

10. Appendix

10.1 Glossary

acceleration model: optional model for → offshore wind that provides for a higher initial tariff with, in turn, shorter funding period. Inserted in the EEG 2012 to press the delayed expansion of offshore wind forward. (*Stauchungsmodell*)

allowance: “The right to emit one unit (e.g., one ton) of a pollutant or greenhouse gas such as carbon dioxide (CO₂), generally distributed by the governing authority for a cap-and-trade program.” (Ellerman, Joskow, & Harrison, 2003, p. 46)

Backloading: postponement of auctioning of allowances, aiming to temporarily reduce the supply of allowances on the market in order to stabilize prices of → allowances.

basic tariff: has different meanings for individual renewable energies. For wind power, it means the feed-in tariff remunerated for each kilowatt hour after a certain initial period where the higher initial tariff is applied. For biomass and geothermal energy, it means the standard tariff that can be increased by certain bonuses (*Grundvergütung*)

Banking: the possibility to herd allowances and transfer them to the next trading period.

Benchmarking: method of allocation of allowances based upon certain technological standards, as industry average or best available technology (BAT). In contrast to → *grandfathering*, it does not take the current or historic emissions level of any given plant into account but assigns the same allocation oriented towards a defined technological standard. This sets incentives for efficiency improvements and rewards → *early action*. In the energy sector, benchmarks can be fuel-specific and take different emissions of different fuels into account (lignite, hard coal, natural gas) or fuel-neutral without differentiation between fuels and employ another standard value instead. The former preserves current structures of electricity supply, the latter incentivizes fuel switch to less carbon-intensive fuels (i.e., from lignite to hard coal, from hard coal to natural gas).

Burden Sharing Agreement: legal agreement between the EU member states to share the joint EU commitment for greenhouse gas reduction under the Kyoto Protocol and assign differentiated national reduction targets to each individual member state. Germany has committed to a reduction target of -21% until 2012 compared to 1990 levels.

biofuel: “liquid or gaseous motor fuels made from biomass (biodiesel, bioethanol, biogas)” (BMU, 2014, S. 54)

biogas: “a combustible gas formed by fermenting biomass or the biodegradable fraction of waste. It consists largely of methane (CH₄) and carbon dioxide (CO₂). When cleaned and treated it can reach the quality of natural gas” (BMU, 2013b, p. 99)

biomass: “all organic material arising from or generated by plants and animals. Where biomass is used for energy purposes, a distinction must be made between regrowable raw materials (energy crops) and organic residues and waste” (BMU, 2013b, p. 99).

blast furnace gases: process-related emerging gases in blast furnaces e.g. in steel production, e.g. carbon monoxide, that are usually used for electricity generation instead of burning them unused or releasing them into the atmosphere. Industrial electricity generation from blast furnace gases is exempted from the → EEG levy. (*Kuppelgase*)

Cap: maximum volume of allowances within one trading period.

Carbon Leakage: “portion of cuts in greenhouse-gas emissions by developed countries -- countries trying to meet mandatory limits under the Kyoto Protocol -- that may reappear in other countries not bound by such limits. For example, multinational corporations may shift factories from developed countries to developing countries to escape restrictions on emissions” (UNFCCC Glossary of climate change acronyms).

CHP: combined generation of heat and power (CHP). „Diesel or petrol engines drive generators and generate electricity. At the same time the exhaust heat of the engines is used. The utilisation of the fuel may be as high as 90 percent“ (BMU, 2013b, p. 100). (*Kraft-Wärme-Kopplung*)

CHP bonus: extra payment for the usage of efficient cogeneration of heat and power (CHP) in biomass plants. Introduced in the EEG 2009 and abolished in the EEG 2012; since then, the usage of cogeneration is obligatory. (*KWK-Bonus*)

Clean Development Mechanism (CDM): “A mechanism under the Kyoto Protocol through which developed countries may finance greenhouse-gas emission reduction or removal projects in developing countries, and receive credits for doing so which they may apply towards meeting mandatory limits on their own emissions” (UNFCCC Glossary of climate change acronyms).

