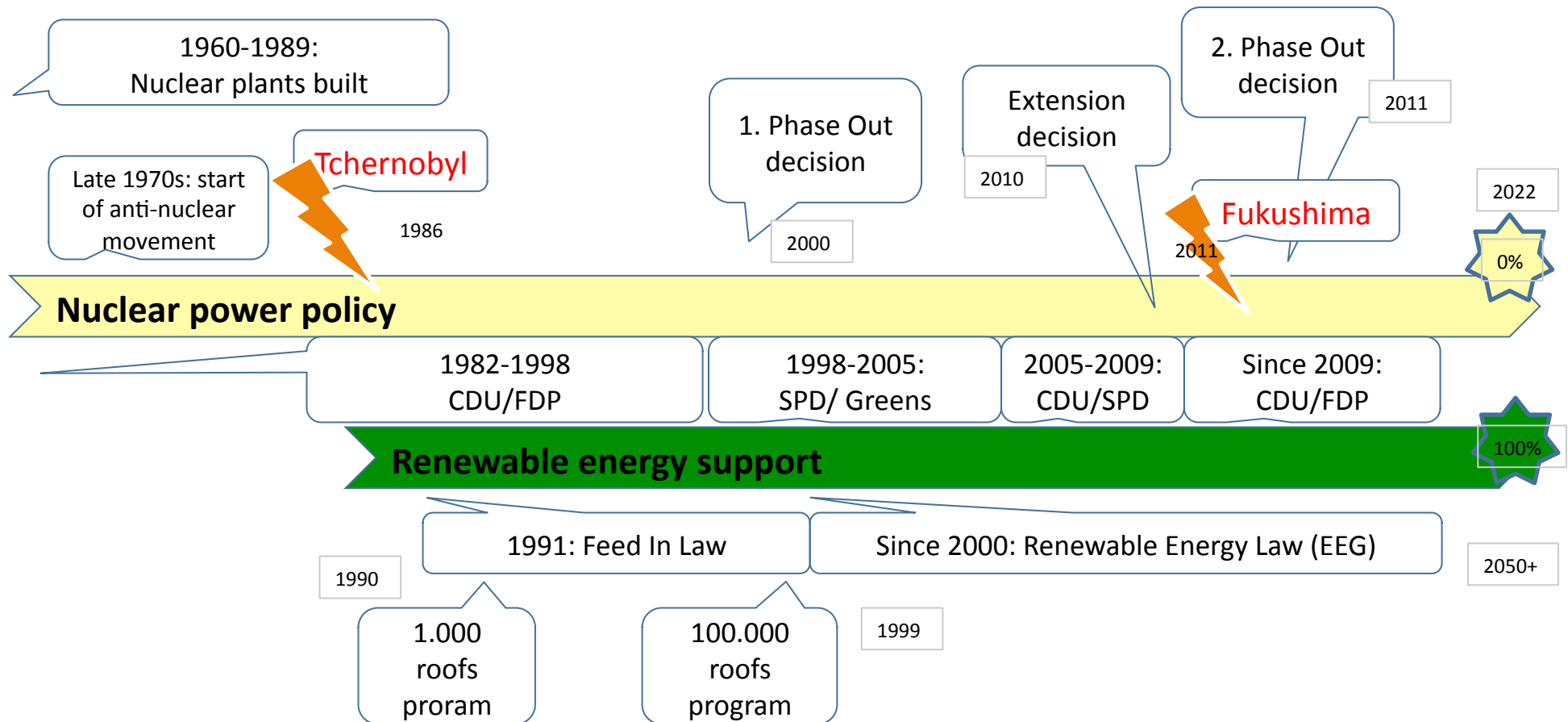
Amendment to the Atomic Energy Act



Source: UBA

- 7 oldest plants + Krümmel:
Immediate decommissioning
- Gradual phasing out of all
nuclear power by **2022**
- Shutdown years:
2015, 2017, 2019, 2021, 2022

