

GLOBAL TRENDS IN RENEWABLE ENERGY INVESTMENT 2019

Chart Pack



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for Climate & Sustainable Energy Finance



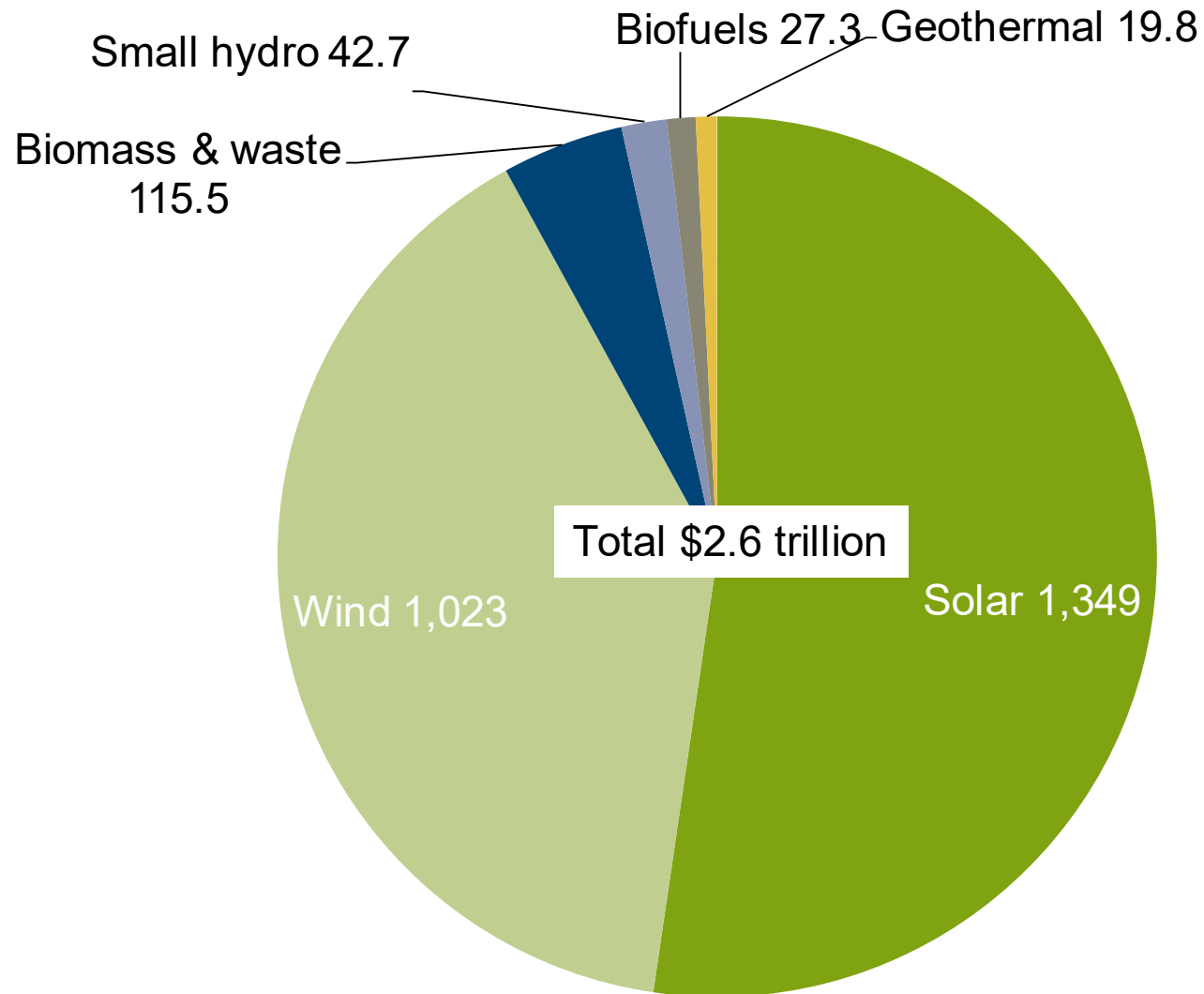
United Nations
Environment Programme

BloombergNEF

RENEWABLE ENERGY CAPACITY INVESTMENT OVER THE DECADE, 2010-2019 (\$BN)



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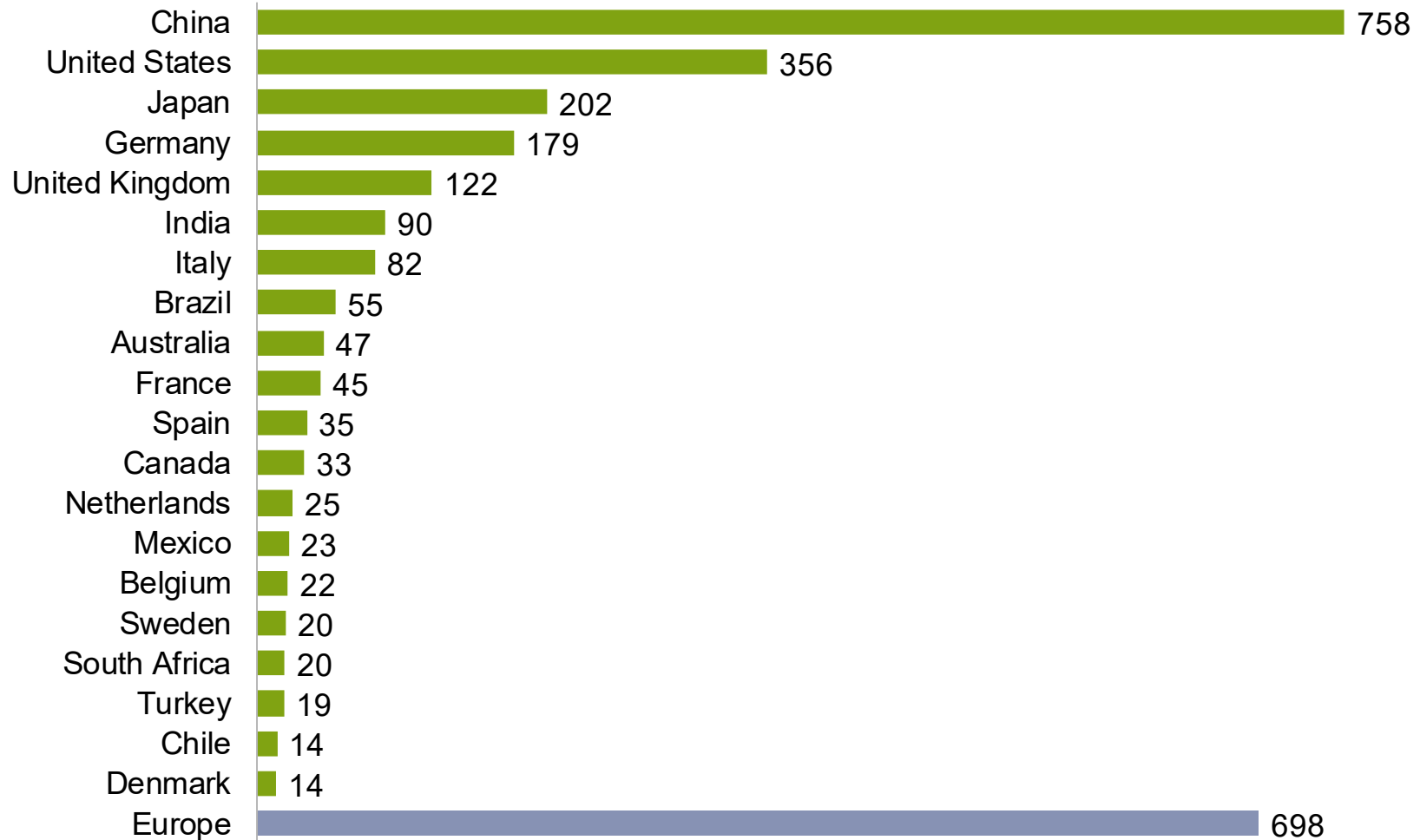
Note: Includes an estimate for 2019, based partly on provisional first-half data