Cogeneration: see → *CHP*

combined power plant: virtual interconnection of plants with different sources of renewable energy (wind, solar, biomass, hydropower) in a technically advanced manner that ensures constant electricity supply despite the fluctuation of wind and solar power. (*Kombikraftwerk*)

Compliance Factor: stipulates the required rate of emissions reduction in a given facility in the respective trading period compared to the base period. For instance, a compliance factor of 0.9709 equals a reduction of 2.91% per facility. A compliance factor of 1 equals a reduction of 0% (i.e. exemption from reduction requirement).

consistency bonus: extra payment for the stabilization of fluctuating renewable energy production in accordance with the demand, i.e. for → combined power plants. Was subject of discussion but not introduced. (*Stetigkeitsbonus*)

conversion areas: idle areas used for traffic, industry, housing or military purposes in the past.

degression: the degression reduces the EEG feed-in tariff for new power plants by a certain percentage after a certain cutoff-date in periodic intervals. (*Degression*)

direct marketing: instead of the use of the legally defined feed-in tariff for their renewable electricity, power plant operators also can sell their electricity directly on the market, either at the spot market or to large consumers. The EEG 2012 introduced an optional market premium to incentivize direct marketing and foster market integration. (*Direktvermarktung*)

differential costs: difference between the sum of legally granted feed-in tariffs paid by grid operators for electricity from renewable sources less their revenues through the sales of this electricity. The differential costs are then passed on to all electricity consumers in the form of a unitary → EEG levy on every kilowatt hour. (*Differenzkosten*)

early action: modernization of plants that led to a reduction of emissions in the past prior to the base period. If the allocation of allowances is based in historic emissions (→ *grandfathering*), the legislator can grant special consideration for early action in order not to punish those companies that have made investments into emissions savings in the past.

early starter bonus: extra payment for offshore wind power plants or geothermal plants that are put into operation until a certain deadline, meant to accelerate the build-up of generation capacity (*Sprinterbonus / Frühstarterbonus*)

EEG: stands for Erneuerbare-Energien-Gesetz (Renewable Energy Sources Act) in Germany, a law introduced in 2000 to promote the market introduction of certain technologies for electricity generation from renewable sources, viz. hydropower, biomass, geothermal energy, wind and solar power. It imposes grid operators to connect renewable power plants to the grid, to feed in electricity from renewable sources with priority, and to remunerate the electricity fed in with a fixed feed-in tariff per kilowatt hour. That means, system operators can generate and sell electricity independent from the actual demand. The → differential costs between remuneration paid and stock market price are compensated through a surcharge on every kilowatt hour consumed.

EEG levy: fee on every kilowatt-hour electricity consumed, imposed by the EEG, to compensate for the → differential costs of renewable energies promotion, passed on to the grid operators. (*EEG-Umlage*)

Energy and Climate Fund: Fund created by the German government in 2010 to promote energy-focused building refurbishment, energy efficiency, research and development of renewable energies, new energy storages, electromobility as well as compensation for the industry for increase in electricity prices from 2013 onwards. The revenues come from the auctioning of certificates. Also, voluntary contributions paid by nuclear power plant operators were meant to go into the fund, yet the withdrawal of the lifetime extension in the aftermath of the Fukushima nuclear disaster led to an end of these payments.

ETS sector: encompasses those sectors that are subject to emissions trading. These are electricity generation and most parts of the manufacturing industries. Traffic (except: air traffic in phase III), private households and commerce/trade/services do not participate in emissions trading (non-ETS sector).

feed-in management: encompasses all measures that serve network security and keep electricity grids stable. When grid capacities are insufficient to transport the total electricity generated, the grid operator is allowed to temporarily suspend the legally imposed priority feed-in of renewable energies, including interventions in the operation of e.g. wind turbines. As there must be not more electricity fed in into the grid than factually demanded at the same time, this steering becomes necessary (*Einspeisemanagement*).

flexible mechanisms: see → *Kyoto mechanisms*.

flexibility premium: extra payment for biogas plants that participate in → direct marketing, serving to partly compensate for the costs of larger gas storages that enable the adjustment of electricity generation oriented towards the real demand (*Flexibilitätsprämie*).