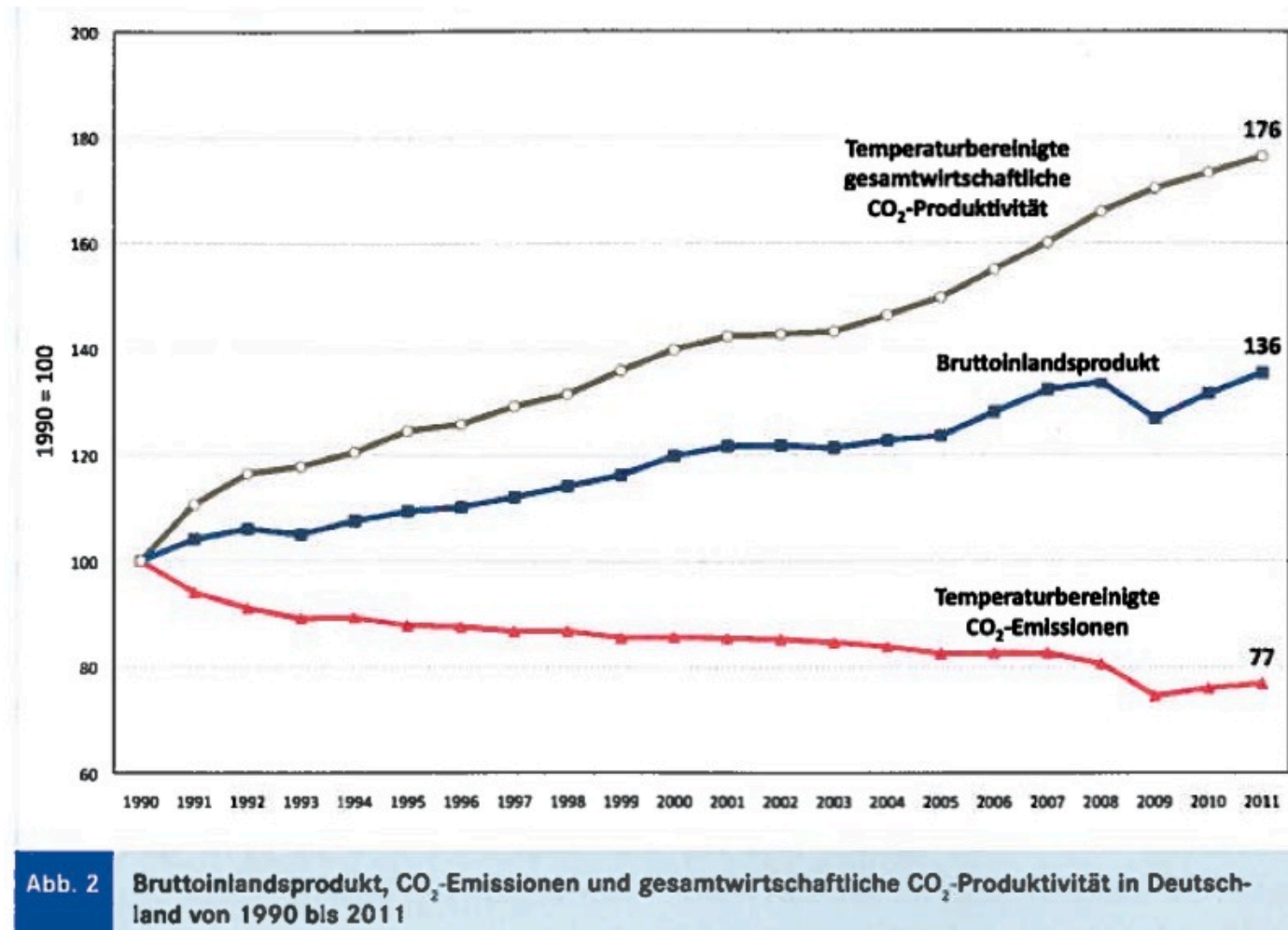
Political process developments of Germany's „Energiewende“



The so-called „Energiewende“ (energy transformation) is a long-term project that started more than twenty years ago – but which was reinforced and sped up by the Fukushima incident.