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

RENEWABLE ENERGY CAPACITY INVESTMENT FROM 2010 TO 1H 2019, TOP 20 COUNTRIES/MARKETS (\$BN)



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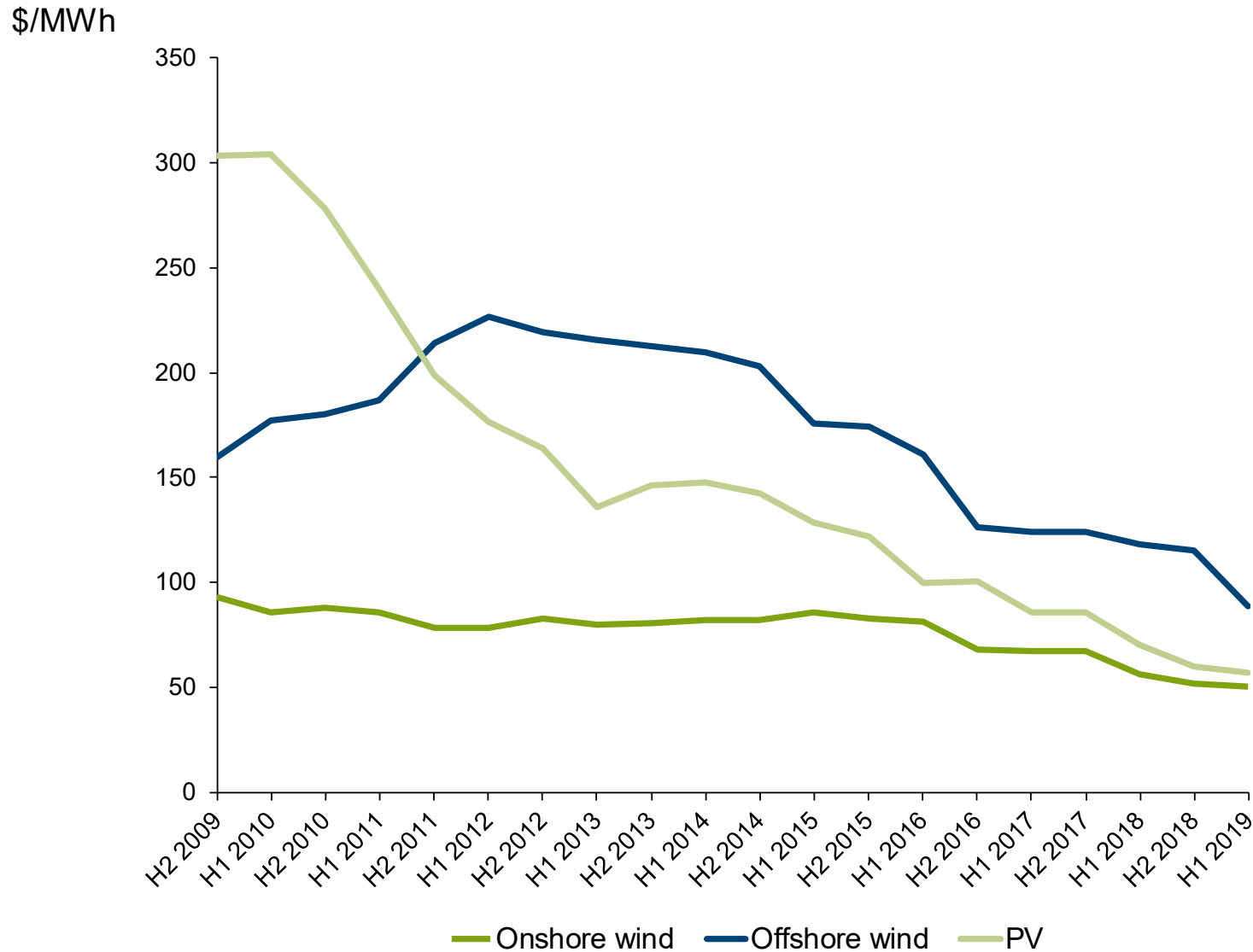
Note: Includes first-half data for 2019, but not an estimate for the second half.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

LEVELIZED COST OF ELECTRICITY, BY MAIN RENEWABLE TECHNOLOGY, 2009 TO 2019 (\$/MWh)



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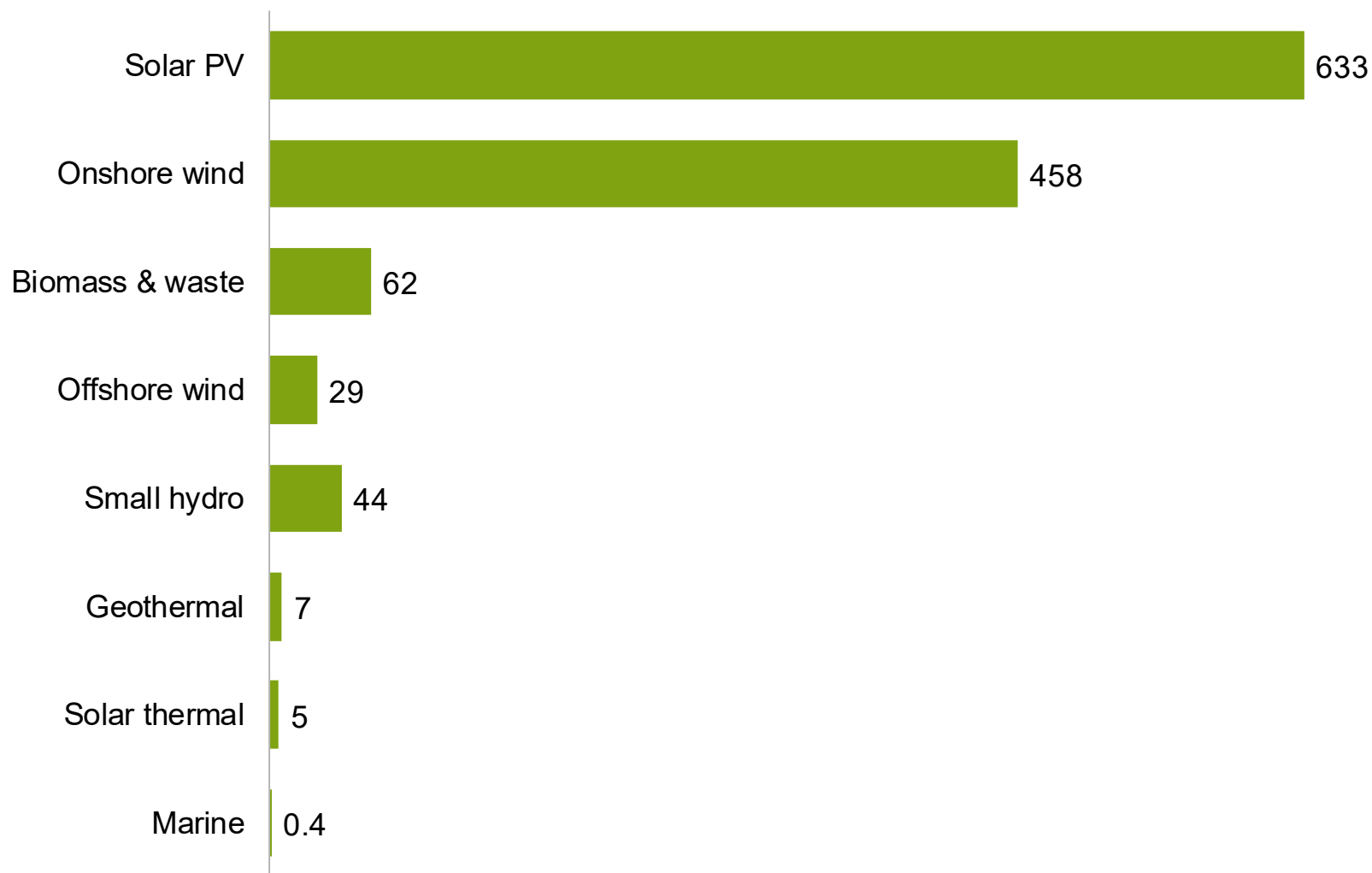
Note: PV is crystalline silicon with no tracking.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