flexible cap: a growth corridor for photovoltaic that provided for an additional degression depending on the development of photovoltaic capacity build-up. If the capacity newly installed succeeded the legally defined targets, the standard degression was automatically tightened, and vice versa. This was done in order to better steer the rapid growth of PV capacity and limit the rising costs associated therewith. Introduced in the PV Act 2010. (*atmender Deckel*)

fuel bonus: extra payment for electricity generated from renewable raw materials, defined as plants or parts of plants that are not especially treated. In particular for biogas plants and biomass cogeneration plants, this bonus is relevant for the economically viable operation; previously, the economic operation was only feasible with slurry or cheap organic waste. Inserted in the EEG 2004 and removed in the EEG 2012 (*Nawaro-Bonus*).

geothermal energy: „Use of renewable terrestrial heat at various depths: in the case of near-surface geothermal energy, the heat of the earth is supplied by the sun. It gradually heats up the soil from the top down. In the winter the soil stores a large proportion of this heat. In the case of deep geothermal energy, the heat is released by the

decay of natural radioactive isotopes. The influence of this energy source increases with depth.“ (BMU, 2013b, p. 101)

Grandfathering: allocation of allowances based on historic emissions in a certain base period. Different from → *benchmarking*, it protects existing plants independent from their emissions levels or efficiency standards.

Greenhouse gases: “The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent – but very powerful – greenhouse gases are hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆)” (UNFCCC Glossary of climate change acronyms).

green power privilege: (partly) exemption of electricity suppliers from the → EEG levy if they fulfill certain requirements, e.g. generate more than 50% of their electricity with plants eligible under the EEG. The importance of the green power privilege strongly increased over time, which is why the originally full exemption was partly reduced in the EEG 2012 to avoid abuse of the instrument for unjustified windfall profits. (*Grünstromprivileg*)

grid parity: means the state of equal generation costs of renewable electricity with the purchase price of conventional electricity for private households. Grid parity for photovoltaic power was reached in Germany in 2012; since then, it is more profitable for homeowners to produce their own electricity than purchase electricity. (*Netzparität*)

gross value added: “value of output less the value of intermediate consumption; it is a measure of the contribution to GDP made by an individual producer, industry or sector” (OECD Glossary of Statistical Terms, 2001). (*Bruttowertschöpfung*)

growth corridor: lower and upper thresholds for the annual growth of electricity generation capacity that is politically envisaged, usually discussed related to photovoltaic. If real market development falls short of or exceeds these thresholds, the → flexible cap takes effect. (*Ausbaukorridor*)

hard cap: limitation of capacity growth in absolute terms; after reaching this limit, the eligibility for → EEG remuneration ceases. A hard cap was often demanded for photovoltaic due to the strong growth of this sector and the high funding costs resultin therefrom. A hard cap on the total (not: annual) photovoltaic capacity eligible under the EEG was inserted in the PV Act 2012. In contrast, the → flexible cap only provides for additional → degression above a certain → growth corridor is exceeded. (*harter Deckel*)

hardship clause: special regulation in the emissions trading scheme. Since allocation rules can, in some individual cases with special circumstances, unpredictably lead to the ruin of a company, the authorities must be legally able to properly respond and, if certain requirements are given, grant additional allowances bades on the harship clause.

initial tariff: feed-in tariff under the EEG for the first years of operation of a wind power plant; after the initial period, a lower → basic tariff applies. The payment period for the initial tariff can be extended in dependence from the yield of the site (onshore) or distance to shore and water depth (offshore). (*Anfangsvergütung*)

Intergovernmental Panel on Climate Change (IPCC): “Established in 1988 by the World Meteorological Organization and the UN Environment Programme, the IPCC surveys world-wide scientific and technical literature and publishes assessment reports that are widely recognized as the most credible existing sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the Convention's subsidiary bodies. The IPCC is independent of the Convention” (UNFCCC Glossary of climate change acronyms).

Joint implementation (JI): “A mechanism under the Kyoto Protocol through which a developed country can receive ‘emissions reduction units’ when it helps to finance projects that reduce net greenhouse-gas emissions in another developed country (in practice, the recipient state is likely to be a country with an ‘economy in transition’)” (UNFCCC Glossary of climate change acronyms).

Kyoto Protocol: “An international agreement [that], among other things, sets binding targets for the reduction of greenhouse-gas emissions by industrialized countries” (UNFCCC Glossary of climate change acronyms).

