



EUROPEAN RENEWABLE
ENERGY COUNCIL



RE-thinking 2050

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http://www.inforse.org/europe/seminar_2010_BXL.htm

RES Development (2005-2007)

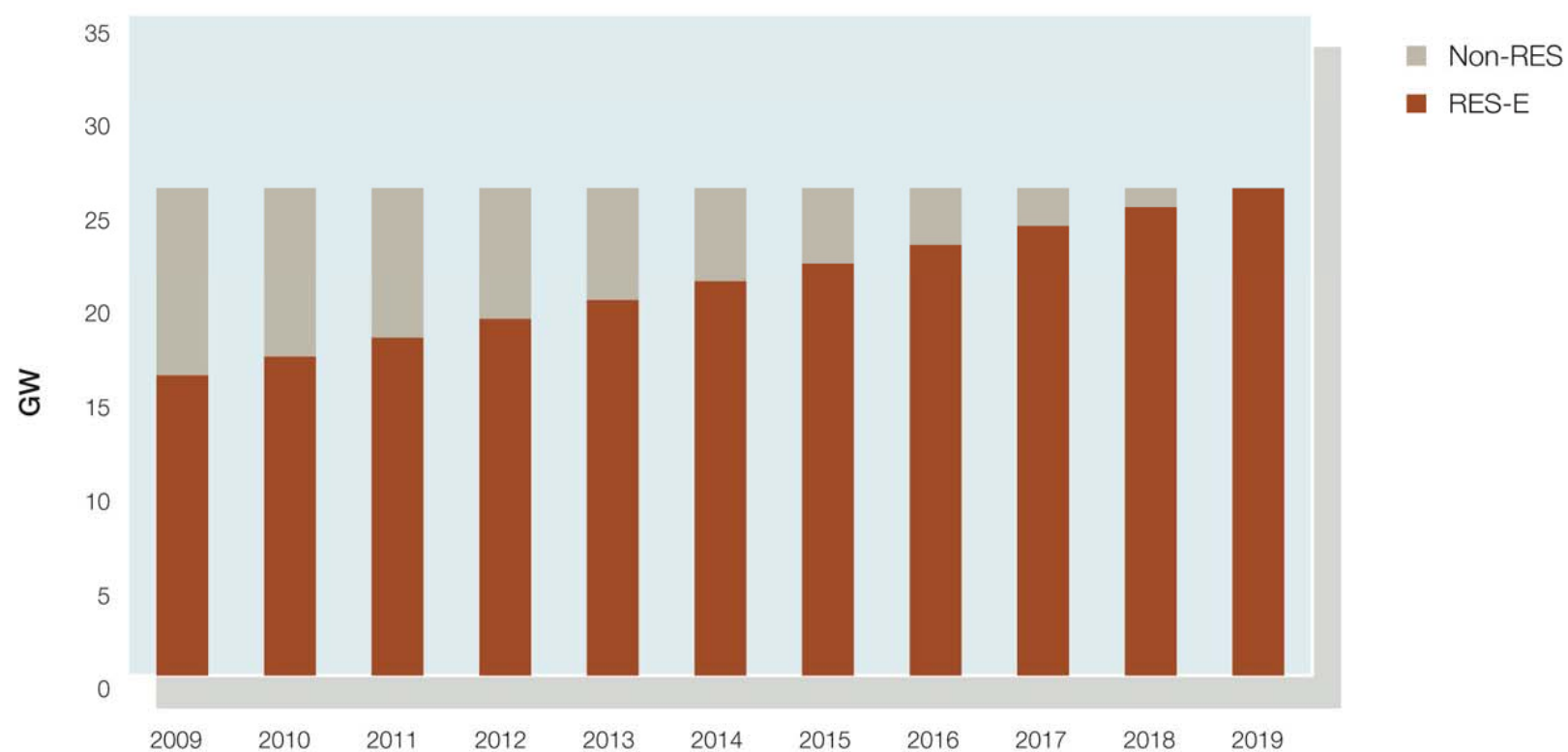
	2005		2006		2007		AGR 2005-2007
TYPE OF ENERGY	Mtoe	%	Mtoe	%	Mtoe	%	%
Final Energy Consumption*	1,211.2	100	1,213	100	1,194.9	100	-0.7
1. Electricity**	42.45	3.5	44.26	3.7	46.69	3.9	4.9
2. Heating and Cooling	59.44	4.9	62.17	5.1	62.98	5.3	2.9
3. Transport Biofuels	3.15	0.3	5.38	0.4	7.88	0.7	51.6
Total Renewable Energy	105.0	8.6	111.8	9.2	118	9.9	5.9

Source: EREC based on EUROSTAT data

*Including electricity and steam transmission/distribution losses and own consumption

**Normalised for hydro and wind

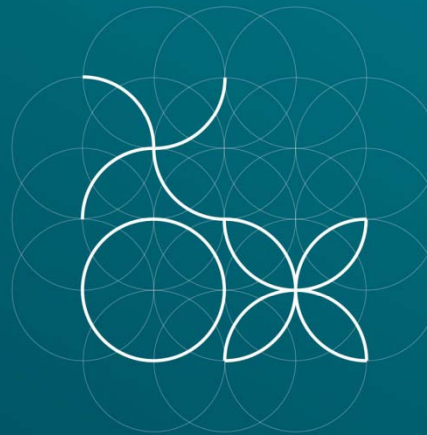
BAU RES-E Capacity Increase vs. Constant Total Newly Installed Electricity Capacity