CAPACITY ADDED IN RENEWABLE POWER TECHNOLOGIES OVER THE DECADE, 2010-2019 (GW)



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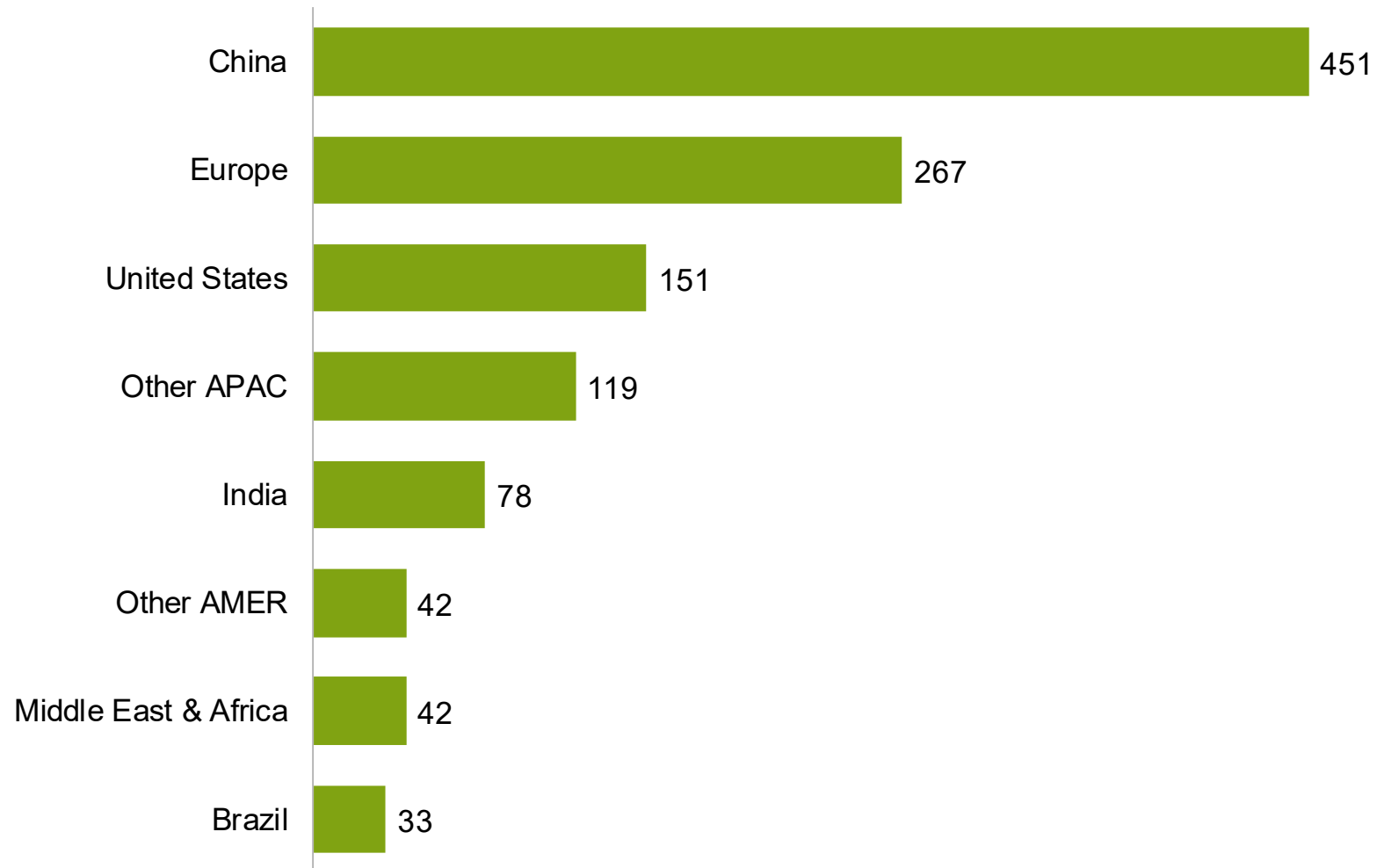
Note: Figures are estimated based on actual data to 2018, and forecasts for 2019.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

RENEWABLE ENERGY CAPACITY ADDED OVER THE DECADE, 2019 VS 2009, BY REGION (GW)



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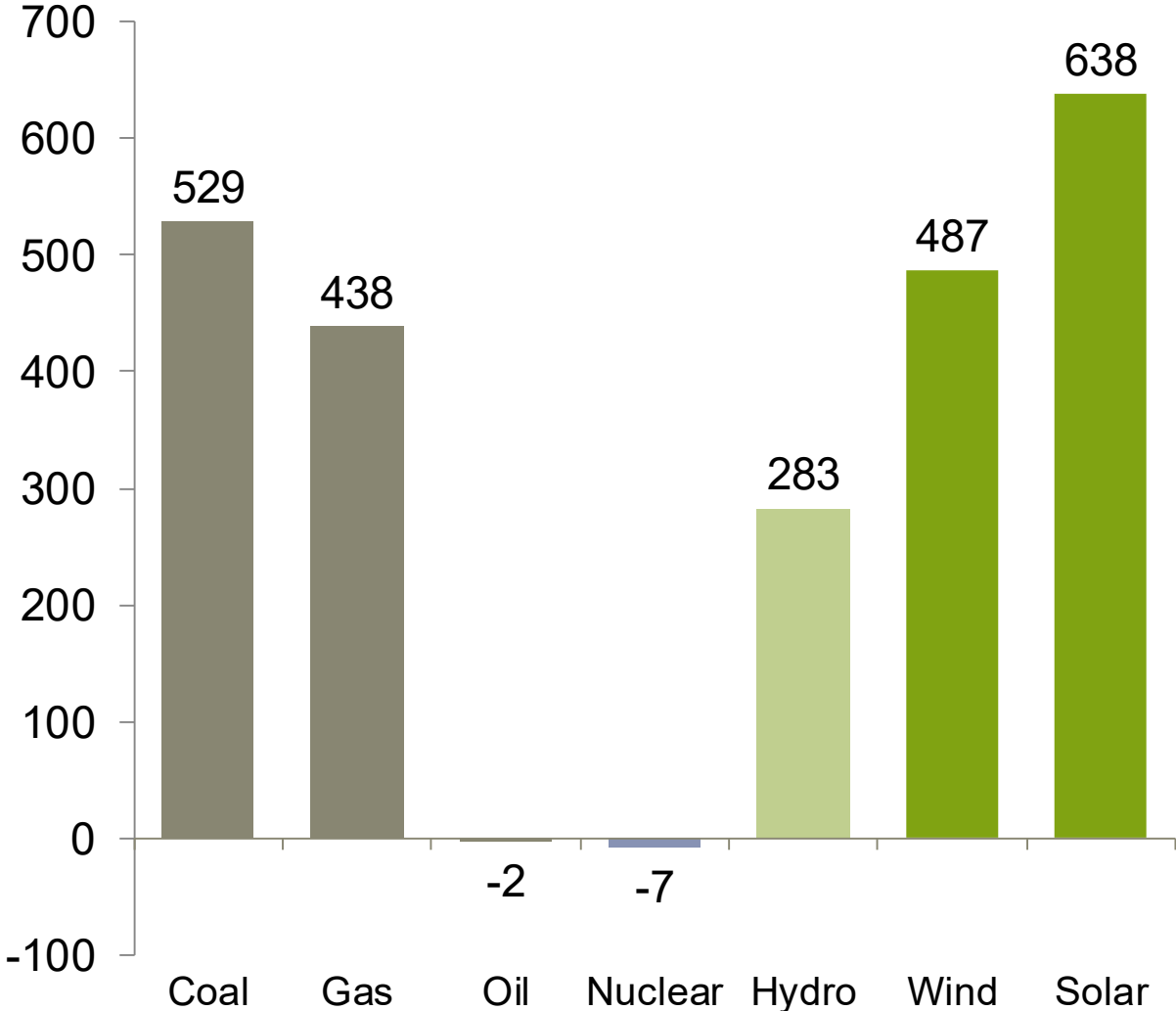
Note: Figures are estimated based on actual data to 2018, and forecasts for 2019. The sum of the additions by region falls short of the total of additions by sector in Figure 4. This is because a small proportion of renewable power additions have yet to be confirmed in terms of location.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