Kyoto mechanisms: “Three procedures established under the Kyoto Protocol to increase the flexibility and reduce the costs of making greenhouse-gas emissions cuts. They are the Clean Development Mechanism, Emissions Trading and Joint Implementation” (UNFCCC Glossary of climate change acronyms).

Land use, land-use change, and forestry (LULUCF): “A greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities” (UNFCCC Glossary of climate change acronyms).

Lex RWE: unofficial designation for special provisions targeted to protect the interest of the energy supplier RWE. In the first → *NAP* (2005-2007), the term described long-term exemptions for substitution power plants from reductions. In the original draft for *NAP II* (2008-2012), it described a special provision that allowed substitution power plants approved by authorities before 2008 the more generous allocation under the rules of the *NAP I* – provision that was tailored to one single lignite power plant at Neurath, operated by RWE.

Lex Vattenfall: unofficial designation for special provisions targeted to protect the interests of the energy supplier Vattenfall. In the first → *NAP* (2005-2007), it referred to the generous recognition of → *early action*, wherefrom Vattenfall benefited due to modernizations of power plants in East Germany after reunification. In *NAP II*, the term meant some detailed privileges for lignite.

load factor: assumed number of annual operational hours of a plant; important for the calculation of the allocation as multiplier in → *benchmarking*.

macro plan: partition of the total national emissions budget to the sectors electricity generation, industry, traffic, private households, commerce/services and agriculture. Part of the → NAP.

micro plan: partition of the emissions budget of the → ETS sector; stipulates the allocation to the individual plants. Part of the → NAP.

market integration model: inserted in the PV Act 2012. (*Marktintegrationsmodell*)

market / management premium: extra payment provided under the EEG for renewable power plants that participate in → direct marketing, aiming to give incentives to produce electricity in accordance with the real demand. The market premium is meant to compensate for the difference between the feed-in tariff and the average market price. The electricity producers thus waive the feed-in tariff and have an incentive to generate power when the market price is above average, i.e. when demand is high. The management premium is part of the market premium model; it compensates plant operators for trading connection costs and timetable compliance costs and to alleviate market risks. (*Marktprämie / Managementprämie*)

merit order: price formation mechanism at the spot market for electricity. The marginal costs of the most expensive power plant then determine the spot market price which applies unitary for all electricity sold. The supply with renewable electricity, that has variable costs of close to zero and enjoys priority access to the market imposed by the EEG, reduces the demand for conventional power and therewith displaces power plants with higher variable costs from the market. Through this merit order mechanism, the increase in renewable electricity generation has dampening effect on spot market prices, creating a redistribution to the benefit of large consumers that directly purchase their electricity at the spot market. (*Merit-Order-Effekt*)

NAP: National Allocation Plan. Core element of national legislation for the emissions trading scheme, containing the provisions for the allocation of allowances to sectors and plants. For each → trading phase, a separate NAP is elaborated. NAP I refers to the first trading phase, NAP II to the second trading phase. In the third trading phase, the system of national plans was replaced by uniform EU-wide allocation rules.

new entrants reserve: number of allowances set aside to grant sufficient supply for newly built plants in the respective → trading phase.

object grid: network of own power plants self-operated by industry or quasi-own power plants operated by a third party close to the industrial facility. (*Objektnetz*)

offshore / onshore wind energy: wind power plants on the high seas (offshore) functions fundamentally different from wind power plants on land (onshore). Offshore wind energy is characterized by large plants far away from the coastline, high technical and organizational challenges, costly grid connection, and the need for large investments with high risks.

option rule: allowed operators of existing plants to choose allocation either based on → Grandfathering or → benchmarking (according to the allocation method for new plants). Granted under → NAP I but removed in NAP II.

own-consumption privilege: applies to the own consumption of electricity self-generated. Prior to 2009, the own consumption of self-generated electricity was fully exempted from the EEG levy. This was economically interesting in particular for industrial large consumers that operated own power plants. The EEG 2009 restricted this privilege to electricity self-generated in spatial link with the consuming facility; if transported through the public electricity grid, the surcharge applies. Besides, the EEG 2009 explicitly regulated the own consumption of solar electricity self-generated on the own roof, with respect to the approaching → grid parity, in the form a fixed tariff for electricity self-consumed (25.01 ct). After reaching grid parity in early 2012, the special tariff was removed and 10% of the solar electricity self-generated exempted from remuneration, above de-minimis limits. (*Eigenverbrauchsprivileg*)

penalty clause: provides for a reduced allocation by 15% for old and inefficient plants. It was inserted in → NAP I yet should first be applied in the second → trading phase. In NAP II, however, it was deleted and replaced by more restrictive overall allocation rules.