Source: EREC

RE-thinking
2050

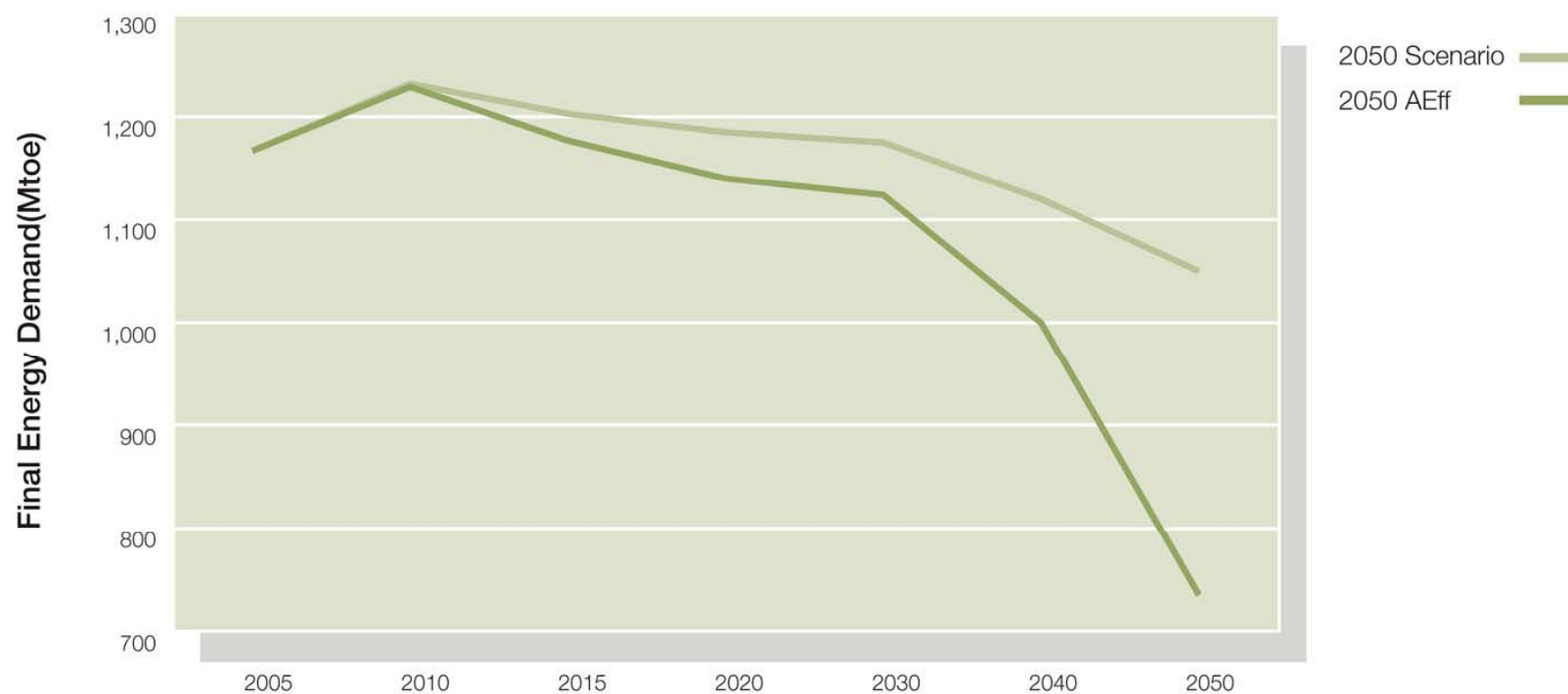
A 100% Renewable
Energy Vision for
the European Union



EREC Member Associations

<input type="checkbox"/> AEBIOM	European Biomass Association
<input type="checkbox"/> EGEC	European Geothermal Energy Council
<input type="checkbox"/> EPIA	European Photovoltaic Industry Association
<input type="checkbox"/> EREF	European Renewable Energies Federation
<input type="checkbox"/> ESHA	European Small Hydropower Association
<input type="checkbox"/> ESTELA	European Solar Thermal Electricity Association
<input type="checkbox"/> ESTIF	European Solar Thermal Industry Federation
<input type="checkbox"/> EUBIA	European Biomass Industry Association
<input type="checkbox"/> EU-OEA	European Ocean Energy Association
<input type="checkbox"/> EUREC	European Association of Renewable Energy Research Centres
<input type="checkbox"/> EWEA	European Wind Energy Association