Source: © Ecologic Institut 2012

Low carbon progress: Germany's GHG emissions

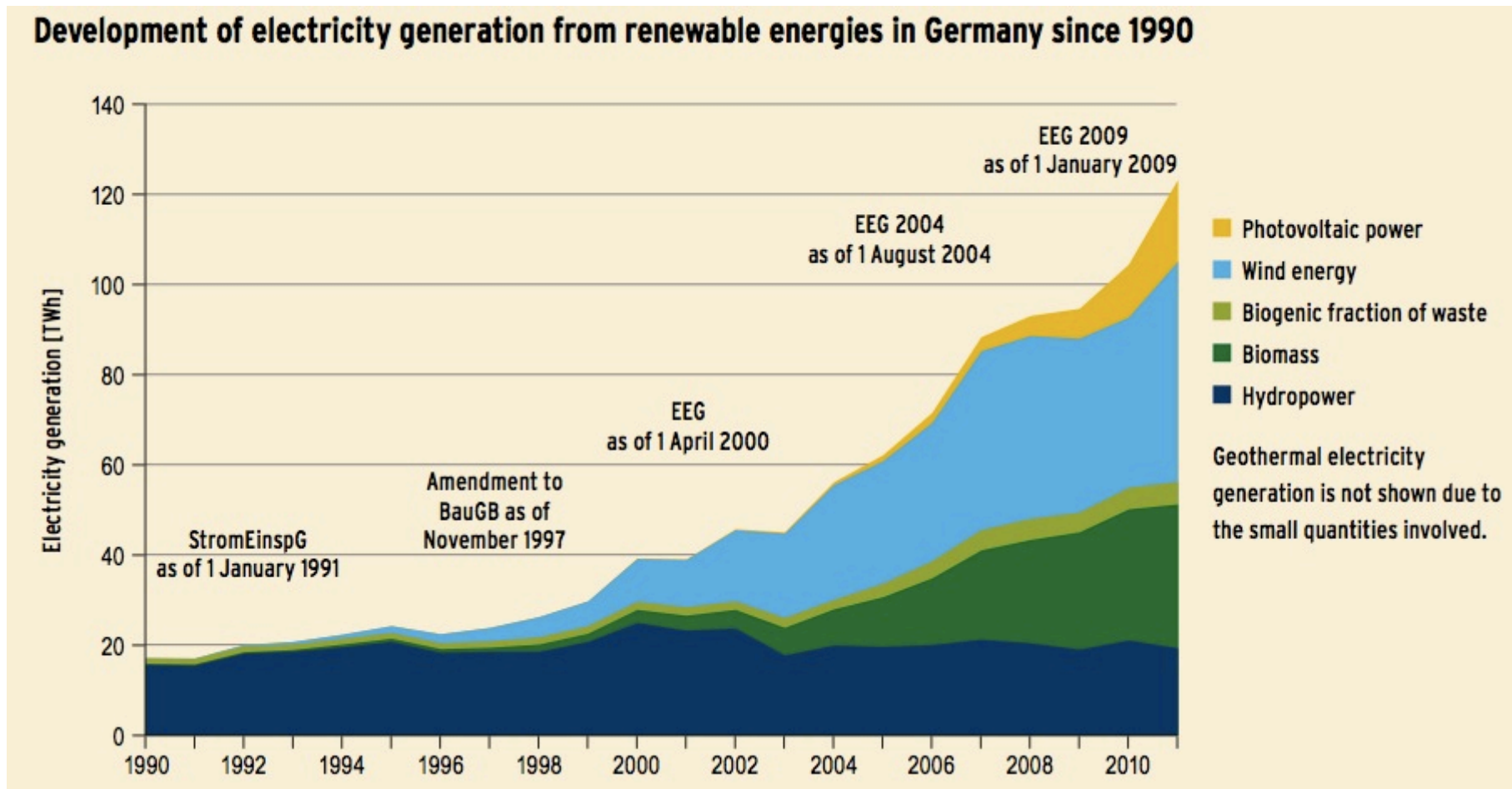


Latest figures:
-27% from 1990 in 2011.
This graph is CO₂ only (-23%)

Kyoto target achieved.

