

An octopus is shown against a deep blue background. Its tentacles are spread out, with some showing suckers. In the upper right corner, there are several abstract geometric shapes: two long diagonal bars (one teal, one orange), two shorter diagonal bars (one light blue, one yellow), and four circles (two teal, one light blue, one yellow).

RENEWABLES NOW

Renewables 2020 Global Status Report

Master slide deck

REN21 Secretariat
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THE ONLY GLOBAL RENEWABLE ENERGY MULTI-STAKEHOLDER COMMUNITY



MAKE THE SHIFT TO RENEWABLE ENERGY HAPPEN – NOW!

The only **global community** of renewable energy actors from science, academia, NGOs, governments, and industry.

Our more than **2,000 community members** co-operate collecting information, changing norms and debating.



We build upon a **decentralized intelligence**, ensuring high responsiveness to an ever changing environment.

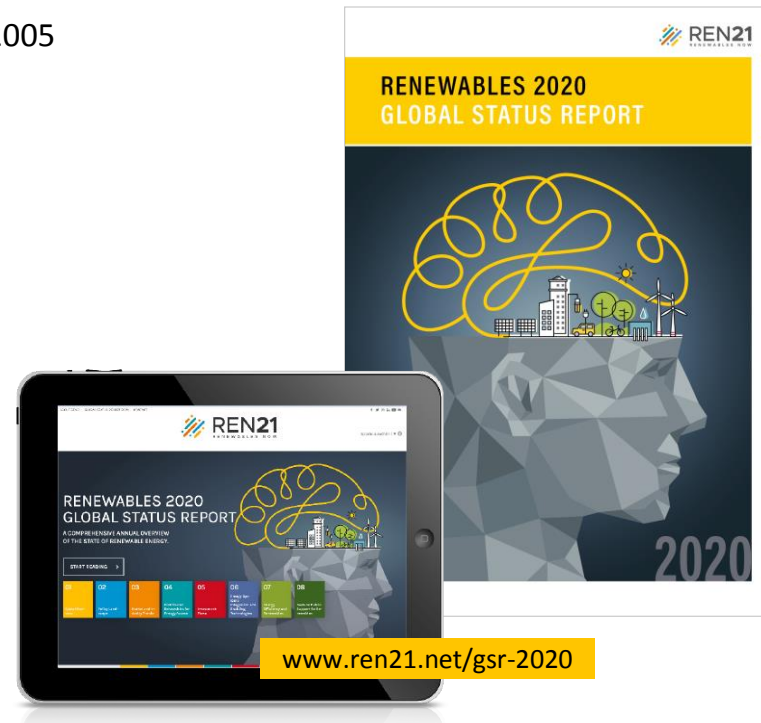
Our **annual publications** are probably the world's most comprehensive, crowdsourced reports on renewables.

RENEWABLES 2020 GLOBAL STATUS REPORT

COLLABORATIVE ANNUAL REPORTING ON RENEWABLES SINCE 2005

THE REPORT FEATURES:

- Global Overview
- Policy Landscape
- Market and Industry Trends
- Distributed Renewables for Energy Access
- Investment Flows
- Energy Systems Integration and Enabling Technologies
- Energy Efficiency
- Feature: Public Support for Renewables



RENEWABLE ENERGY CONTINUED TO GROW IN 2019

- **Total power capacity rose 8.4%**
 - 2,588 GW including hydropower
 - Non-hydropower: 14.7% increase
- **200 GW of renewable power additions**
 - Solar PV: 115 GW; Wind: 60 GW; Hydro: 16 GW
- **Renewable heat demand increased marginally**
- **5% growth in biofuel production**

■ Table 1. Renewable Energy Indicators 2019

		2018	2019
INVESTMENT			
New investment (annual) in renewable power and fuels ¹	billion USD	296.0	301.7
POWER			
Renewable power capacity (including hydropower)	GW	2,387	2,588
Renewable power capacity (not including hydropower)	GW	1,252	1,437
Hydropower capacity ²	GW	1,135	1,150
Wind power capacity	GW	591	651
Solar PV capacity ³	GW	512	627
Bio-power capacity	GW	131	139
Geothermal power capacity	GW	13.2	13.9
Concentrating solar thermal power (CSP) capacity	GW	5.6	6.2
Ocean power capacity	GW	0.5	0.5
HEAT			
Modern bio-heat demand (estimated) ⁴	EJ	13.9	14.1
Solar hot water demand (estimated) ⁵	EJ	1.4	1.4
Geothermal direct-use heat demand (estimated) ⁶	PJ	384	421
TRANSPORT			
Ethanol production (annual)	billion litres	111	114
FAME biodiesel production (annual)	billion litres	41	47
HVO biodiesel production (annual)	billion litres	6.0	6.5

WHICH COUNTRIES LED THE WAY IN 2019?

Annual Investment / Net Capacity Additions / Production in 2019

Technologies ordered based on total capacity additions in 2019.

	1	2	3	4	5
Investment in renewable power and fuels capacity (not including hydropower over 50 MW)	China	United States	Japan	India	Chinese Taipei
 Solar PV capacity	China	United States	India	Japan	Vietnam
 Wind power capacity	China	United States	United Kingdom	India	Spain
 Hydropower capacity	Brazil	China	Lao PDR	Bhutan	Tajikistan
 Geothermal power capacity	Turkey	Indonesia	Kenya	Costa Rica	Japan
 Concentrating solar thermal power (CSP) capacity	Israel	China	South Africa	Kuwait	France
 Solar water heating capacity	China	Turkey	India	Brazil	United States
 Ethanol production	United States	Brazil	China	India	Canada
 Biodiesel production	Indonesia	United States	Brazil	Germany	France

As in past years, **China** led many key annual categories for renewable energy in 2019.

WHO WERE THE RENEWABLE ENERGY LEADERS AT THE END OF 2019?