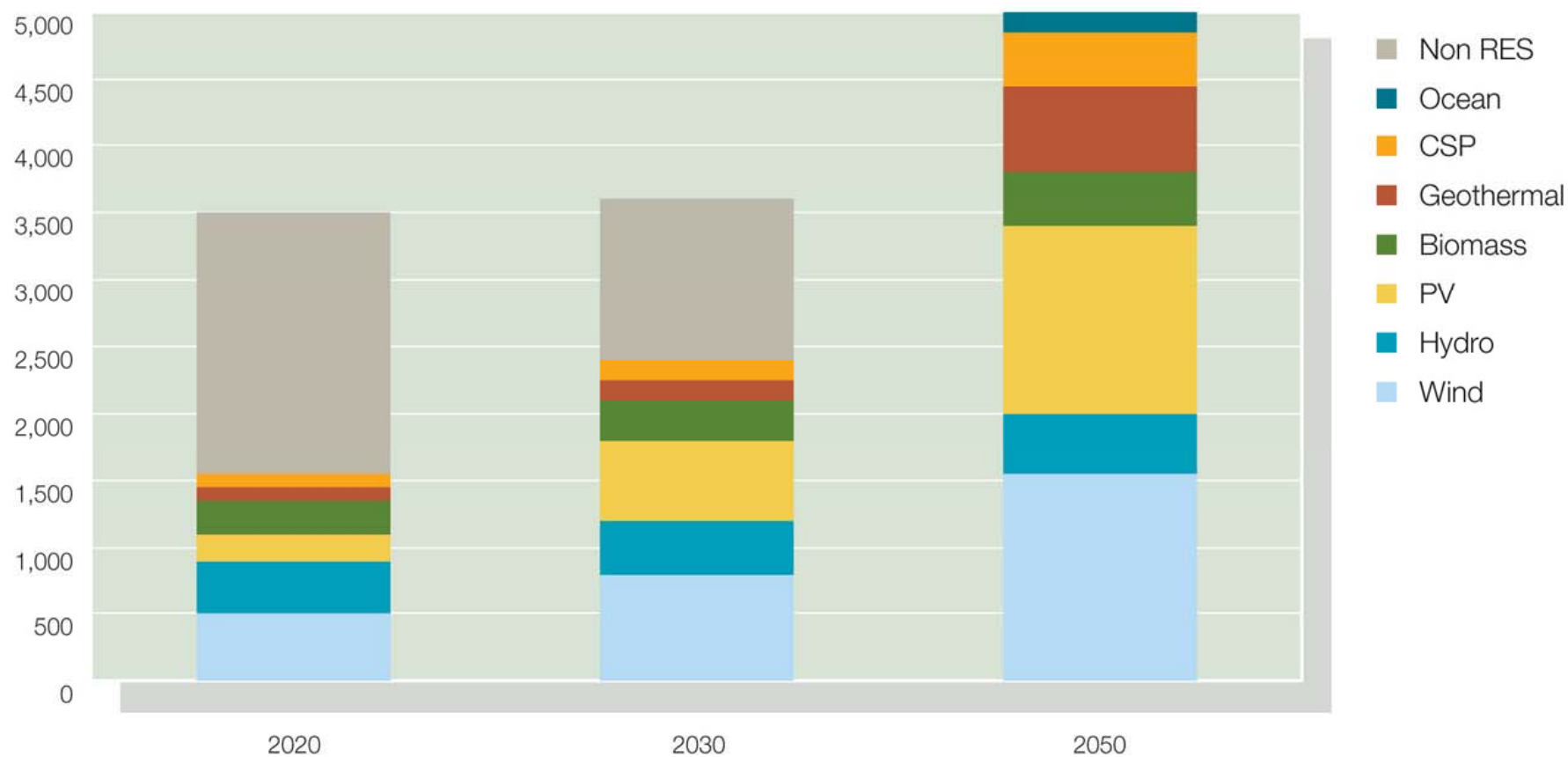
Consumption Assumptions (2005-2050)



	2005	2010	2015	2020	2030	2040	2050
NEP MP	1,167	1,232	1,203	1,185	1,175	1,120	1,050
NEP HP	1,167	1,229	1,177	1,140	1,124	1,000	735