NET CAPACITY ADDED IN MAIN GENERATION TECHNOLOGIES IN THE DECADE, 2019 VS 2009 (GW)



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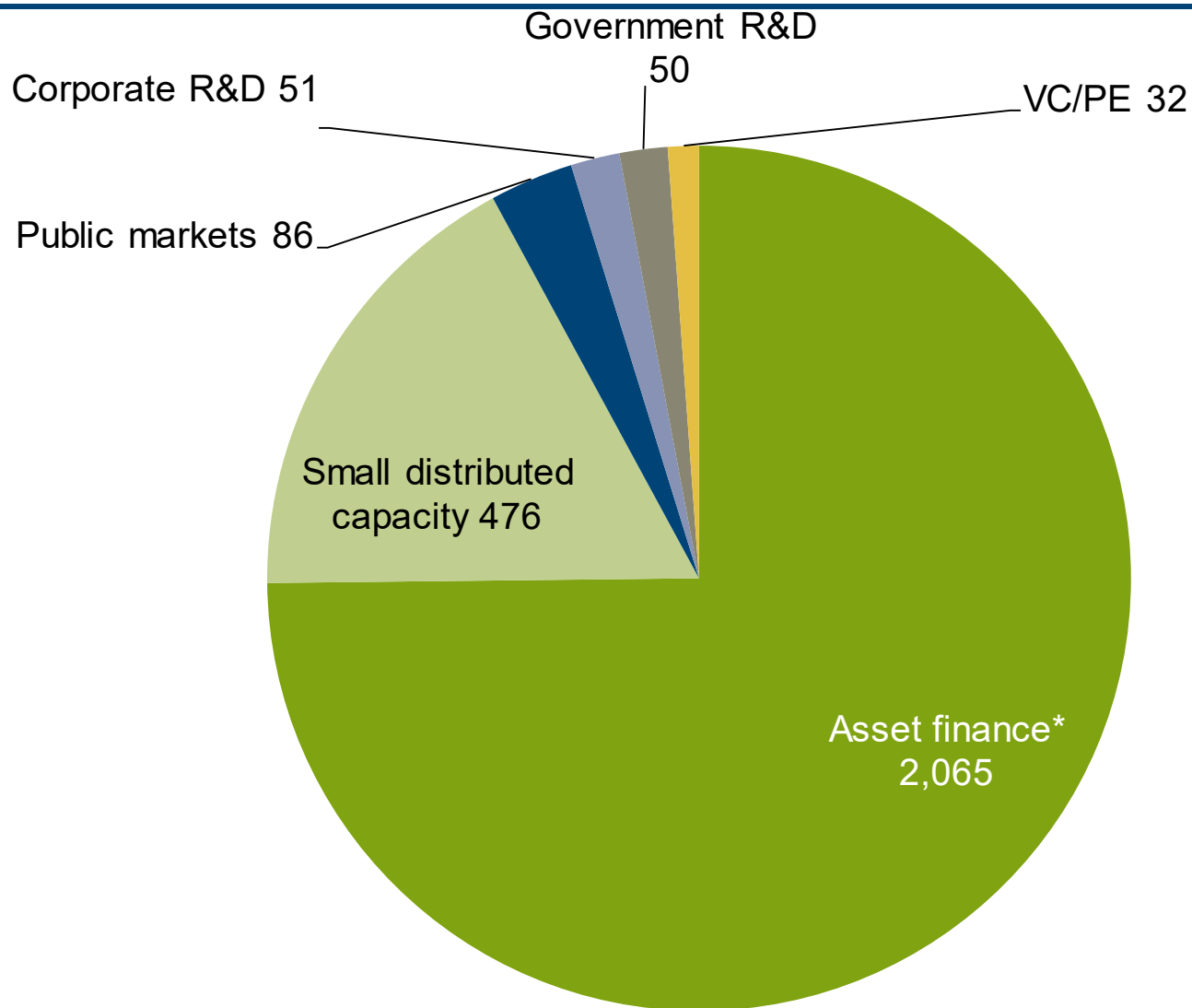
Note: Figures are estimated based on actual data to 2018, and forecasts for 2019. Oil and nuclear saw capacity closed more than offset new capacity commissioned.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

TOTAL RENEWABLE ENERGY INVESTMENT OVER THE DECADE 2010-2019, BY CATEGORY (\$BN)



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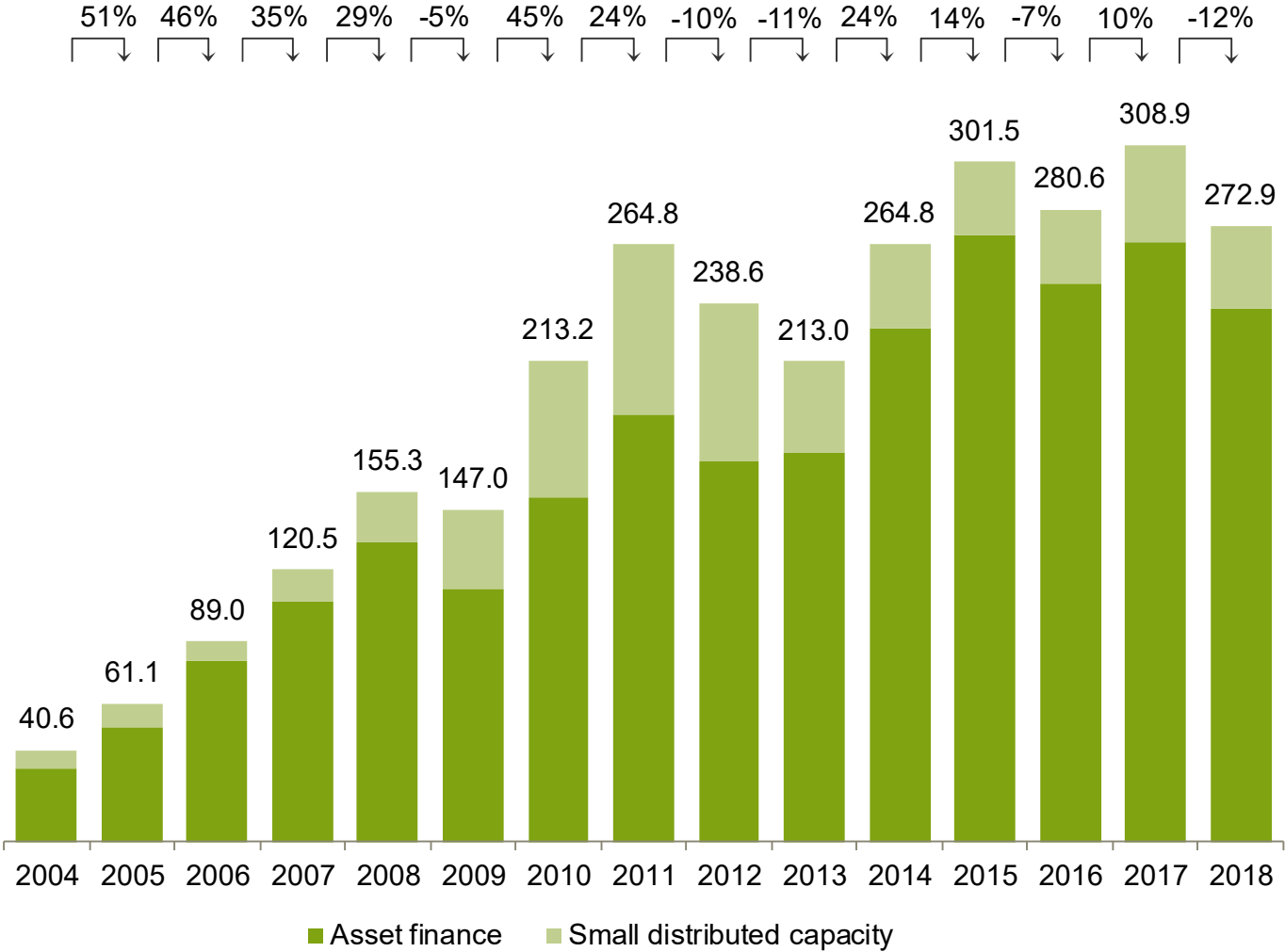
Note: Asset finance adjusts for re-invested equity, VC/PE = venture capital and private equity. Figures for 2019 are estimated based on provisional first-half totals.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