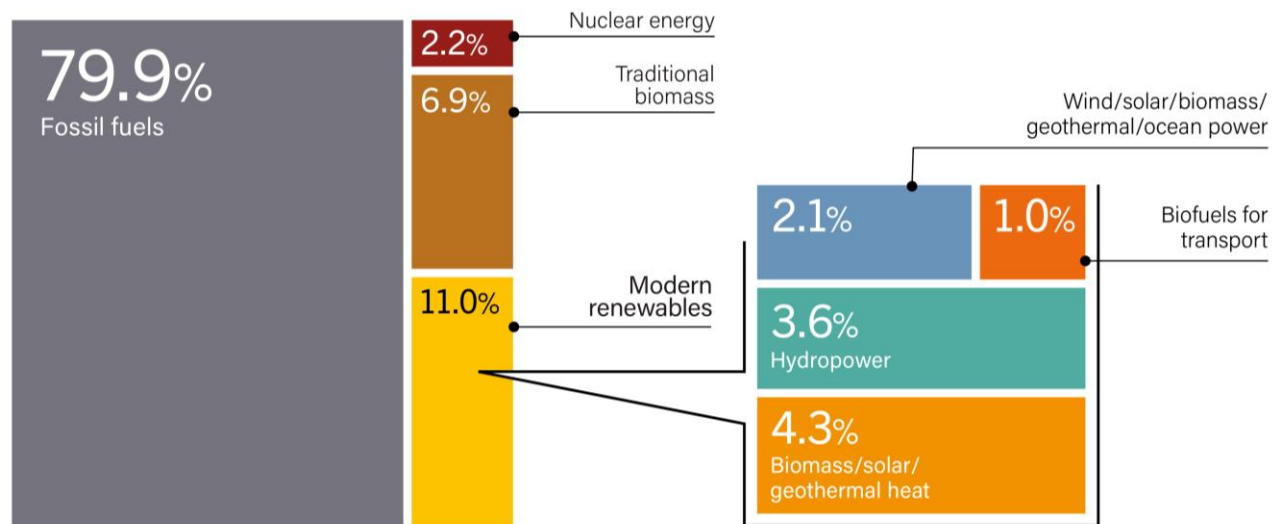
Total Capacity or Generation as of End-2019

Countries in **bold** indicate change from 2018.

	1	2	3	4	5
POWER					
Renewable power capacity (including hydropower)	China	United States	Brazil	India	Germany
Renewable power capacity (not including hydropower)	China	United States	Germany	India	Japan
Renewable power capacity <i>per capita</i> (not including hydropower) ¹	Iceland	Denmark	Sweden	Germany	Australia
 Bio-power capacity	China	United States	Brazil	India	Germany
 Geothermal power capacity	United States	Indonesia	Philippines	Turkey	New Zealand
 Hydropower capacity ²	China	Brazil	Canada	United States	Russian Federation
 Hydropower generation ²	China	Brazil	Canada	United States	Russian Federation
 Solar PV capacity	China	United States	Japan	Germany	India
 Concentrating solar thermal power (CSP) capacity	Spain	United States	Morocco	South Africa	China
 Wind power capacity	China	United States	Germany	India	Spain
HEAT					
 Solar water heating collector capacity ³	China	United States	Turkey	Germany	Brazil
 Solar water heating collector capacity <i>per capita</i>	Barbados	Cyprus	Israel	Austria	Greece
 Geothermal heat output ⁴	China	Turkey	Iceland	Japan	New Zealand

Some countries changed places during the year, though in many cases the leaders for total capacity and generation are well-established.

ONLY MODERATE CHANGE IN RENEWABLE SHARE OF ENERGY DEMAND



Estimated Renewable
Share of Total Final Energy
Consumption, 2017

Renewable share grew
from **9.6%** in 2013 to
only **11%** in 2018.

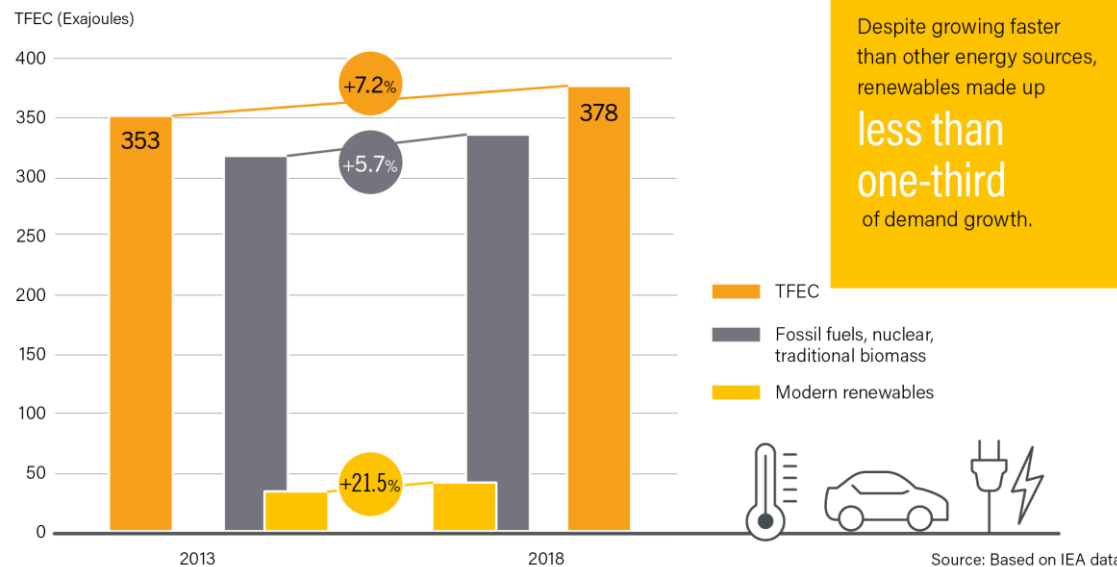
Note: Data should not be compared with previous years because of revisions due to improved or adjusted data or methodology. Totals may not add up due to rounding.

Source: Based on IEA data.