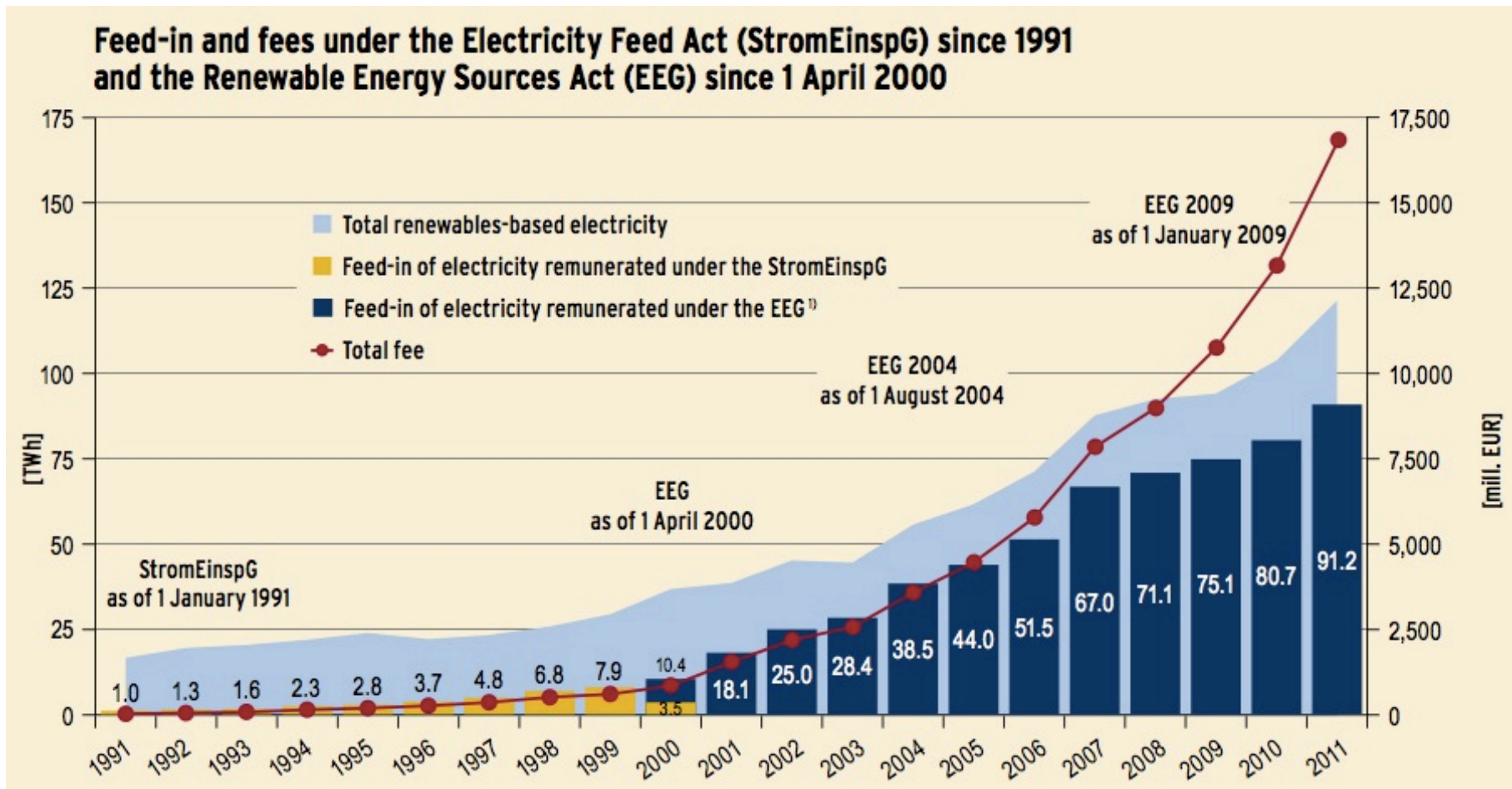
2020 target needs addl effort to meet.