GLOBAL RENEWABLE ENERGY CAPACITY INVESTMENT, 2004 TO 2018 (\$BN)



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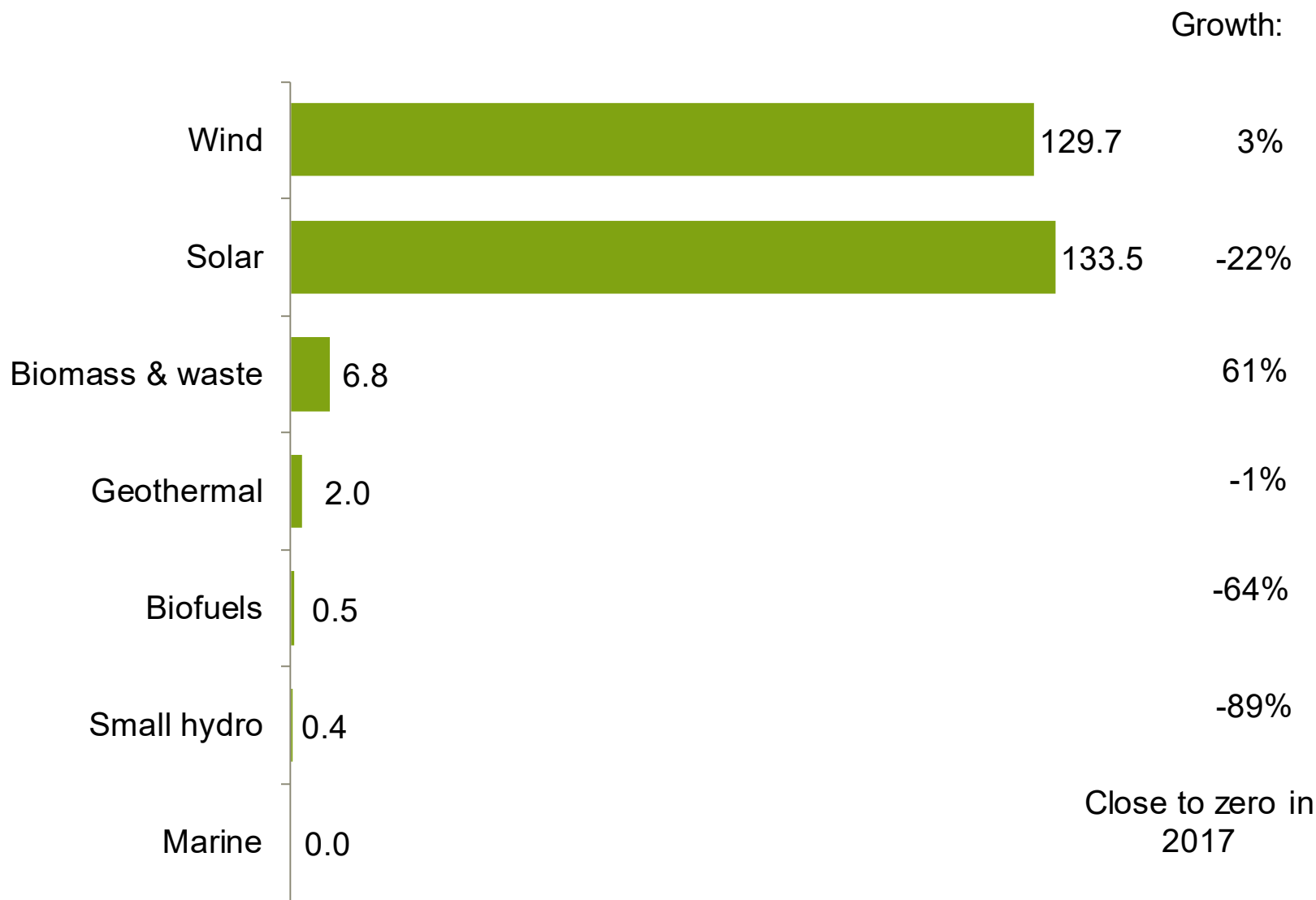
Note: Total values include estimates for undisclosed deals.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

GLOBAL INVESTMENT IN RENEWABLES CAPACITY BY SECTOR IN 2018, AND GROWTH ON 2017 (\$BN)



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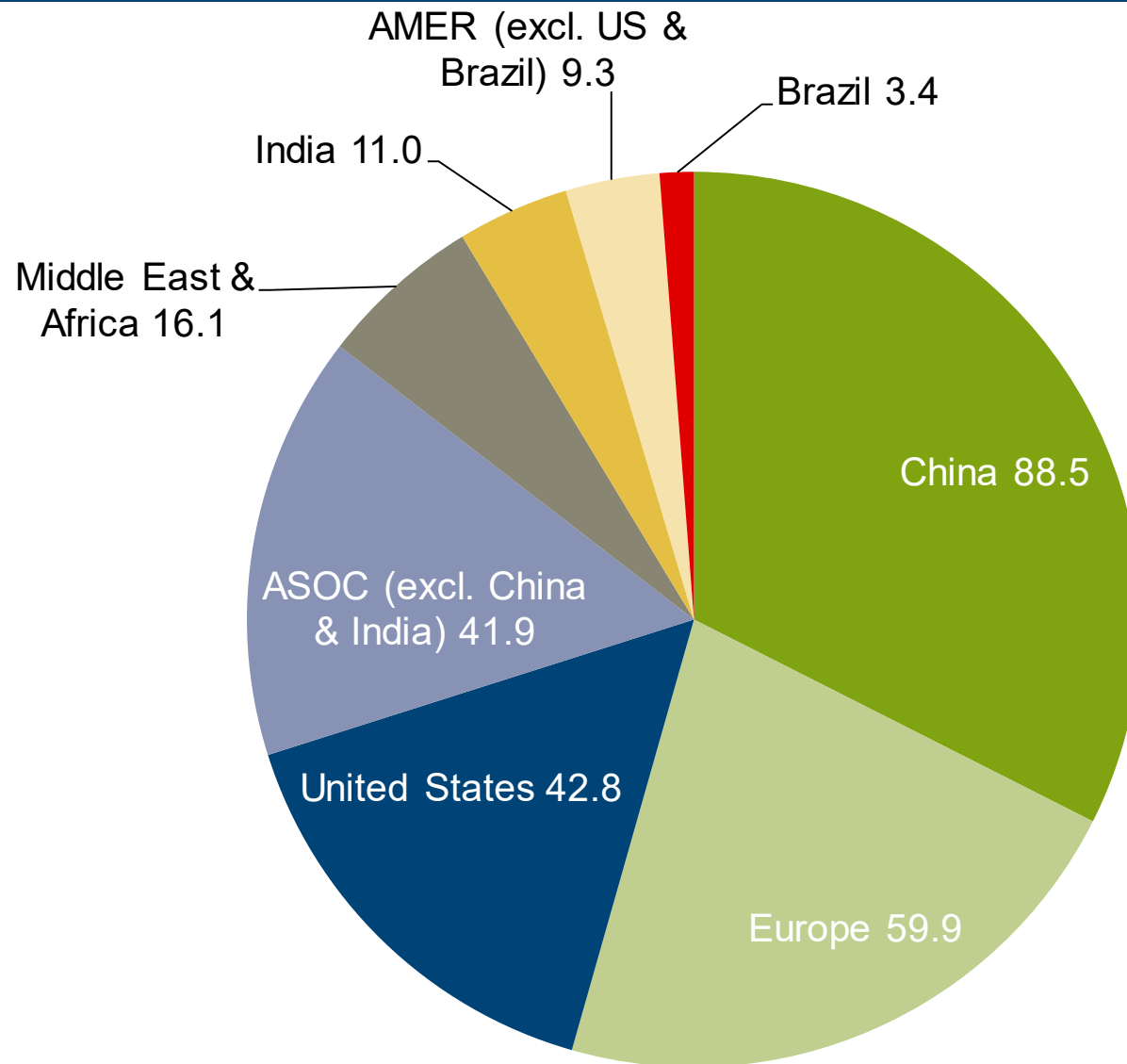
Note: Total values include estimates for undisclosed deals.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