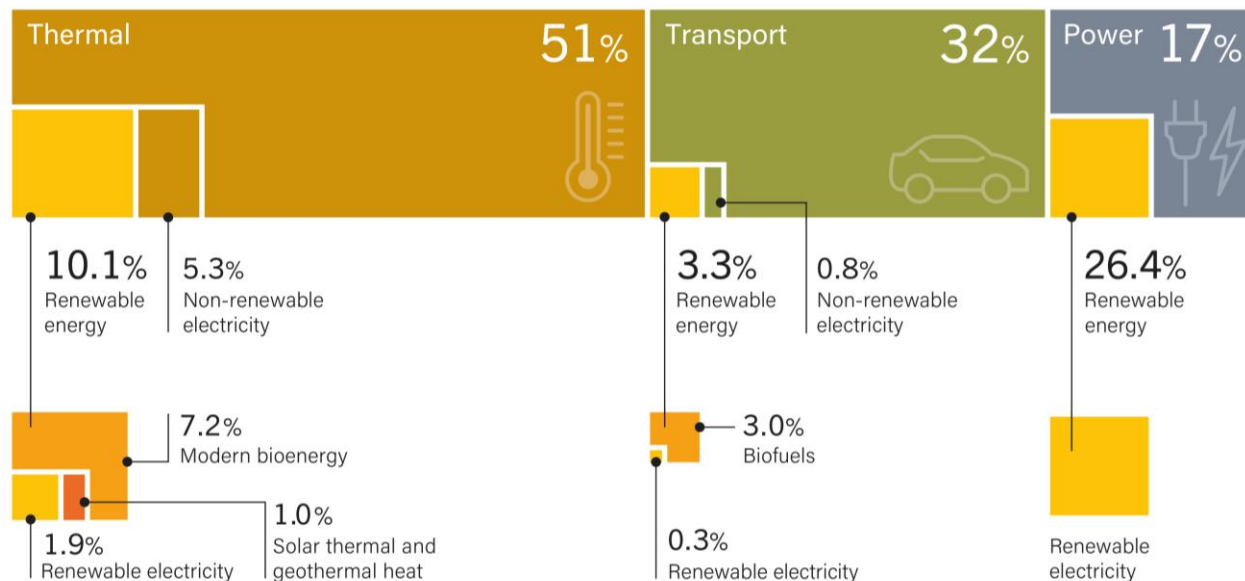
RENEWABLES ARE GROWING FAST... BUT NOT FAST ENOUGH

- Renewables grew three times faster than fossil fuels
- Renewable energy only accounted for 29% of demand growth
- Energy efficiency and renewables are complementary

Estimated Global Growth in Renewable Energy Compared to Total Final Energy Consumption, 2013-2018



MORE THAN 80% OF OUR ENERGY FOR HEATING, COOLING, TRANSPORT



Share of Electricity Generation from Variable Renewable Energy, Top Countries, 2019

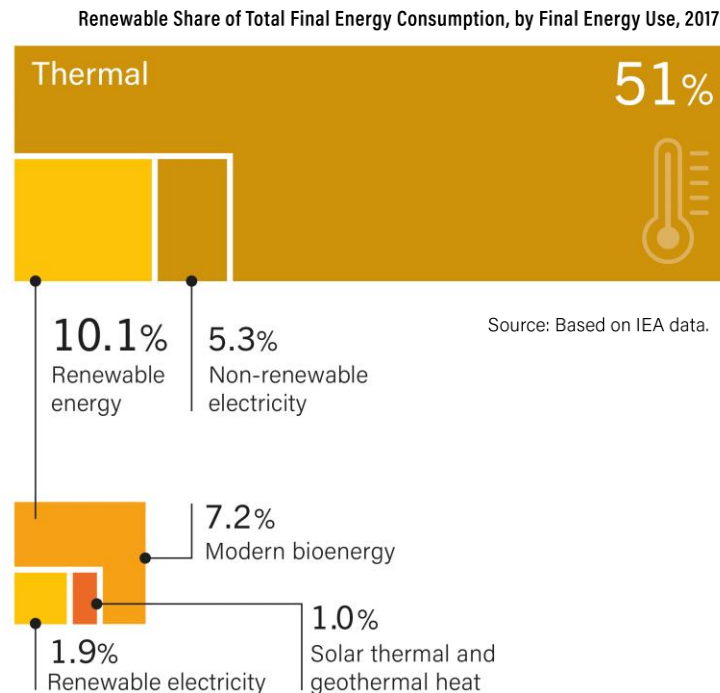
Most focus is on the power sector.

But the **greatest urgency** is in heating, cooling and transport.