Evolution of Renewable Energy deployment: generation



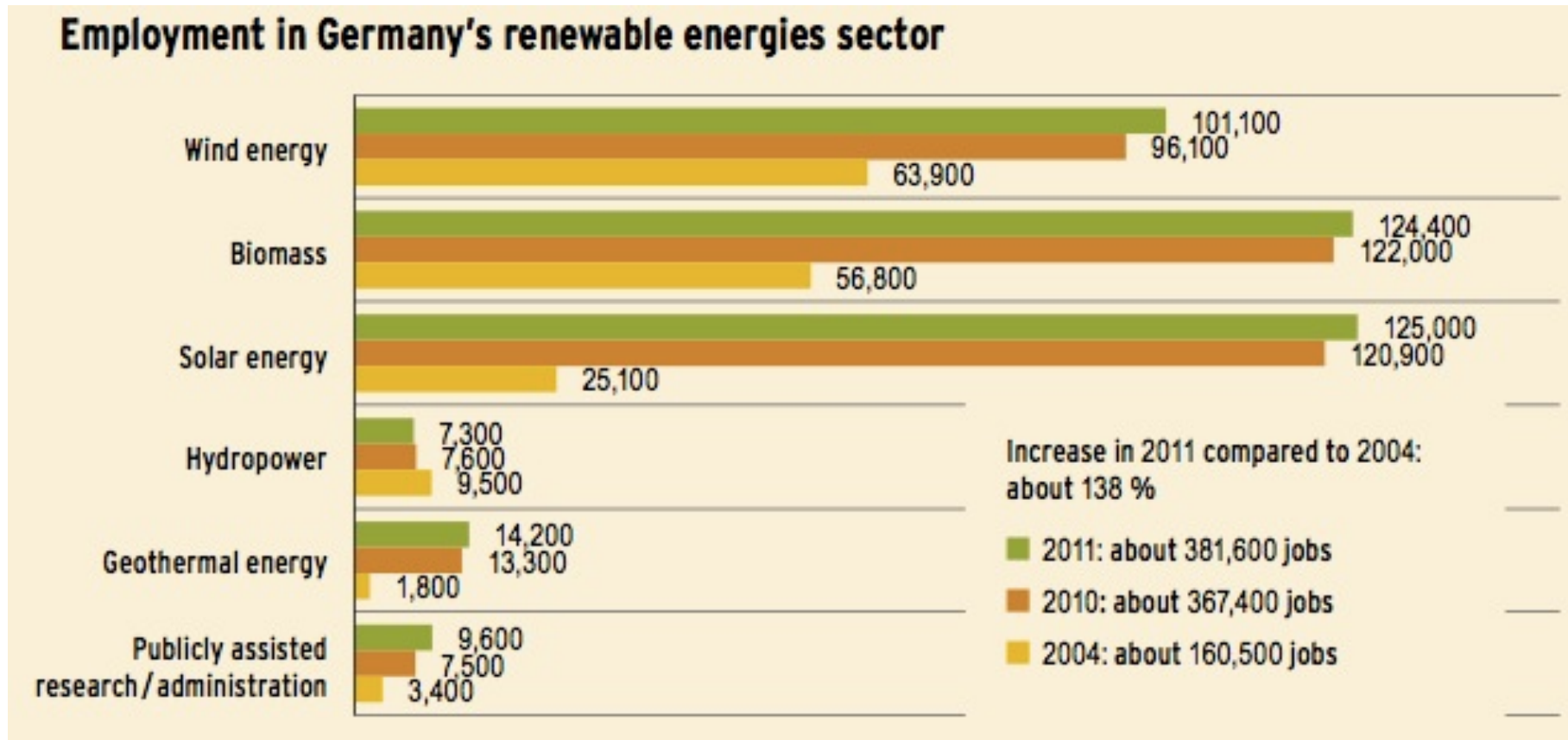
Source: BMU 2012 „Renewables in figures“