INVESTMENT IN RENEWABLE ENERGY CAPACITY BY REGION, 2018 (\$BN)



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Note: Total values include estimates for undisclosed deals.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

INVESTMENT IN RENEWABLES CAPACITY BY TOP 30 COUNTRY/MARKET IN 2018, GROWTH ON 2017 (\$BN)



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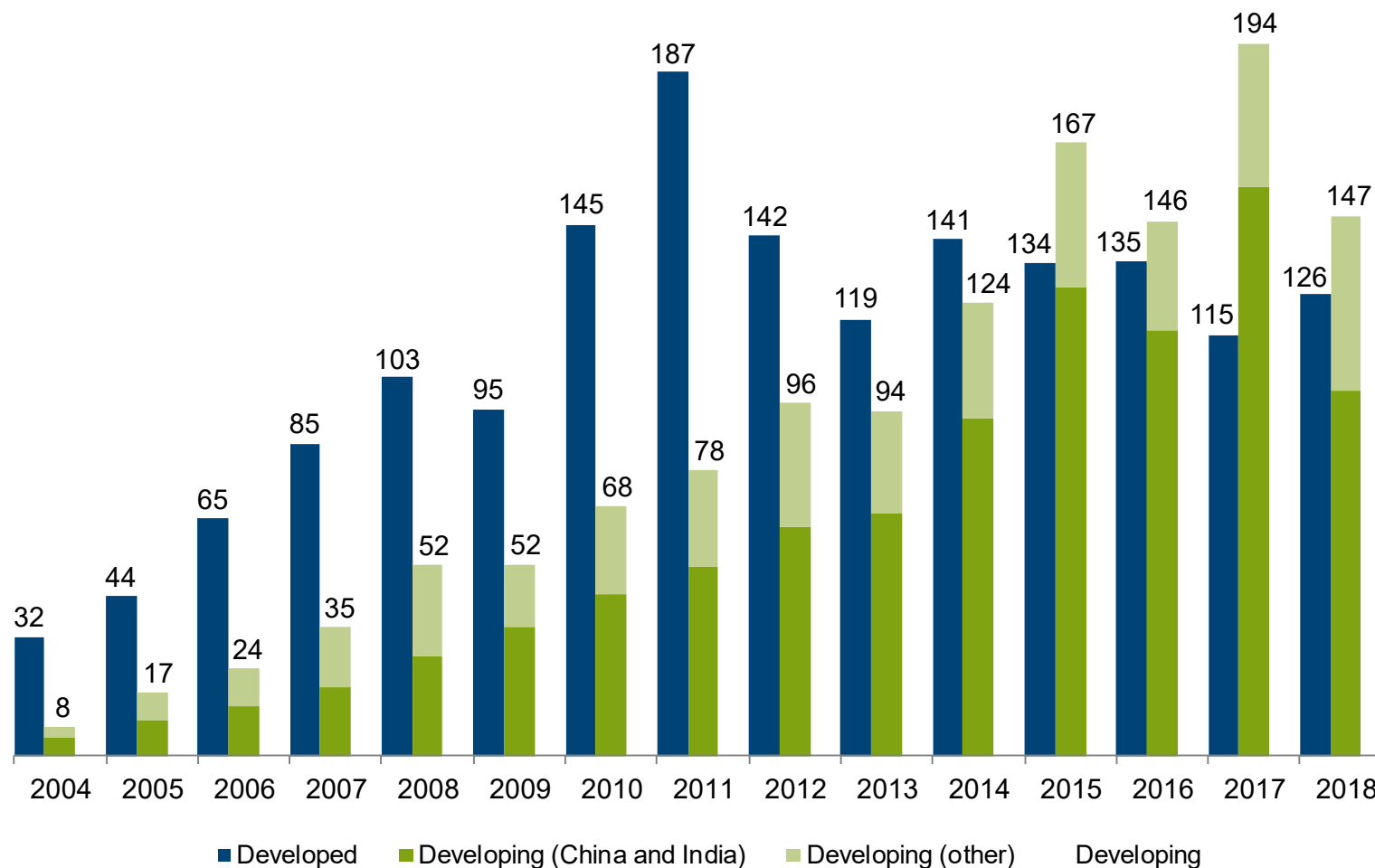
		% growth on 2017
China	88.5	-38%
United States	42.8	-6%
Japan	17.6	-17%
India	11.0	-15%
Australia	9.2	36%
United Kingdom	8.8	36%
Spain	7.5	859%
Germany	6.3	-52%
Vietnam	5.2	809%
Netherlands	4.9	197%
Sweden	4.5	122%
France	4.1	-8%
South Africa	4.1	3493%
Mexico	3.8	-38%
Brazil	3.4	-44%
Belgium	3.1	312%
Morocco	3.1	173%
Ukraine	2.1	539%
Turkey	2.0	-33%
Italy	2.0	92%
Argentina	1.9	15%
Russian Federation	1.9	371%
Taiwan	1.8	163%
Denmark	1.7	69%
Kenya	1.4	0 in 2017
Korea (Republic)	1.4	-37%
Chile	1.3	-38%
Norway	1.1	15%
Finland	1.0	193%
Egypt	1.0	-71%

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

INVESTMENT IN RENEWABLES CAPACITY, DEVELOPED VS DEVELOPING COUNTRIES, 2004-2018 (\$BN)