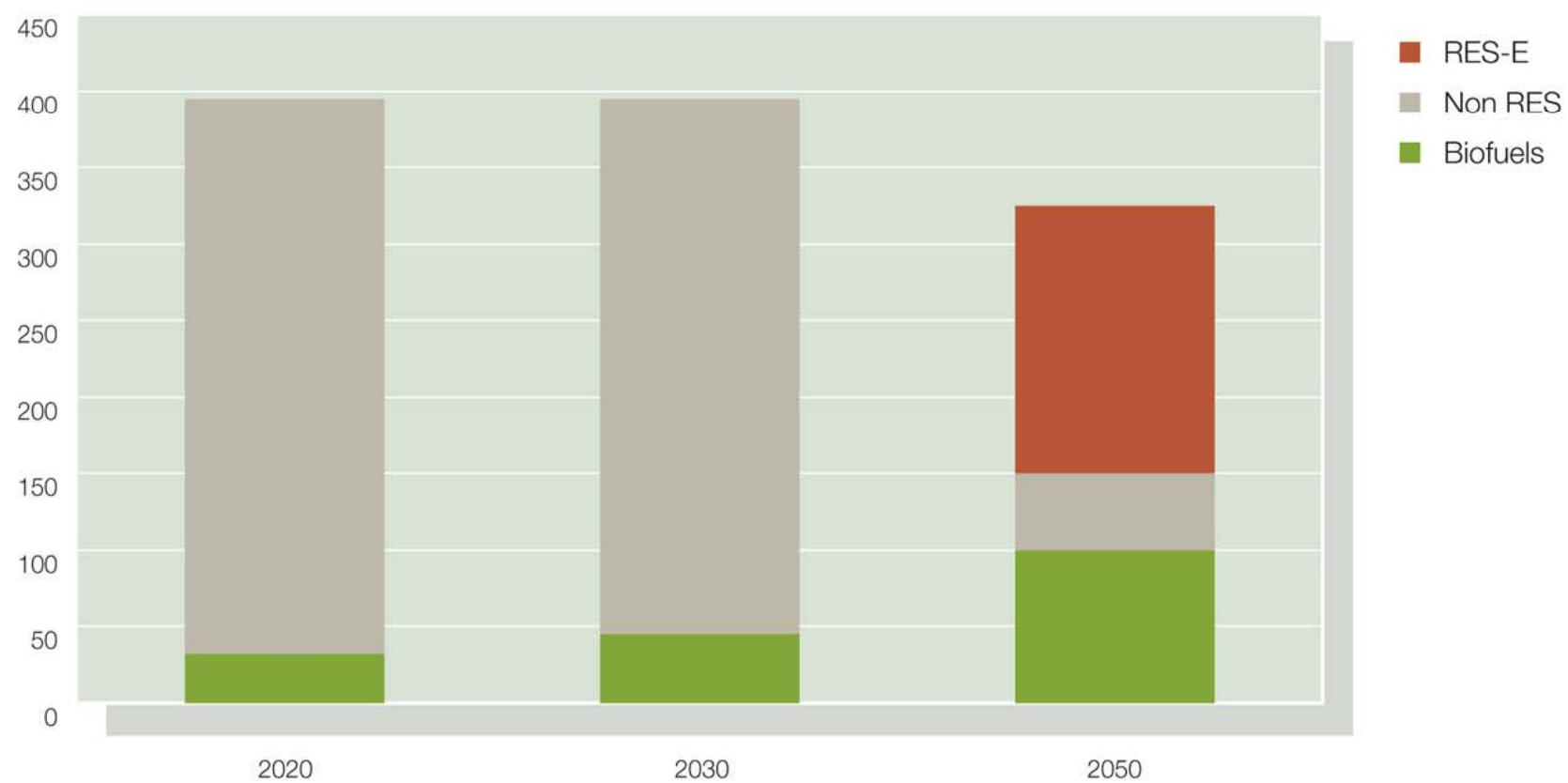
Source: EREC

Contribution of Renewable Electricity Technologies to Electricity Consumption (TWh)



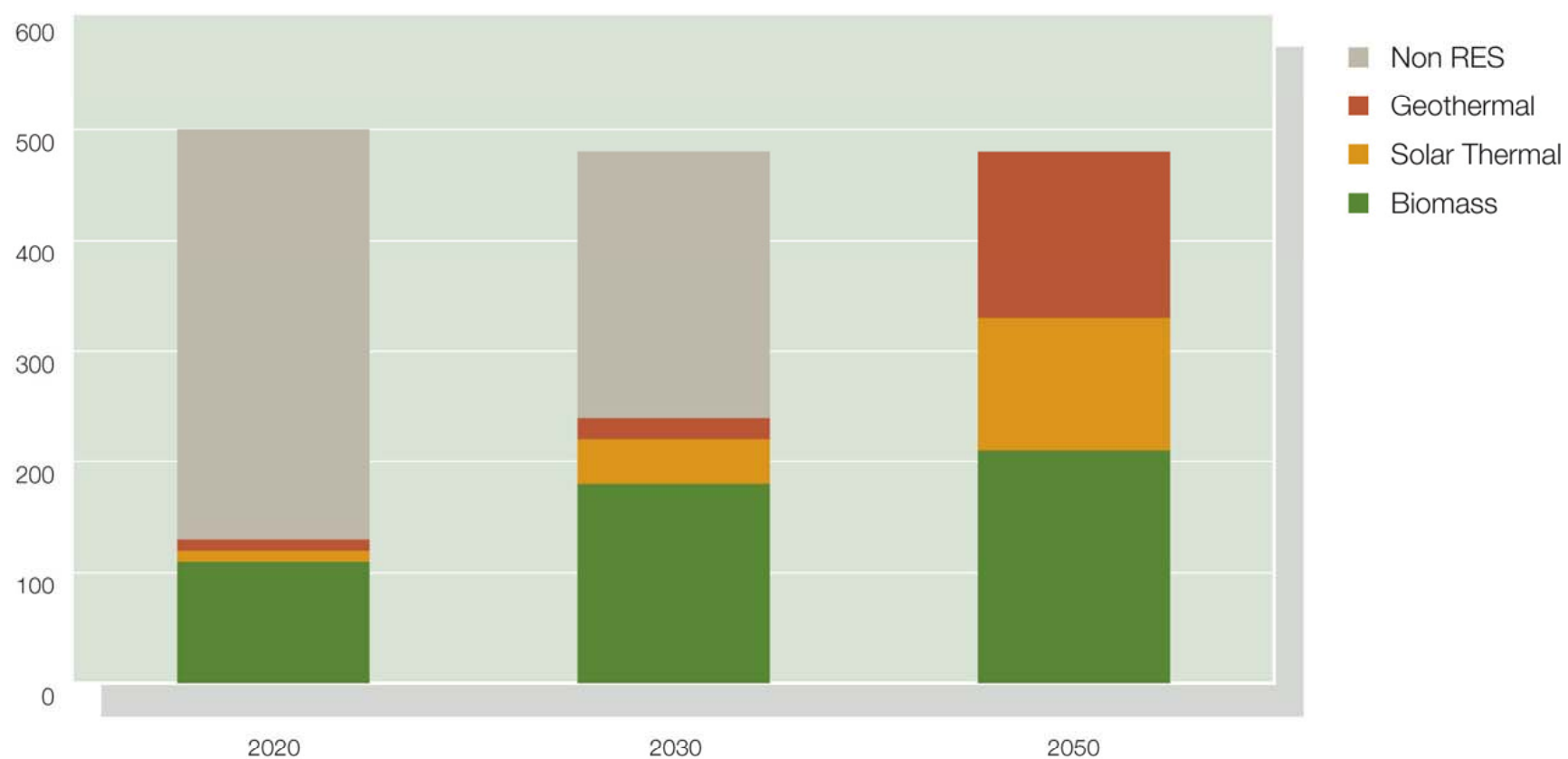
Source: EREC

Contribution of Biofuels to Transport Fuel Demand (Mtoe)