Evolution of Renewable Energy deployment: fees



Source: BMU 2012 „Renewables in figures“

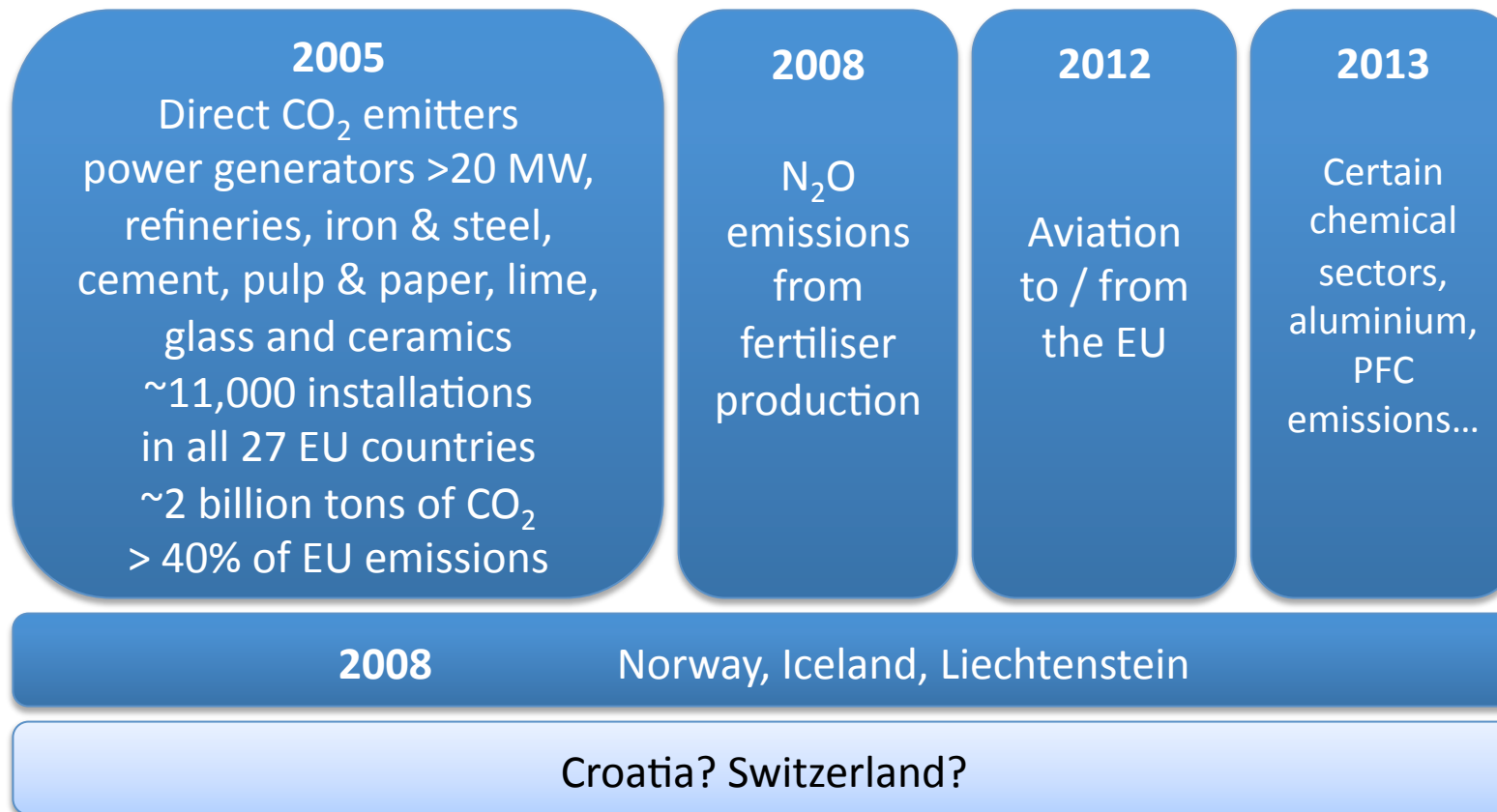
Evolution of Renewable Energy deployment: jobs