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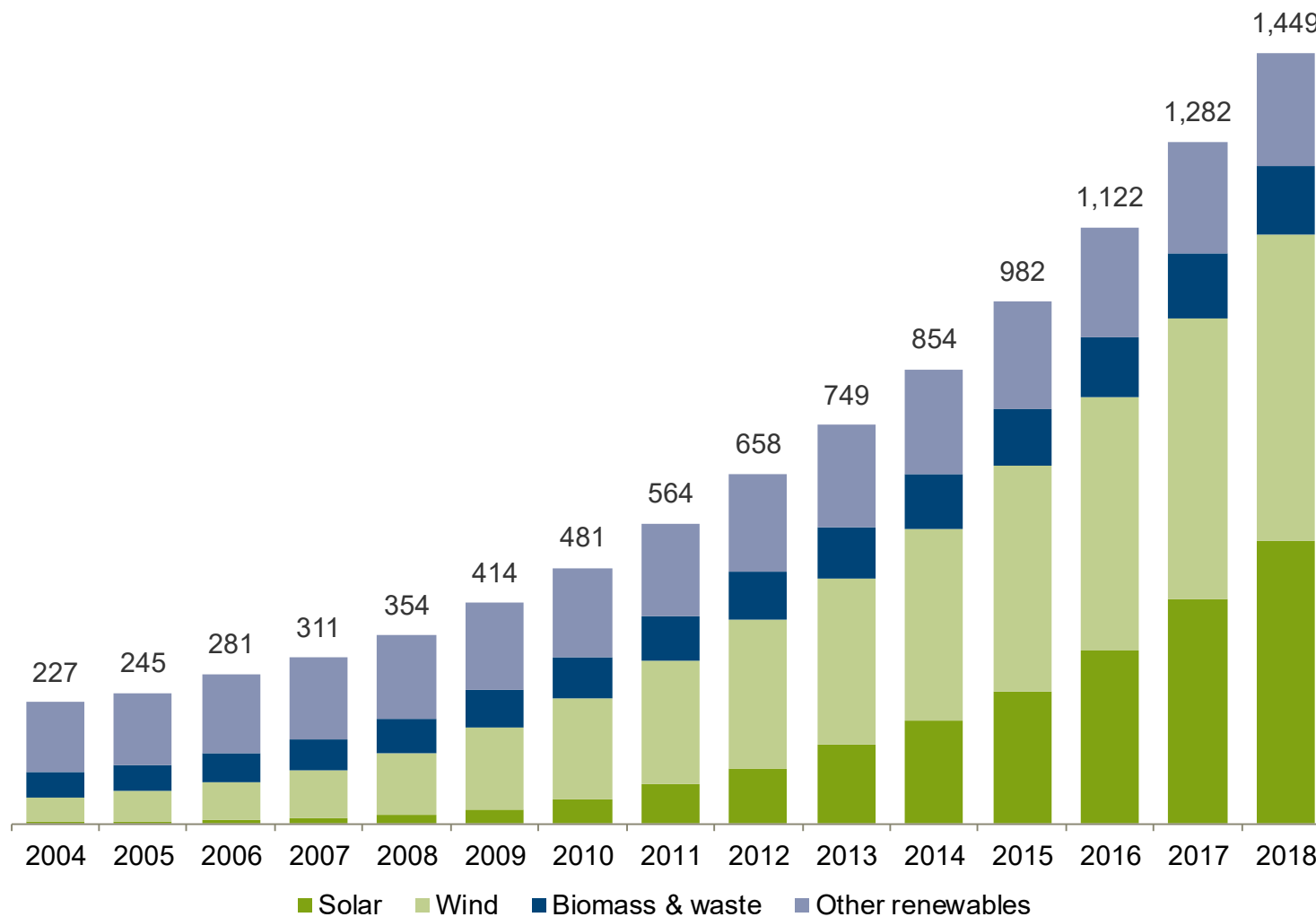
Note: Total values include estimates for undisclosed deals. Developed volumes are based on OECD countries excluding Mexico, Chile, and Turkey.

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

GLOBAL CAPACITY IN RENEWABLE POWER, 2004-2018 (GW)



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Note: "Other renewables" does not include large hydro-electric projects of more than 50MW

Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

RENEWABLE ENERGY CAPACITY INVESTMENT IN \$BN VS GW CAPACITY ADDED, 2005-2018



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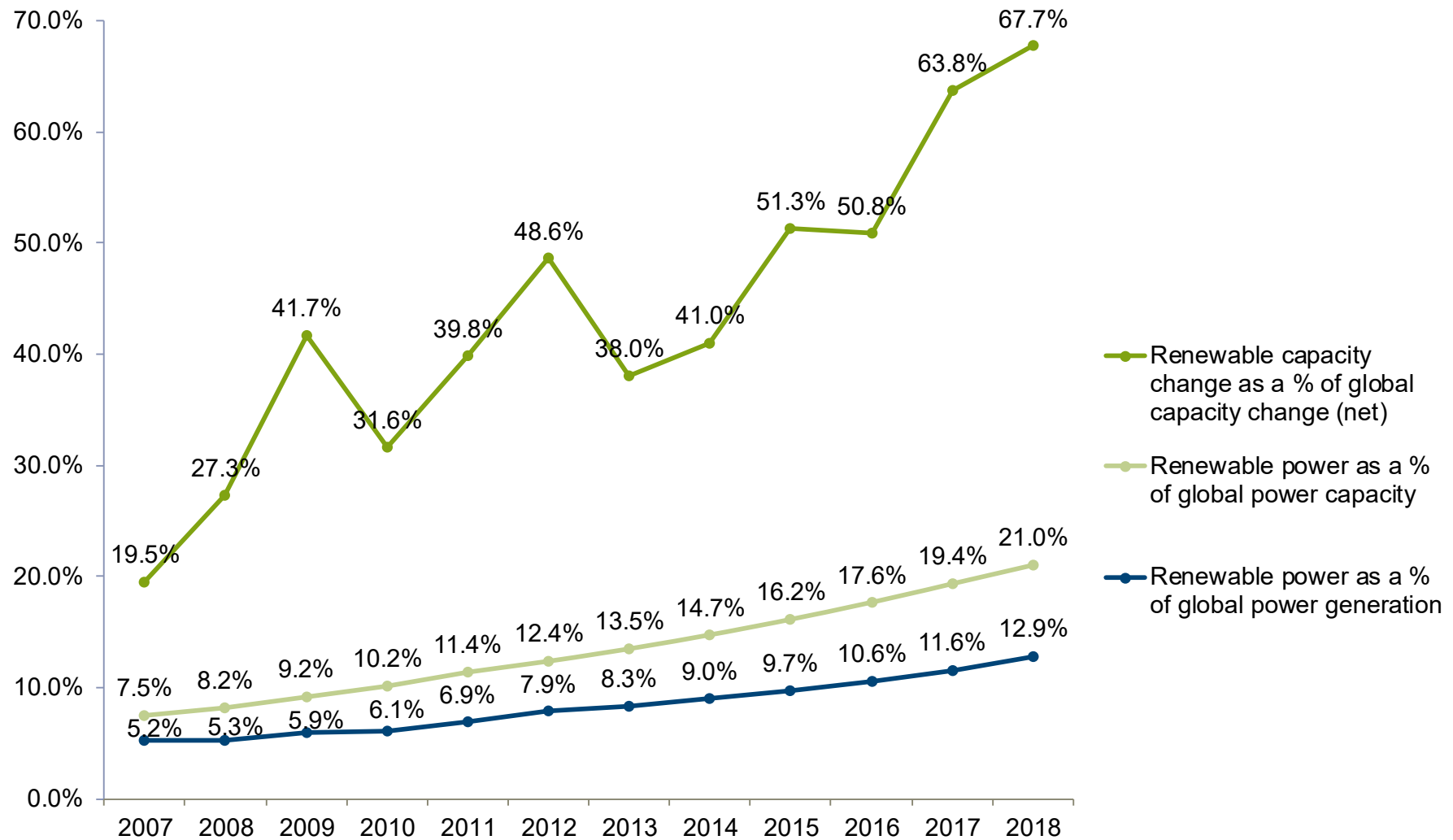


Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

RENEWABLE GENERATION AND CAPACITY AS A SHARE OF GLOBAL POWER, 2007-2018 (%)