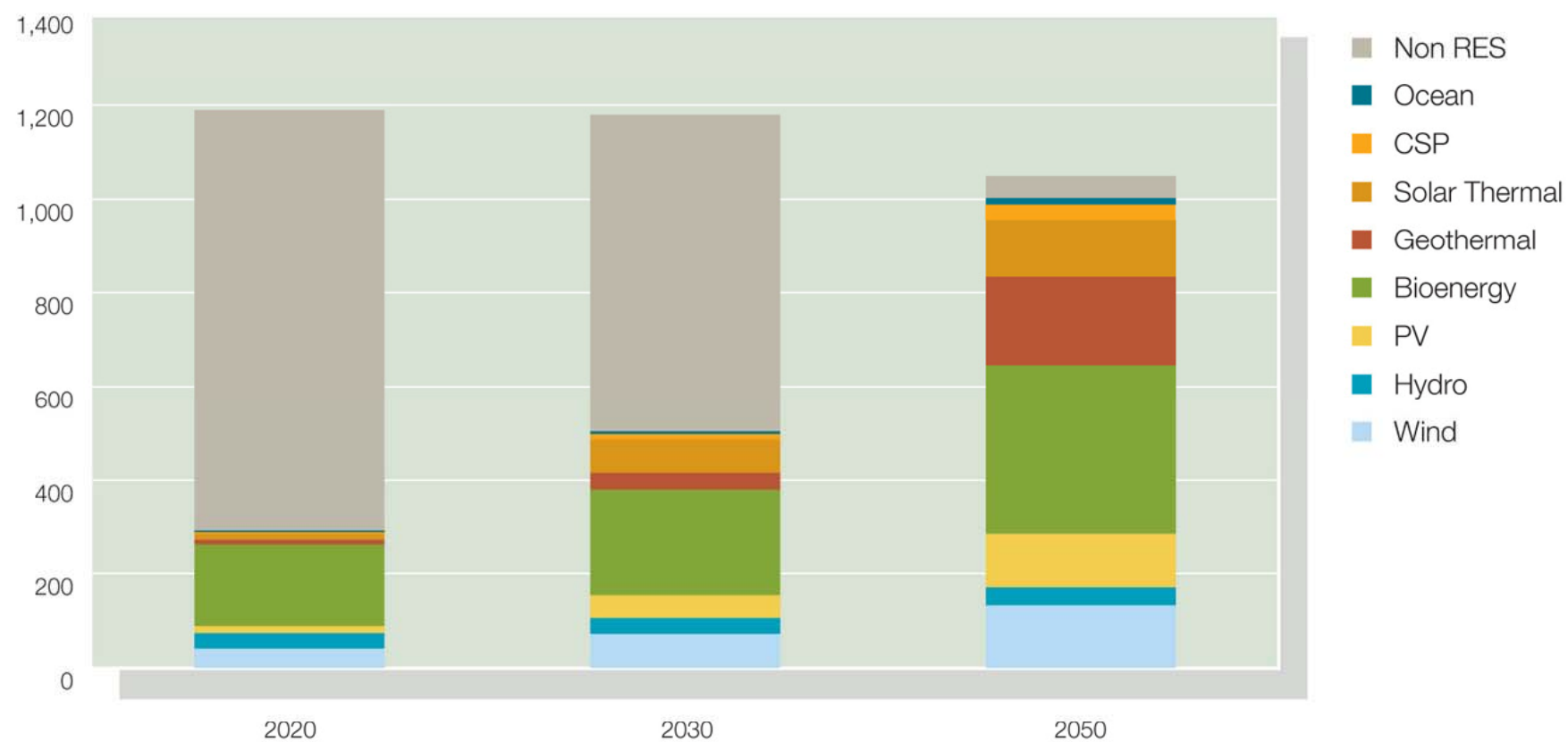
Source: EREC

Contribution of Renewable Heating and Cooling Technologies to Heat Consumption (Mtoe)