SLOW GROWTH IN RENEWABLE HEATING AND COOLING

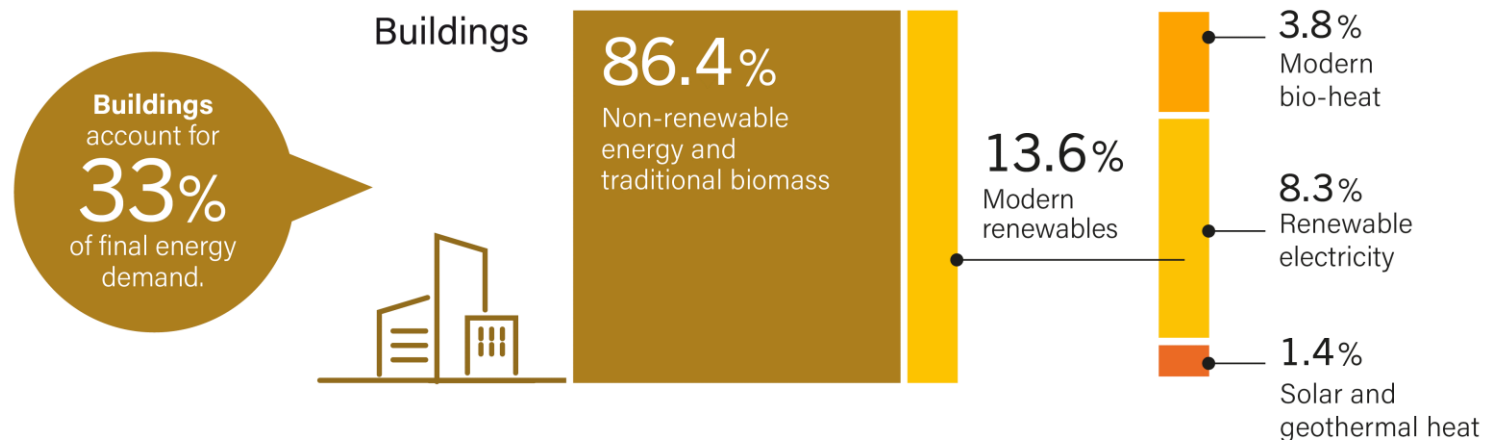
KEY BARRIERS

- Sector heavily relying on fossil fuel
 - fossil fuel subsidies – no level playing field
 - Upfront capital cost of RE
- Lack of supportive regulatory framework
 - No new H&C policies since 2017
 - for electrification
- Resource availability
- Investments in supporting infrastructure needed (e.g., district heating and cooling)
- Technological advances needed for high-temperature industrial processes



RENEWABLES WERE FASTEST GROWING ENERGY SOURCE IN BUILDINGS

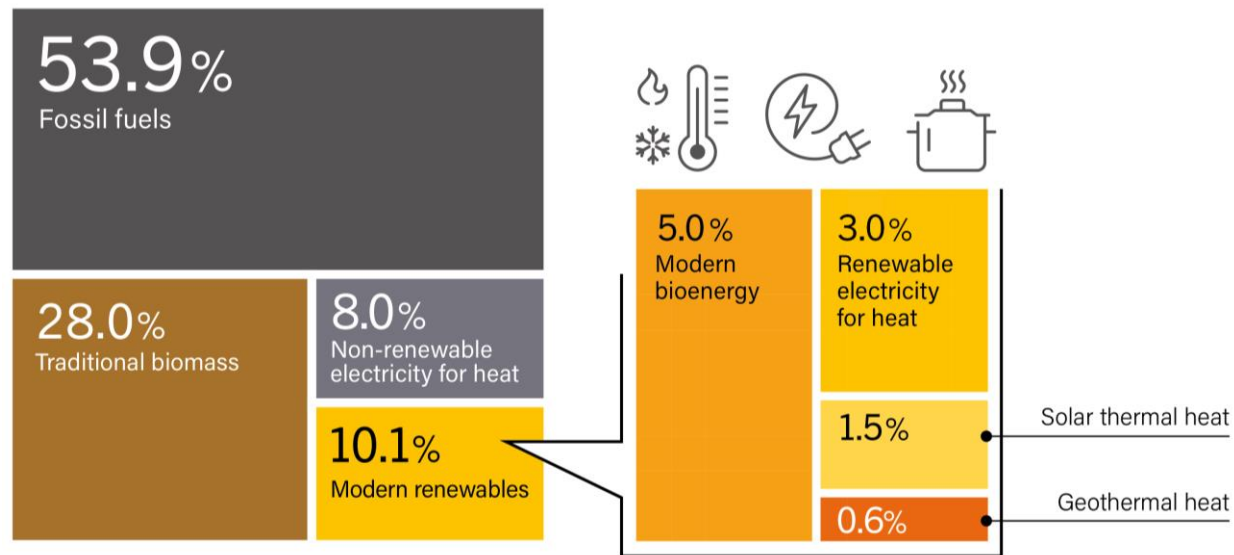
Renewable Share of Total Final Energy Consumption in Buildings, 2017



Note: Modern bio-heat includes heat supplied by district energy networks. Totals may not add up due to rounding.

Source: Based on IEA data.

RENEWABLE HEAT IS GRADUALLY GROWING IN BUILDINGS



Estimated Renewable
Share of Heating and
Cooling in Buildings, 2018

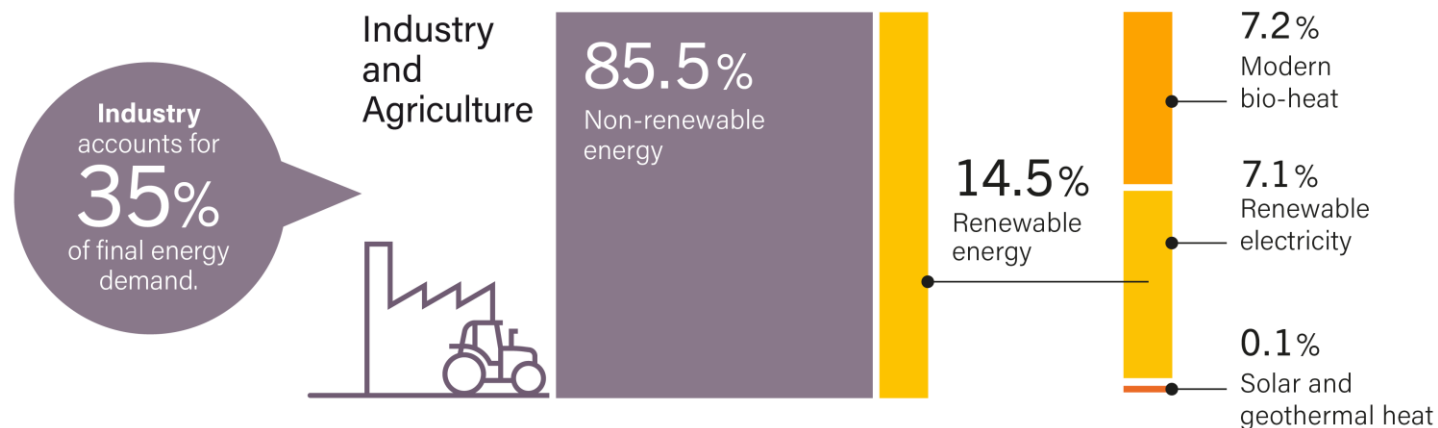
The share of renewable
heating and cooling in
buildings grew from **8%
in 2010** to more than
10% in 2018.