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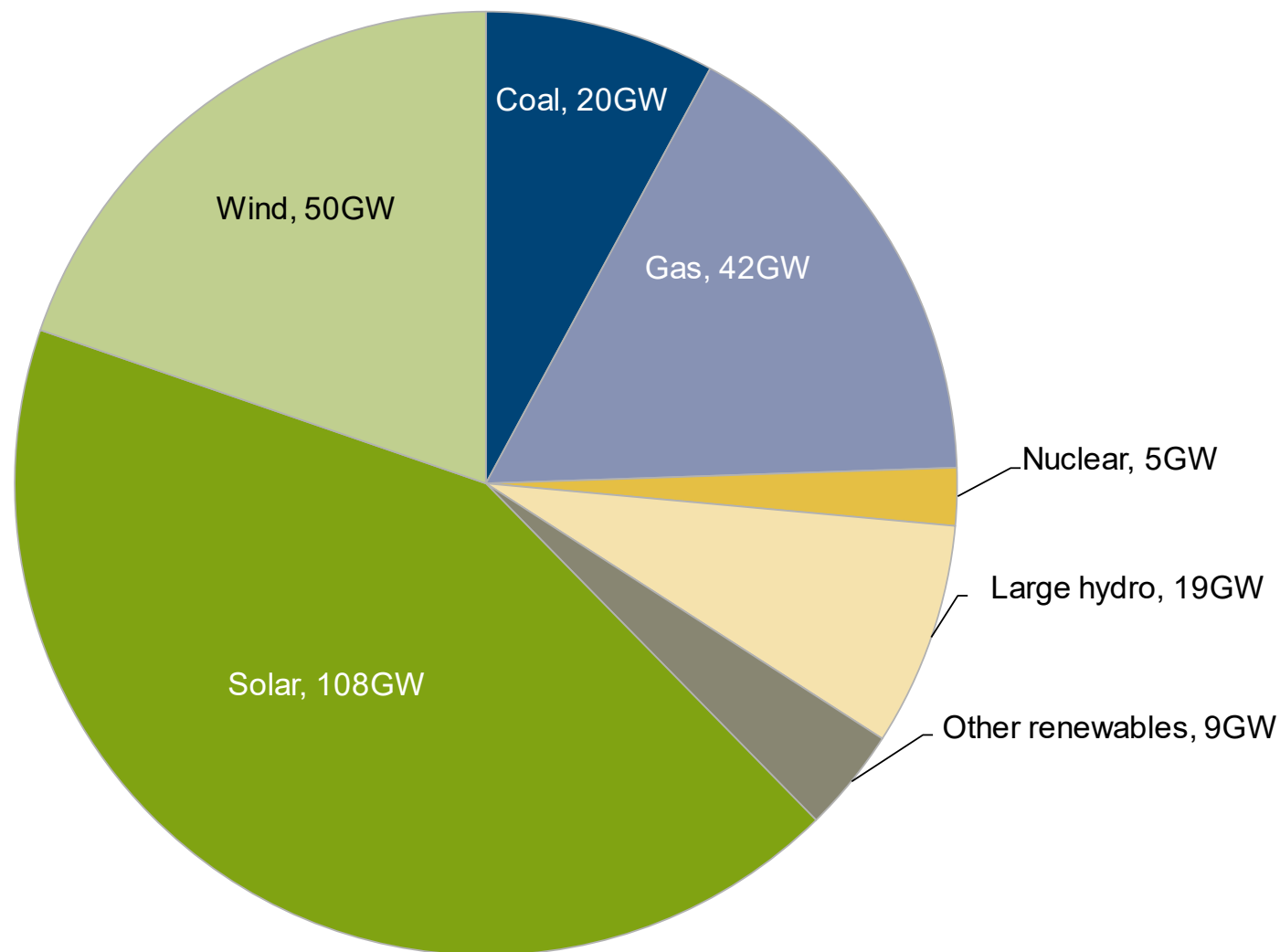
Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF

Note: Renewables figure excludes large hydro. Capacity and generation based on BloombergNEF totals.

NET POWER GENERATING CAPACITY ADDED IN 2018 BY MAIN TECHNOLOGY (GW)



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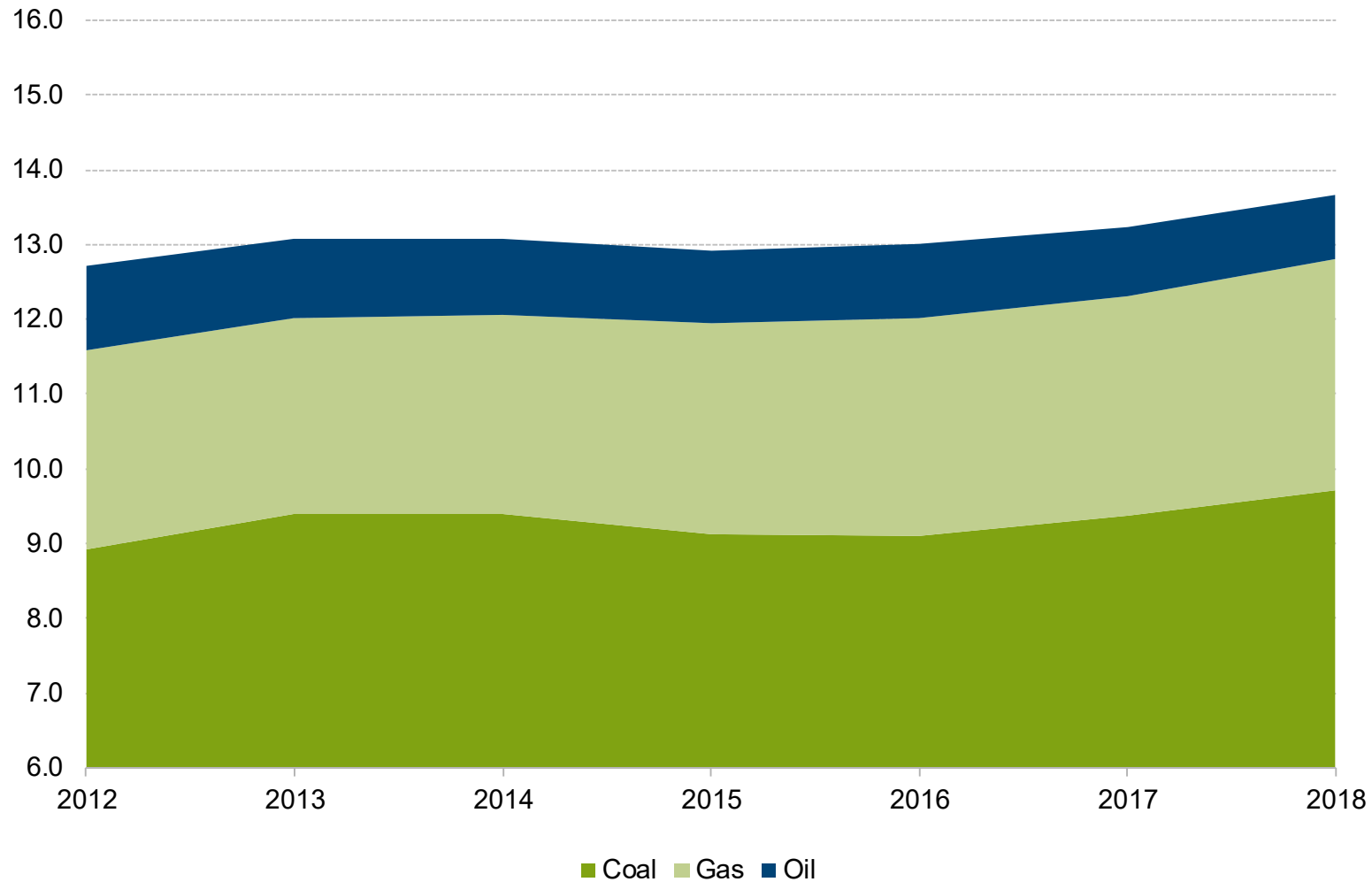
Note: The chart does not show the negative figure from net closure of oil-fired capacity in 2018

Source: UN Environment, Frankfurt School-UNEP Centre,
BloombergNEF

GLOBAL POWER SECTOR EMISSIONS, BILLIONS OF TONNES OF CO2 EQUIVALENT, 2012 TO 2018



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Source: UN Environment, Frankfurt School-UNEP Centre, BloombergNEF



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**Frankfurt School – UNEP Collaborating Centre
Frankfurt School of Finance & Management**

Sonnemannstrasse 9–11
60314 Frankfurt am Main

<http://fs-unep-centre.org>
www.frankfurt-school.de

E-Mail: fs_unep@fs.de
Phone: +49 (0)69 154008-647
Fax: +49 (0)69 154008-4647



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