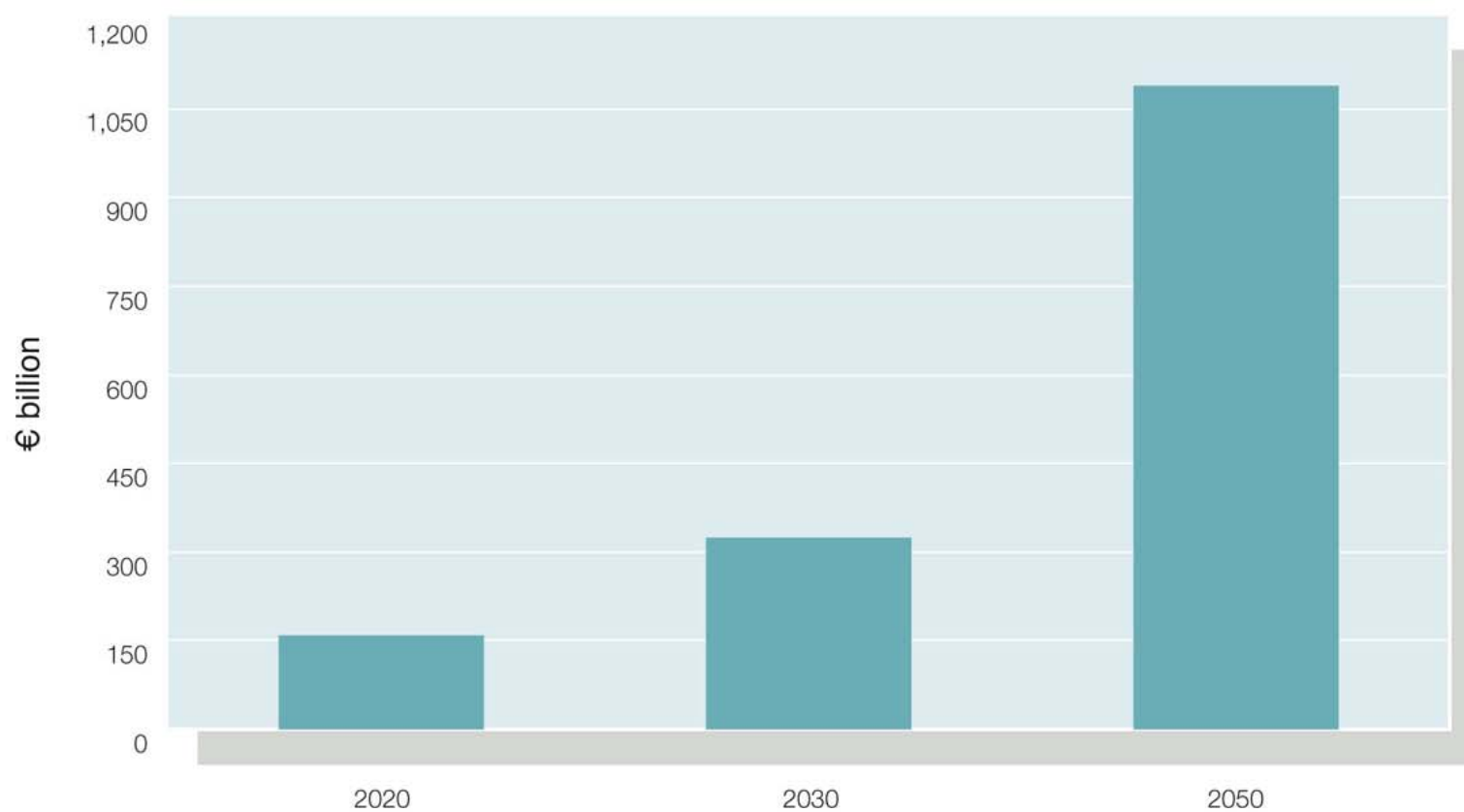
Source: EREC

Contribution of Renewable Energy Technologies to Final Energy Consumption (Mtoe)



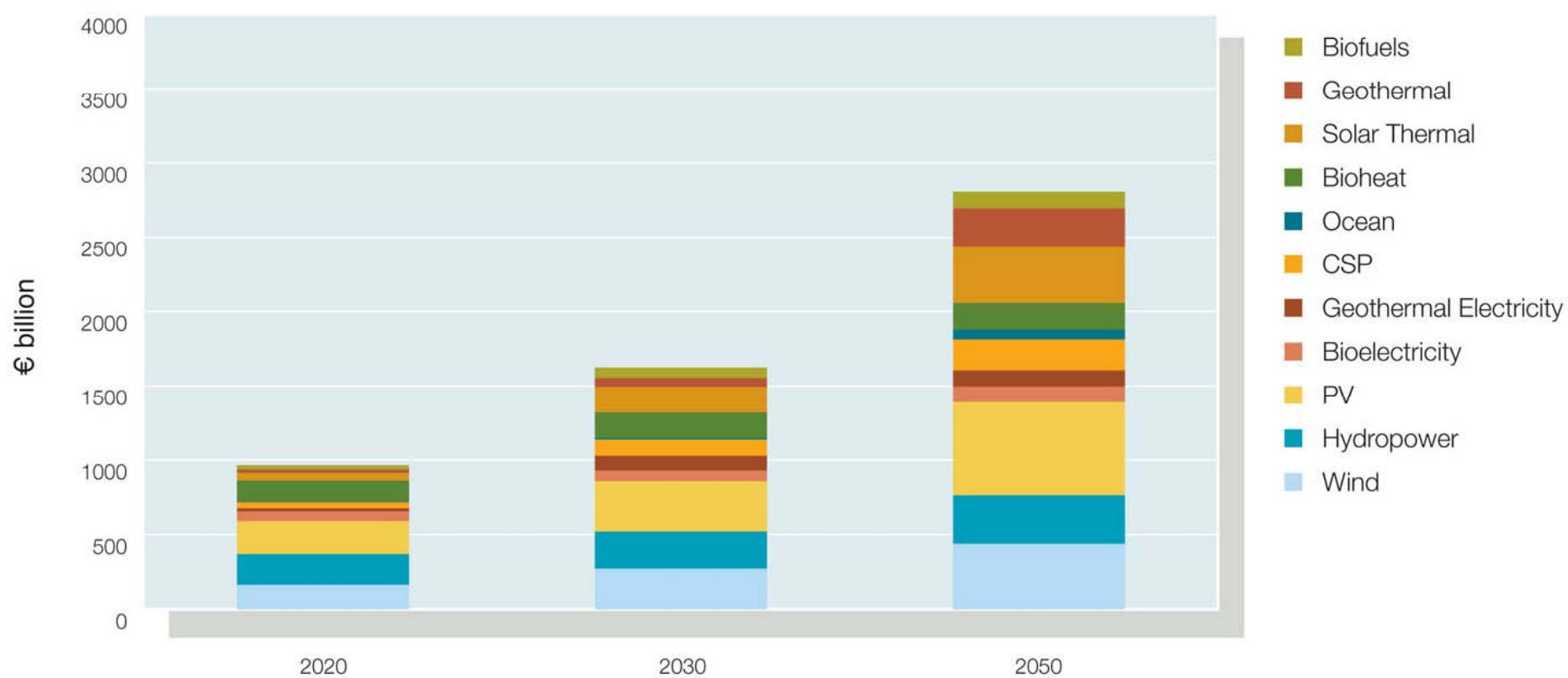
Source: EREC

Avoided Fuel Costs from RES Deployment (2020-2030-2050)