Note: Includes space heating, space cooling, water heating and cooking.
Modern bioenergy includes heat supplied by district energy networks.

Source: Based on IEA data.

RENEWABLES IN INDUSTRIAL ENERGY USE REMAINS SMALL

Renewable Share of Total Final Energy Consumption in Industry and Agriculture, 2017

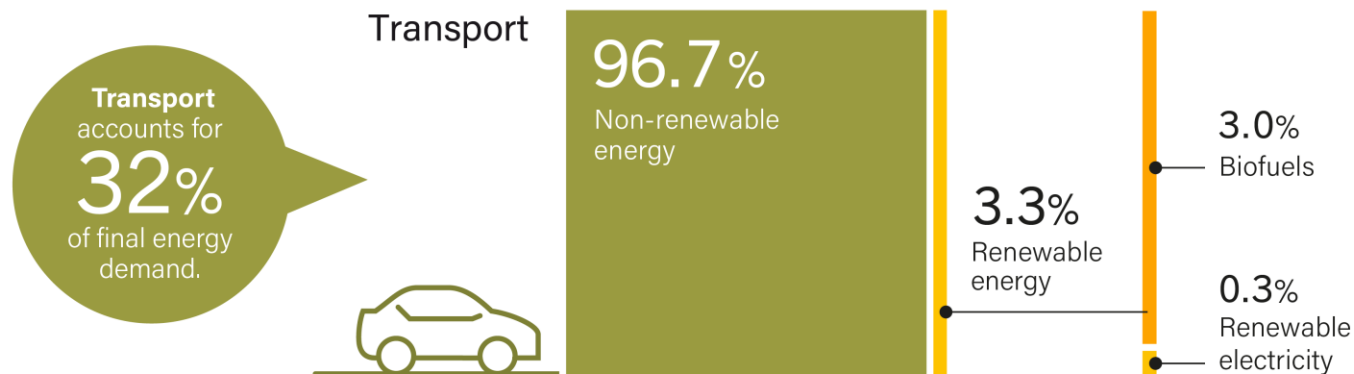


Note: Modern bio-heat includes heat supplied by district energy networks.
Totals may not add up due to rounding.

Source: Based on IEA data.

THE SHARE OF RENEWABLES IN TRANSPORT HAS NOT CHANGED

Renewable Share of Total Final Energy Consumption in Transport, 2017



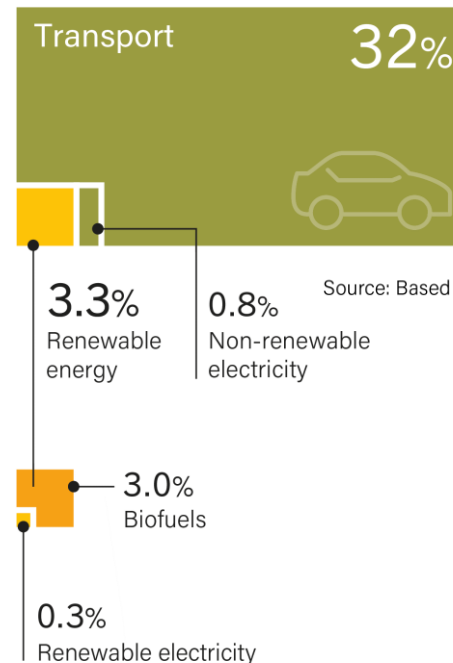
Source: Based on IEA data.

THE SHARE OF RENEWABLES IN TRANSPORT HAS NOT CHANGED

KEY BARRIERS

- Sector heavily relying on fossil fuel
 - Fossil fuel “centered” market structures
 - Fossil fuel subsidies – no level playing field
- Lack of strong policy support → no new countries with biofuel blend mandates since 2017
- Exploding demand growth
- Only nine countries with advanced mandates
- Limited options in aviation and shipping

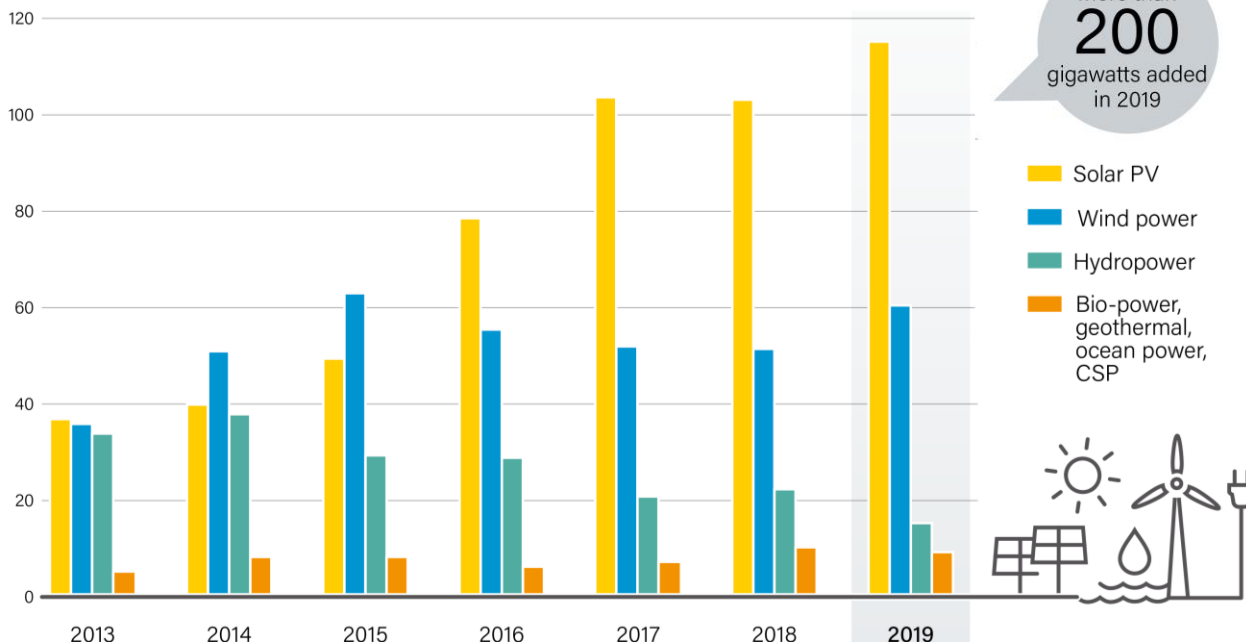
Renewable Share of Total Final Energy Consumption, by Final Energy Use, 2017



Source: Based on IEA data.