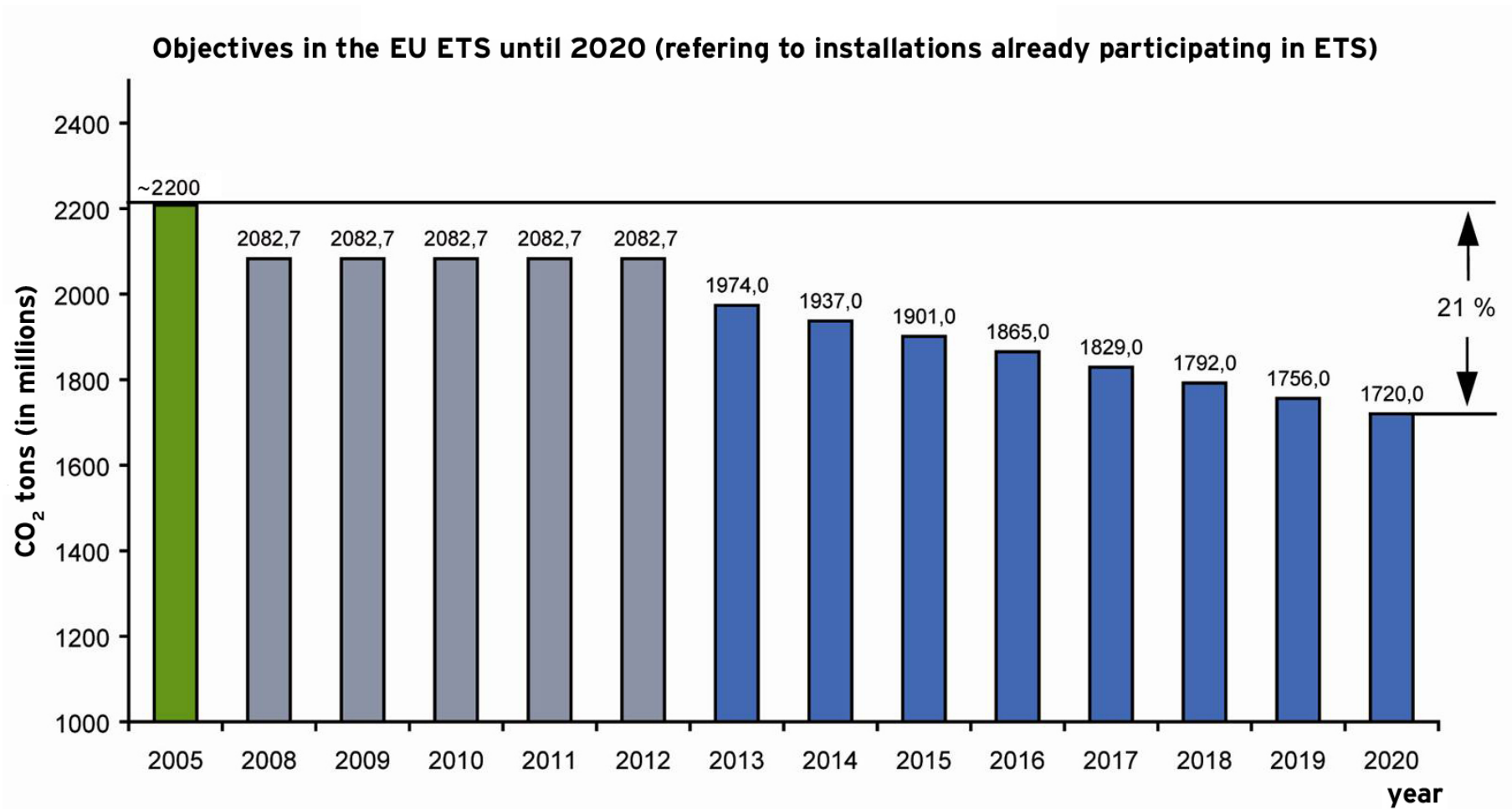
Source: BMU 2012 „Renewables in figures“