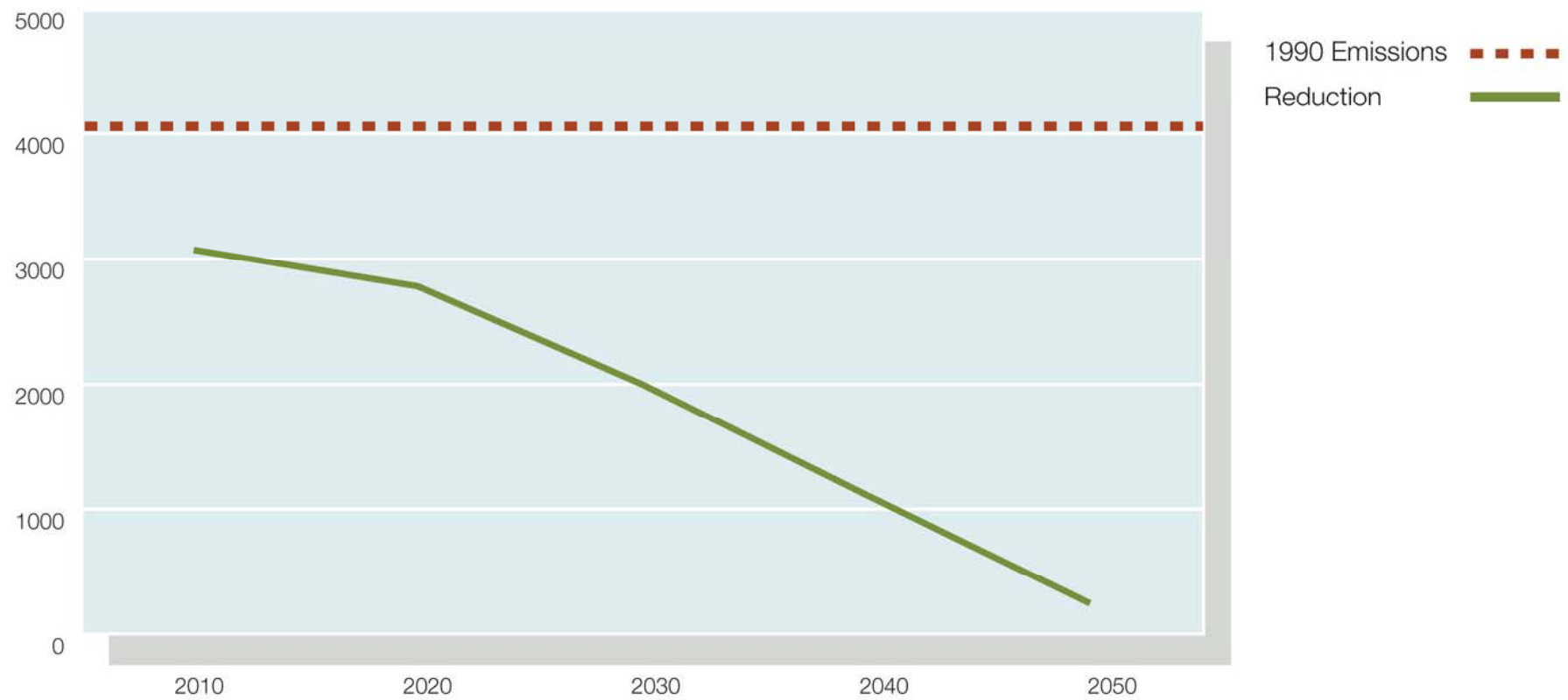
Source: EREC

Total Cumulative Investments (2020-2030-2050)