principle of exclusive use: restricts the eligibility for EEG remuneration for biomass plants to the exclusive use of renewable materials. If the plant uses fossil fuels, eligibility is dropped. (*Ausschließlichkeitsprinzip*)

process-related emissions: arise in certain production processes from chemical reactions which are not incineration, such as in lime reburning or when coal is used as reducing agent in iron production. These emissions cannot be reduced without limiting the production itself. For this reason, they are granted special consideration in the allocation.

redistribution cap: limitation of the increasing effect of the → Special Equalization Scheme on the electricity prices. According to this provision of the EEG 2004, the exemptions for privileged industrial consumers from the EEG levy may not lead to increase in prices for non-privileged consumers by more than 10%. Otherwise, the exemptions for industry are automatically limited. (*Umverteilungsdeckel*)

redistribution mechanism: In its version of the Redistribution Mechanism Ordinance as of 2010, transmission grid operators must sell the entire electricity from renewables sources under the EEG at the stock market. The difference between stock market price and feed-in tariffs determines the calculatory → differential costs of renewables promotion. Previous to this ordinance, EEG promotion costs was not subject to uniform and transparent calculation. (*Ausgleichsmechanismus*)

repowering: the substitution of old power plants (usually wind power plants) by more modern, usually larger and more efficient plants with higher capacity.

sink: “Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere. Forests and other vegetation are considered sinks because they remove carbon dioxide through photosynthesis” (UNFCCC Glossary of climate change acronyms).

slurry bonus: extra payment for electricity generated in small biogas plants (<150kW/<500kW) with a minimum share of 30% slurry, i.e. livestock manure, in the substrate mixture. Introduced in the EEG 2009, the bonus serves the energetic use of liquid manure that is otherwise spread as fertilizer on the fields, and should support small plants. (*Güllebonus*)

special equalisation scheme: partly exempts energy-intensive manufacturing companies from the → EEG levy in order to secure their international competitiveness. The privileges for energy-intensive companies lead to an accordingly higher surcharge for non-privileged consumers such as private households and small and medium-sized enterprises. (*Besondere Ausgleichsregelung*)

substitution plant: new plant that replaces an existing plant.

system service bonus: extra payment for electricity from wind power plants that meet certain technical requirements such as the ability to maintain voltage if the transmission grid failed. (*Systemdienstleistungsbonus*, „SDL Bonus“)

technology bonus: extra payment for electricity generated in biomass plants with certain innovative technologies. Inserted in the EEG 2004 and abolished in the EEG 2012; only a special bonus for biogas treatment for its refineration to natural gas quality was maintained. (*Technologiebonus*)

trading period: The European emissions trading system has three trading periods: 2005-2007, 2008-2012 and 2013-2020 (and a fourth period will follow thereafter). For each trading period, a different set of rules applies, layed down in the Directive at EU level and national legislation with the → NAP at the core.

transfer rule: allows for the transfer of allowances of an abandoned existing plant to a → *substitution plant*. This is meant to incentivize more efficient new constructions.

virtual power plant: see → combined power plant.

windfall profits: profits made by electricity suppliers through the emissions trading, arising from inpricing of opportunity costs of allowances that had been allocated free of charge and passed on through increased electricity prices to the final consumers.