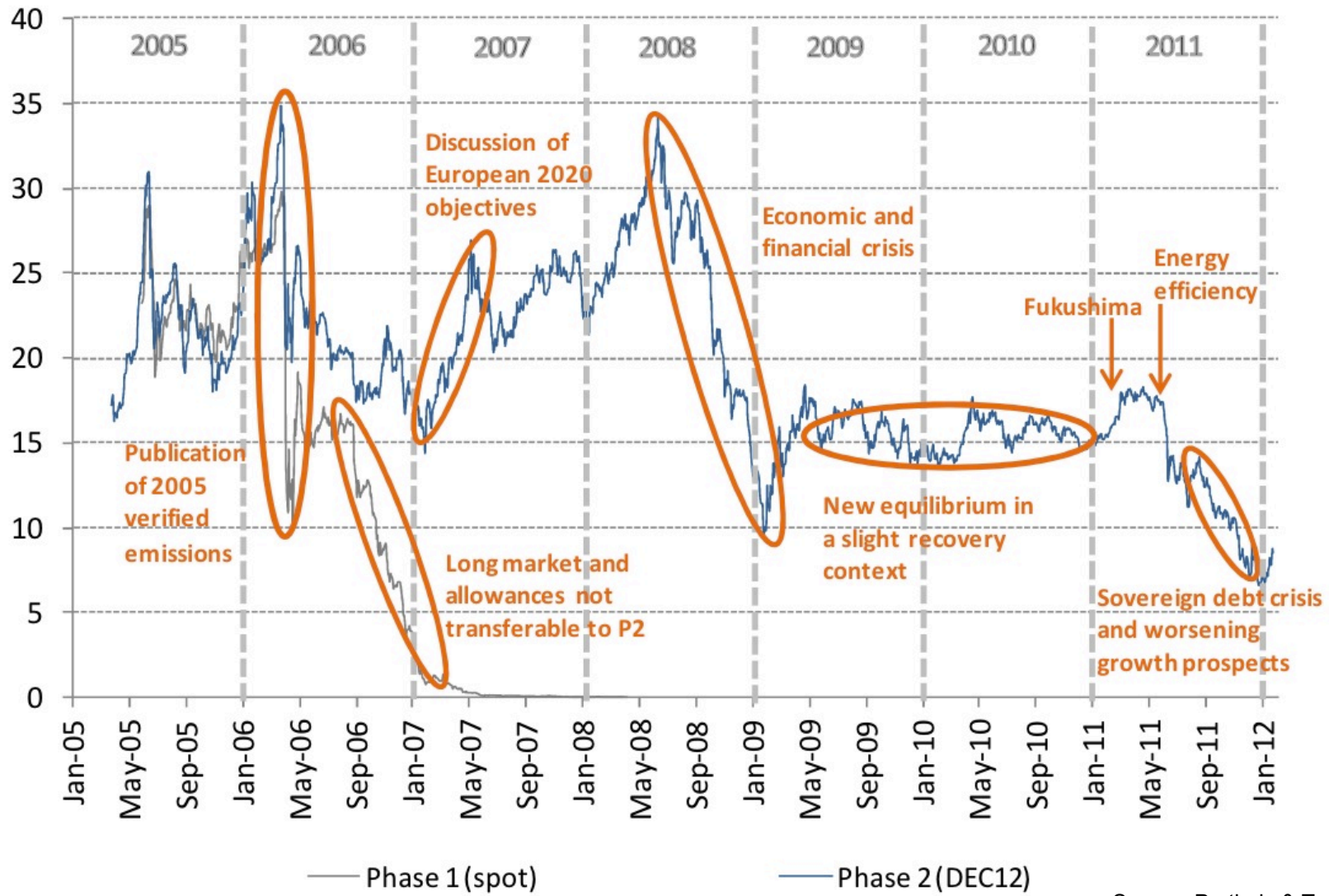
The EU Emissions Trading Scheme

- ▶ The world's largest, first international cap-and-trade scheme, covering:



Evolution of the EU ETS cap 2005 - 2020





Source: Perthuis & Trotignon, 2012



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Thank you for listening.

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