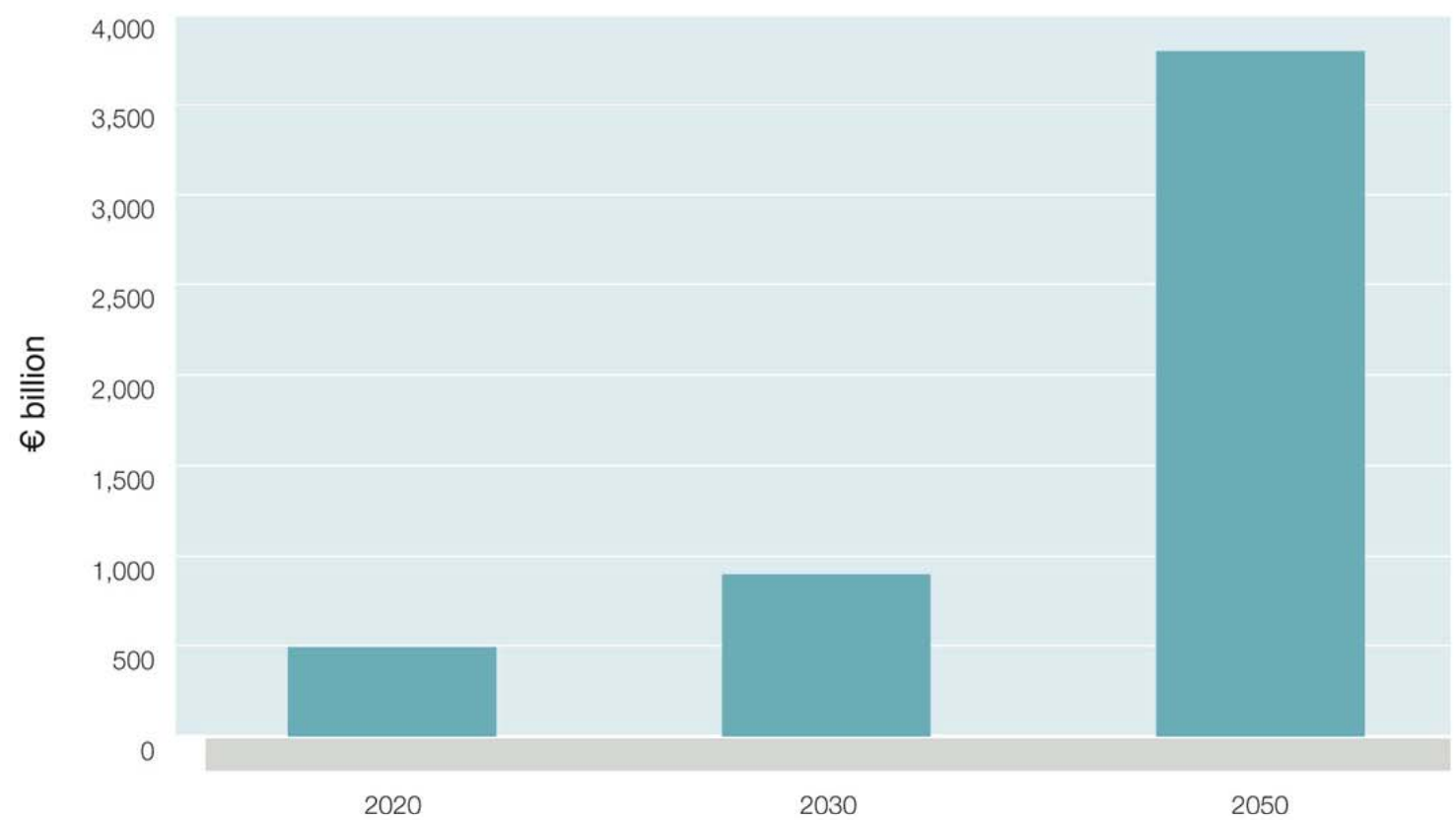
Source: EREC

CO₂ Avoidance (2020-2050)



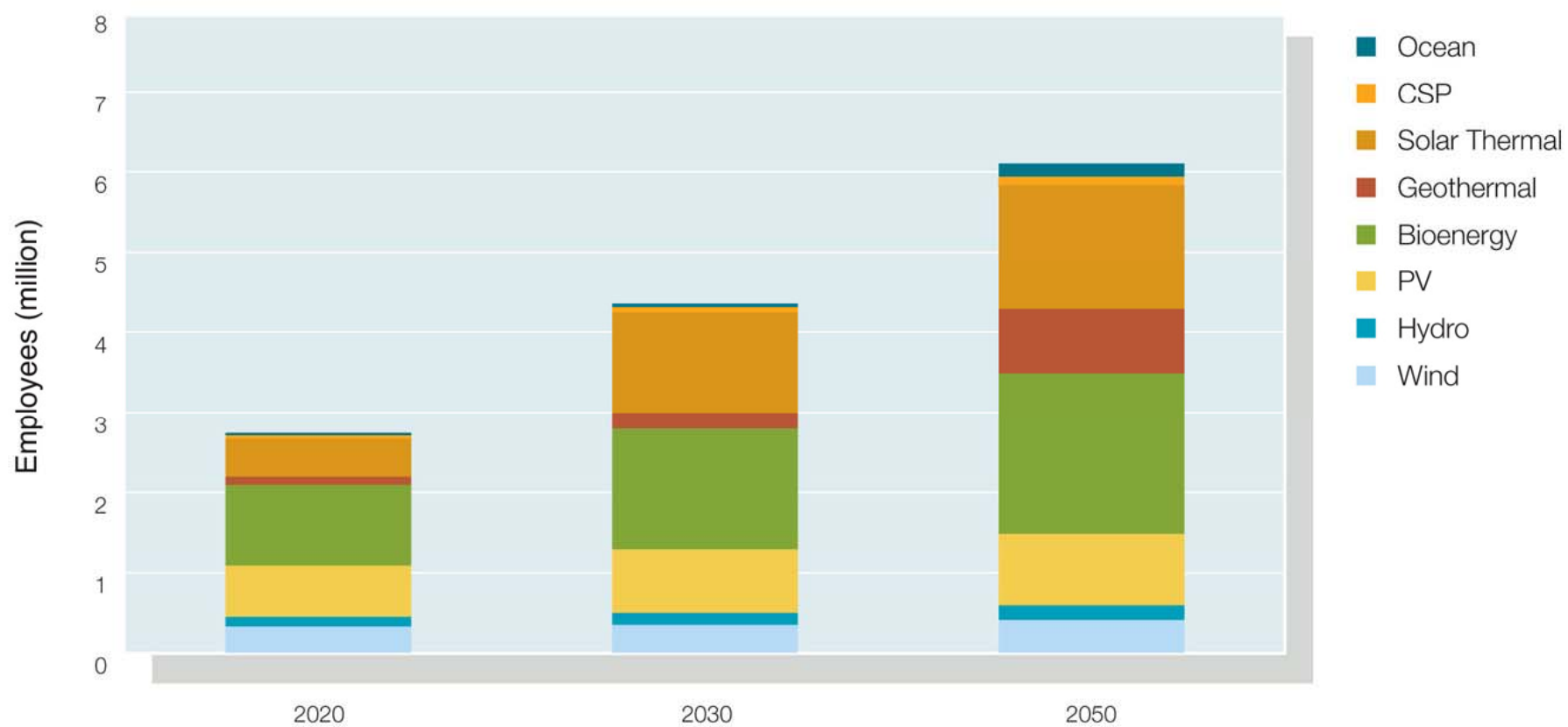
Source: EREC

Carbon Costs Avoided (2020-2030-2050)



Source: EREC

Gross Employment in the Renewable Energy Sector (2020-2030-2050)



Source: EREC

Enabling Policy Measures

- Supporting the transition towards a 100% renewable energy economy with all EU policy areas
- Less is more – an ambitious framework for Europe's energy demand
- Effective and full implementation of the new RES Directive
- Binding renewable energy targets for 2030
- Full liberalisation of the energy market
- Phasing out all subsidies for fossil and nuclear energy and introducing an EU-wide carbon and energy tax