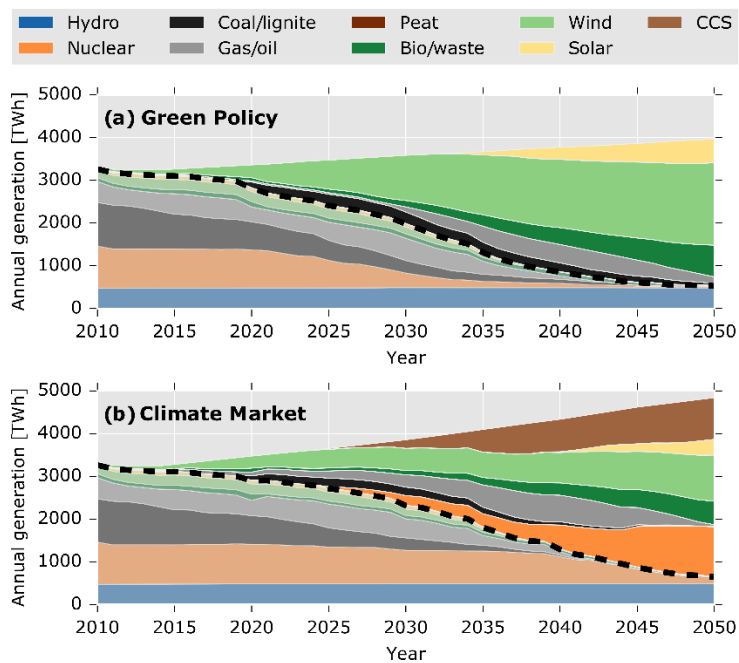


## Appendix

### A1: Generation capacities for Europe as obtained from the ELIN model



**Fig. A 1: Electricity generation capacities for the Green Policy and Climate Market scenarios, according to output from the ELIN investment model (adapted from Goop (2017))**

## A2: Technology input data to the ELIN and EPOD models

**Table A 1: Lifetime, investment costs and fixed and variable O&M costs for the different technologies as utilized in the modelling.**

Technology	Lifetime [years]	Inv. cost [€/kW]		Fixed O&M [€/kW,yr]	Variable O&M [€/kW,yr]
		2030	2050		
<b>Hard coal</b>					
Condense	40	1550	1550	27.4	
CHP/BP	40	1550	1550	27.4	
CCS	40	2390	1970	47.9	1.55
CCS cofire	40	2790	2370	57.5	1.86
<b>Lignite</b>					
Condense	40	1250	1250	31.7	
CHP/BP	40	1250	1250	31.7	
CCS	40	2190	1770	44.9	1.36
CCS cofire	40	2590	2170	53.9	1.63
<b>Natural Gas</b>					
GT	30	380	380	8	
CCGT	30	750	750	13	
CHP/BP	30	780	780	16.6	
CCS	30	1170	1020	41.2	2.8
<b>Nuclear</b>					
	45	4200	4200	57.6	
<b>Bio &amp; Waste</b>					
Condense	40	2500	2500	50	
Waste	40	9060	9060	443	
CHP/BP	40	2900	2900	57.6	
<b>Intermittent</b>					
Wind (onshore)	25	1320	1190	27.4	
Wind (offshore)	25	2190	1880	72.7	
Solar PV	25	1280	660	27.4	

Assumptions from the World Energy Outlook by the IEA, 2011-2014, extrapolated after the year 2035. Costs for CCS are taken from the Zero Emission Platform (ZEP)