MORE THAN 200 GIGAWATTS OF RENEWABLE POWER ADDED IN 2019

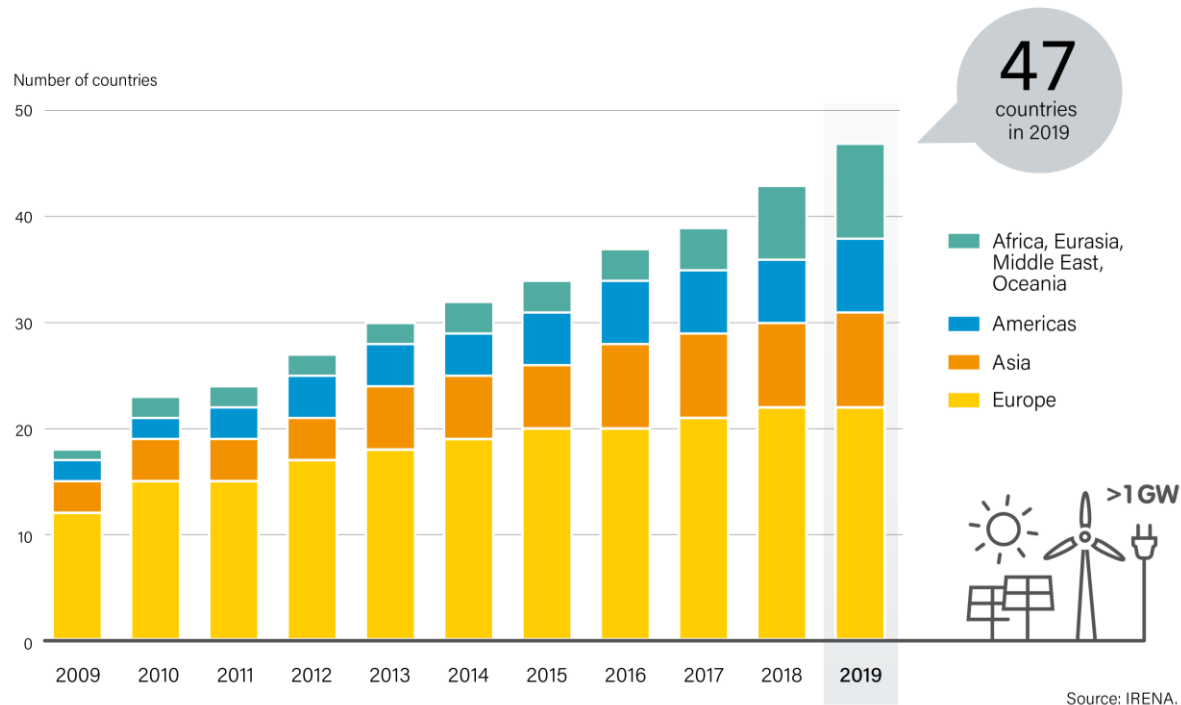
Additions by technology (Gigawatts)



Annual Additions of Renewable Power Capacity, by Technology and Total, 2013-2019

Although most of the additions were from **solar PV (115 GW)**, global markets for wind power and bio-power also grew during 2019.

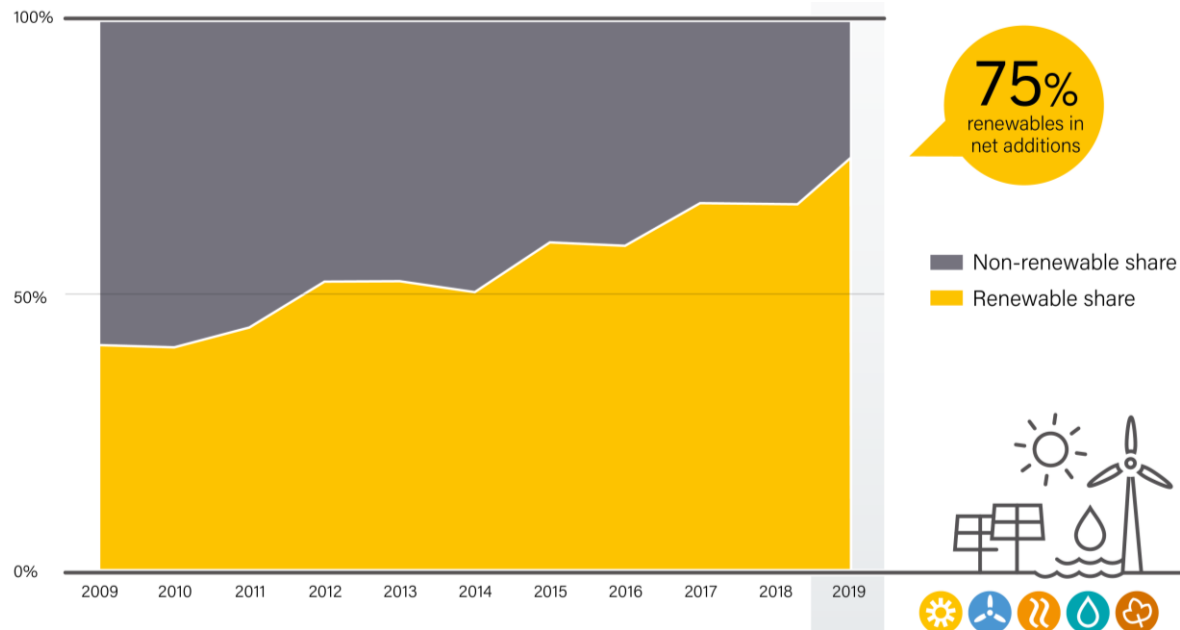
SOLAR PV AND WIND POWER ARE SPREADING AROUND THE WORLD



Number of Countries with More Than 1 GW of Solar PV and Wind Power, by Region, 2009-2019

47 countries had installed at least 1 GW of solar PV and wind power. compared to **18 countries** in 2009.