Conversion table

kWh (kilowatt hour)

MWh (Megawatt hour) = 1,000 kWh

GWh (Gigawatt hour) = 1,000,000 kWh = 1 million kWh

TWh (Terawatt hour) = 1,000,000,000 kWh = 1 billion kWh

10.2 Abbreviations

AtG	Atomgesetz
BAT	Best Available Technology
BDEW	Bund der Energie- und Wasserwirtschaft
BDI	Bund der Deutschen Industrie
BEE	Bundesverband Erneuerbare Energie
BfS	Bundesamt für Strahlenschutz
BMU	Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (Federal Ministry for Environment, Nature Protection and Nuclear Safety)
BMWi	Bundesministerium für Wirtschaft und Technologie (Federal Ministry for Economy and Technology)
bn	billion
BUND	Bund für Umwelt und Naturschutz Deutschland (Friends of the Earth Germany)
CCS	Carbon Dioxide Capture & Storage
CO ₂	carbon dioxide
CDU	Christian-Democratic Union (conservative party)
CSU	Christian-Social Union (conservative party, leading in the state of Bavaria)
DBV	Deutscher Bauernverband
doc.	document (Drucksache)
DSt	Deutscher Städte- und Gemeindetag
DUH	Deutsche Umwelthilfe
EEG	Erneuerbare-Energien-Gesetz (Renewable Energy Sources Act)
EnBW	Energie Baden-Württemberg (one of the four largest energy corporations in Germany)
EnWG	Energiewirtschaftsgesetz (Energy Market Act)
ESK	Entsorgungskommission
ETS	Emission Trading Scheme
EU	European Union
FDP	Free Democratic Party
GDP	Gross Domestic Product
GRS	Gesellschaft für Anlagen- und Reaktorsicherheit
GWh	Gigawatt hour
IPCC	Intergovernmental Panel on Climate Change
IG	Industriegewerkschaft (Trade Union)
IG BCE	Industriegewerkschaft Bau, Chemie, Energie
m	million
MWh	megawatt hour
NAP	National Allocation Plan
NGO	Non-Governmental Organization
NPP	Nuclear Power Plant
OECD	Organization for Economic Cooperation and Development
PIK	Potsdam Institut für Klimafolgenforschung
PV	photovoltaics
RSK	Reaktor-Sicherheitskommission
RWE	Rheinisch-Westfälische Energie (one of the four largest energy corporations in Germany)
SPD	Socialdemocratic Party
SRU	Sachverständigenrat für Umweltfragen
t	tons
UBA	Umweltbundesamt
VKU	Verband Kommunalen Unternehmen
WBGU	Wissenschaftlicher Beirat Globale Umweltveränderungen
WI	Wuppertal Institut für Klima, Umwelt, Energie
WWF	World Wide Fund for Nature

10.3 Overview of Interviewees

#	name	sector	function	date
1	Anonymous A	government	state official, economics ministry	22.09.2014
2	Anonymous B	electricity industry	lobbyist	07.02.2013
3	Anonymous C	electricity industry; politics	lobbyist; strong links to SPD	14.08.2013
4	Anonymous D	industry	lobbyist	10.06.2014
5	Tobias Austrup	environmental NGO	Greenpeace, Berlin representative office	15.12.2014
6	Thorben Becker	environmental NGO	BUND (Friends of the Earth Germany), Energy Policy Expert	06.06.2013
7	RDir Dr Torsten Bischoff	government	Environmental ministry, Department KI I 4 (Climate Protection and Energy Transition)	28.08.2014
8	Rainer Brohm	renewables industry	BSW-Solar, Leiter Politik und Internationales	27.05.2014
9	Eva Bulling-Schröter MdB	parliament	Left Party, environmental spokesperson of the Left parliamentary group 2005-2009, chairwoman of the Environmental Committee since 2009	26.06.2013
10	Jan Burck	environmental NGO	Germanwatch, Team Leader - German and EU Climate Policy Team, member of WGTE	28.08.2014 (phone call)
11	Dr Steffen Dagger	parliament; energy industry	former staff member at the Bundestag office of Maria Flachsbarth (CDU); currently; Hauptgeschäftsführer at MEW Mittelständische Energiewirtschaft Deutschland, previously	07.06.2012
12	StS Jochen Flasbarth	government; environmental NGO	environmental ministry, state secretary; previously: director of Federal Environmental Office, director of NABU	10.09.2014
13	Juliette de Grandpré	environmental NGO	WWF Germany, Emissions Trading Scheme and EU climate policy expert	12.08.2010 12.09.2014
14	Wolfgang Dirschauer	electricity industry; parliament	Vattenfall, Head of Climate Policy, previously: energy advisor for the SPD parliamentary group	07.03.2013
15	Hans-Josef Fell	parliament	DWR Eco Senior Advisor; former member of parliament (1998-2013), spokesperson for research policy (1998-2005) and energy policy (2005-2013) of the Green fraction; co-author of the EEG; interview:	15.04.2014
16	Eckhard Fischer	parliament	SPD parliamentary group, Coordinating Advisor of the Energy Working Group	17.05.2013
17	BM Sigmar Gabriel	government	SPD party chairman; economics and energy minister (since 2013); environmental minister (2005-2009)	01.09.2014 (non-citable background use)
18	Dr. Andreas K. Gruber	consultancy	Steltemeier & Rawe GmbH,	01.06.2012