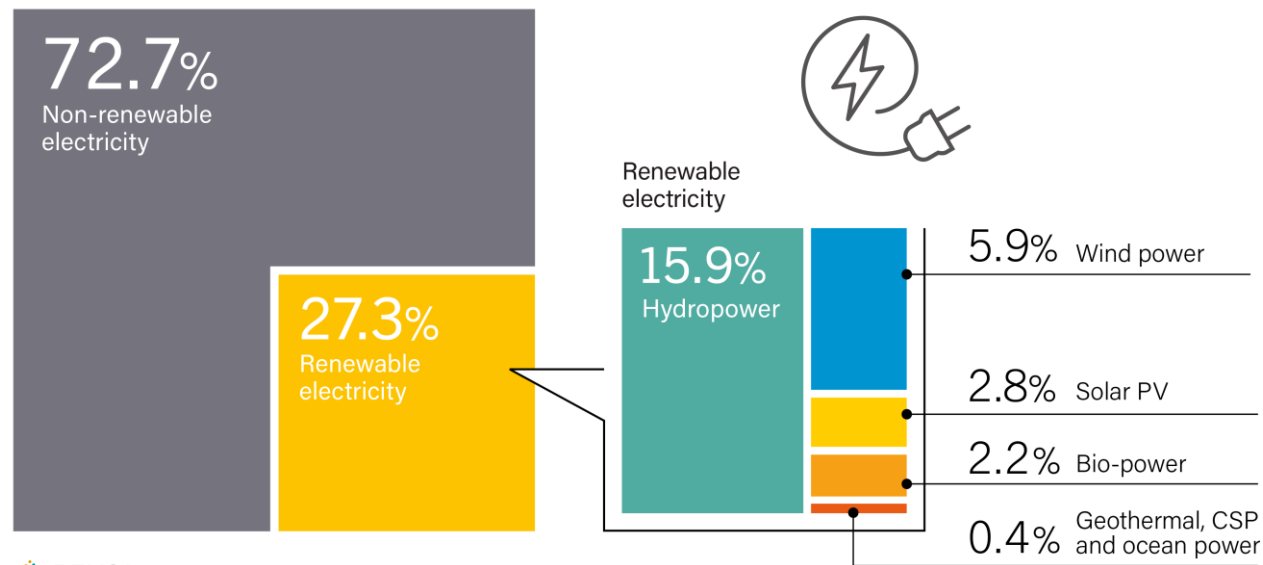
MORE RENEWABLE POWER ADDED THAN FOSSIL FUEL AND NUCLEAR



Renewable and Non-renewable Shares of Net Annual Additions in Power Generating Capacity, 2009-2019

For the fifth year in a row, net additions of renewable power generation capacity were higher than net installations of both fossil fuel and nuclear power capacity combined.

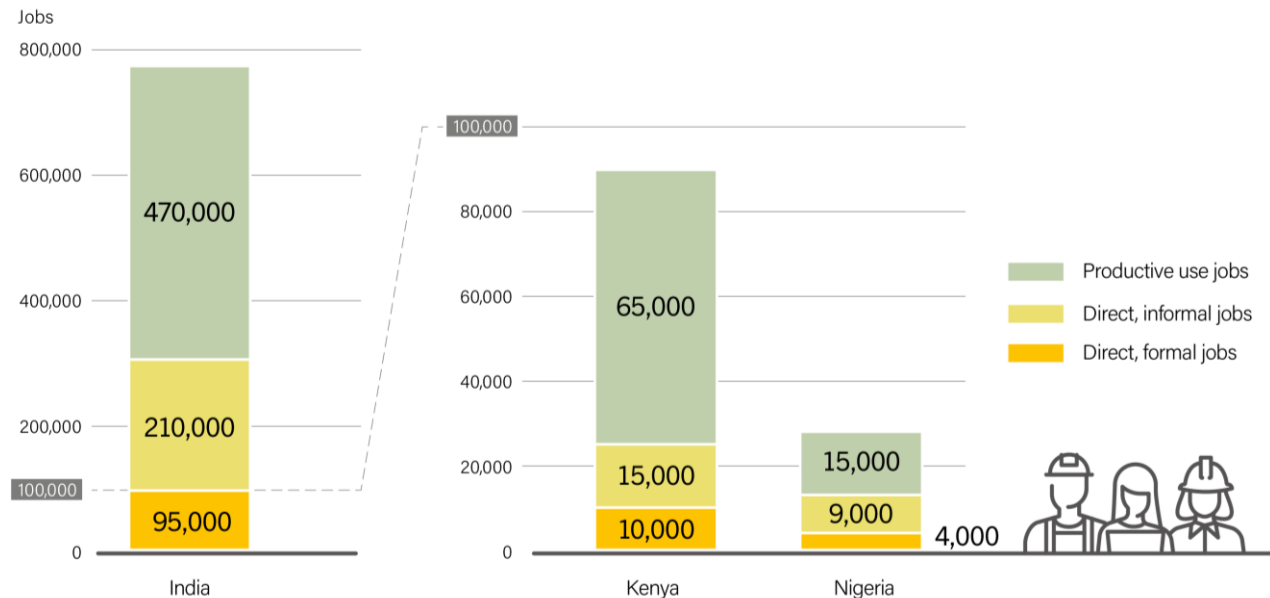
MORE THAN 27% OF GLOBAL ELECTRICITY IS NOW RENEWABLE



Estimated Renewable
Energy Share of Global
Electricity Production,
End-2019

The share of renewables
in electricity generation
is **rising in many
countries around the
world.**