			partner	(non-citable background use)
19	Stefanie Hidde	renewables industry	juwi Holding AG, Berlin office, Governmental Affairs	31.05.2012
20	Volker Holtfrerich	electricity industry	German Association of Energy and Water Industry (BDEW), Head of Strategy and Policy	09.03.2012
21	Andreas Jung MdB	parliament	Member of Bundestag, spokesperson of CDU/CSU fraction for climate protection and emissions trading	09.03.2014
22	Annika Kießler	grid operator; parliament	50 Hertz, grid operator, press spokesperson; previous (2006-2010): legislative assistant to Rolf Hempelmann, spokesperson for energy politics of the SPD Bundestag fraction	29.03.2012 (non-citable background use)
23	Ilya Kochevrin	energy industry	Gazprom, Deputy General Director, Communications	29.11.2014 (non-citable background use)
24	Oliver Krischer MdB	parliament	Spokesperson for Energy and Resources Efficiency, Chariman of the Working Group Energy and Climate of the Bundestag Faction, Green Party	26.03.2012
25	Matthias Kopp	environmental NGO	WWF, Head Low Carbon Business & Finance Sector	23.01.2013
26	Andreas Kuhlmann	energy industry	BDEW	
27	Dr. Barbara Lueg	environmental NGO	WWF Germany, international climate policy expert	12.08.2010
28	Horst Meierhofer MdB	parliament	Chairman of the Working Group Energy, Chairman of the Federal Special Committee on Environment, Rapporteur for the CCS Act, FDP	26.04.2012
29	Frederik Moch	unions	DGB, department structure, industry and services policy	07.10.2014
30	Dr Volker Oschmann	government	economics ministry, specialist staff "Electricity and Security of Supply"; previously: environmental ministry, specialist staff "National and European Electricity Market, Market Integration and EU Matters of Renewable Energies"	17.09.2014
31	Dr Urban Rid	government	economics ministry, head of department "Energy policy – Electricity and Grids"; previously: environmental ministry, head of department "Climate Protection, Renewable Energies, International Cooperation"	17.09.2014
32	Franzjosef Schafhausen	government	environmental ministry, undersecretary (Ministerialrat), leading official for emissions trading	26.08.2014 01.10.2014
33	Christian Schneider	energy industry	RWE, Berlin Representation Office	12.08.2013 (non-citable background use)
34	Prof. Miranda Schreurs	scientific community	Director of Environmental Research Center at the Free University Berlin, member of the German Council of Environmental Advisors (SRU),	03.07.2013

			member of the Ethics Commission on Energy Supply	
35	Frank Schwabe MdB	parliament	SPD, member of the Bundestag Environmental Committee, SPD rapporteur for national and international climate protection and emission trading	07.07.2010 11.07.2013
36	Daniela Setton	environmental NGO	BUND, head of energy policy (since 2013); previously: Klima Allianz, head of anti coal campaign (since 2008)	07.10.2014
37	Jochen Stay	environmental NGO	anti-nuclear activist, spokesperson of X-tausendmal quer (until 2008), spokesperson of ausgestrahlt (since end of 2010)	07.08.2013
38	Dr Manfred Treber	environmental NGO	Germanwatch, Senior Advisor - Climate and Transport	09.09.2013 (phone call)
39	Klaus von Trotha	electricity industry	chairman at IZ Klima (until 2012), former minister for science and research in Baden-Württemberg (CDU),	23.04.2012 (phone call)
40	Dr Cornelia Ziehm	environmental NGO	Deutsche Umwelthilfe, Policy Officer Climate and Energy Politics, Berlin	18.12.2012 (non-citable background use)

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