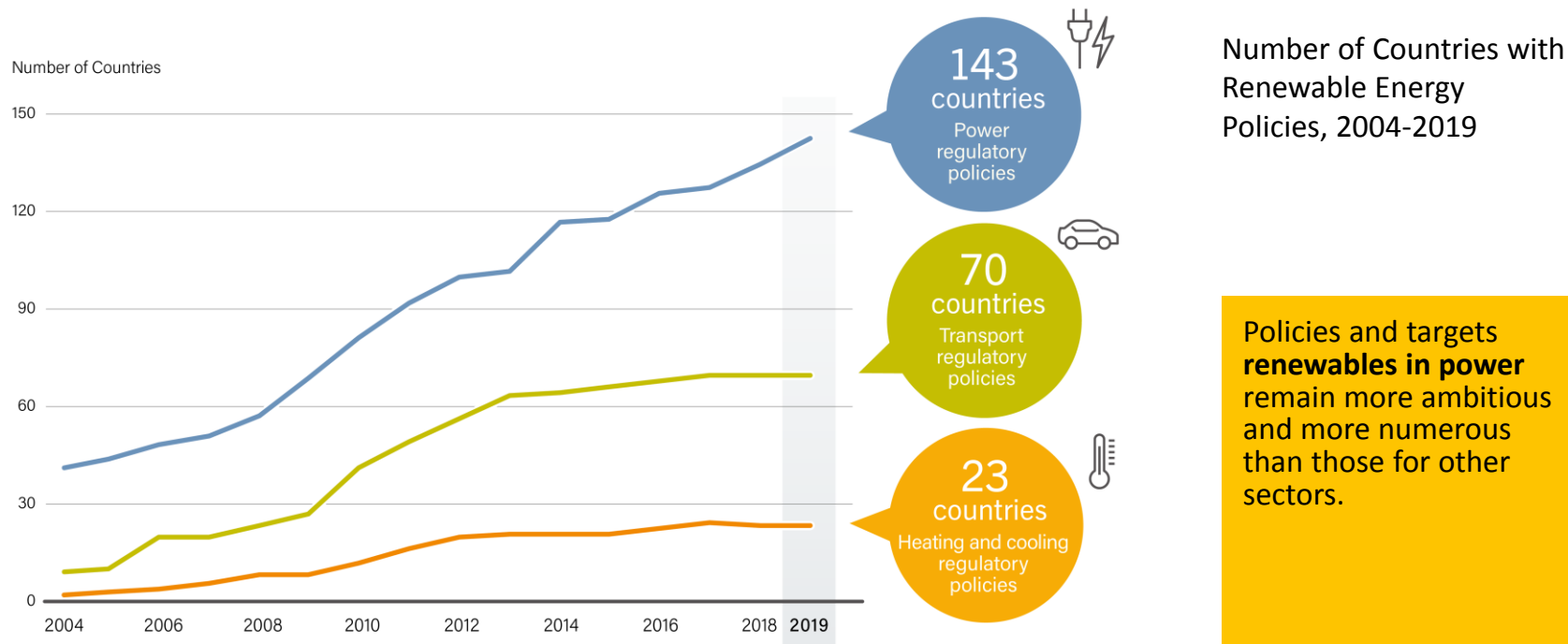
RENEWABLES PROVIDE DIRECT AND INDIRECT EMPLOYMENT



Formal, Informal and Productive Use Employment Estimates Related to Distributed Renewables for Energy Access in India, Kenya and Nigeria, 2017/18

Distributed renewables for energy access create jobs related to the **productive use of energy** in the developing world.

POWER SECTOR CONTINUES TO RECEIVE MOST POLICY ATTENTION



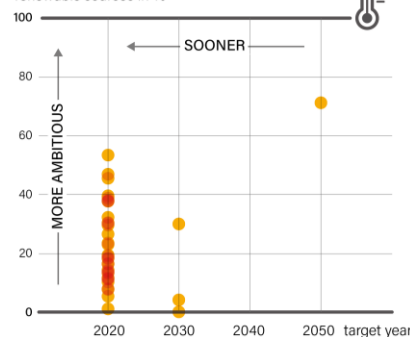
TARGET IMBALANCE

National Sector-Specific
Targets for Share of
Renewable Energy by a
Specific Year, in Place at
End-2019

Globally, most
renewable energy
targets are aimed
exclusively at the **power**
sector.

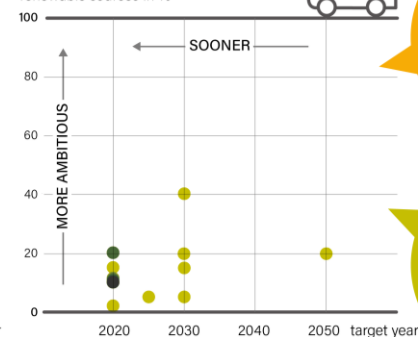
HEATING AND COOLING

Targets for share of heating and cooling from renewable sources in %



TRANSPORT

Targets for share of transport energy from renewable sources in %



49

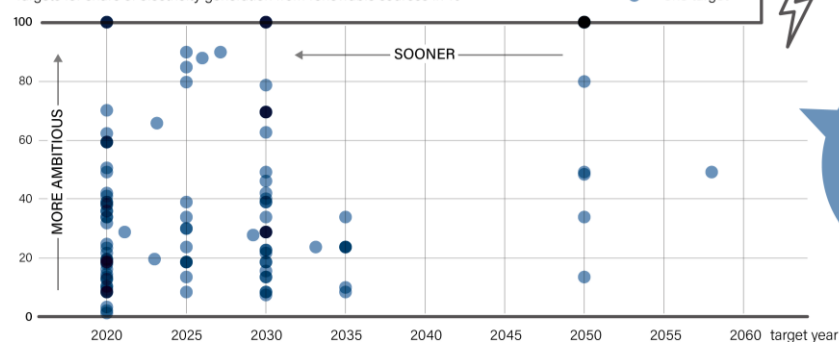
countries
have national targets
for renewable
energy in heating
and cooling.

46

countries
have national
targets for
renewable energy
in transport.

POWER

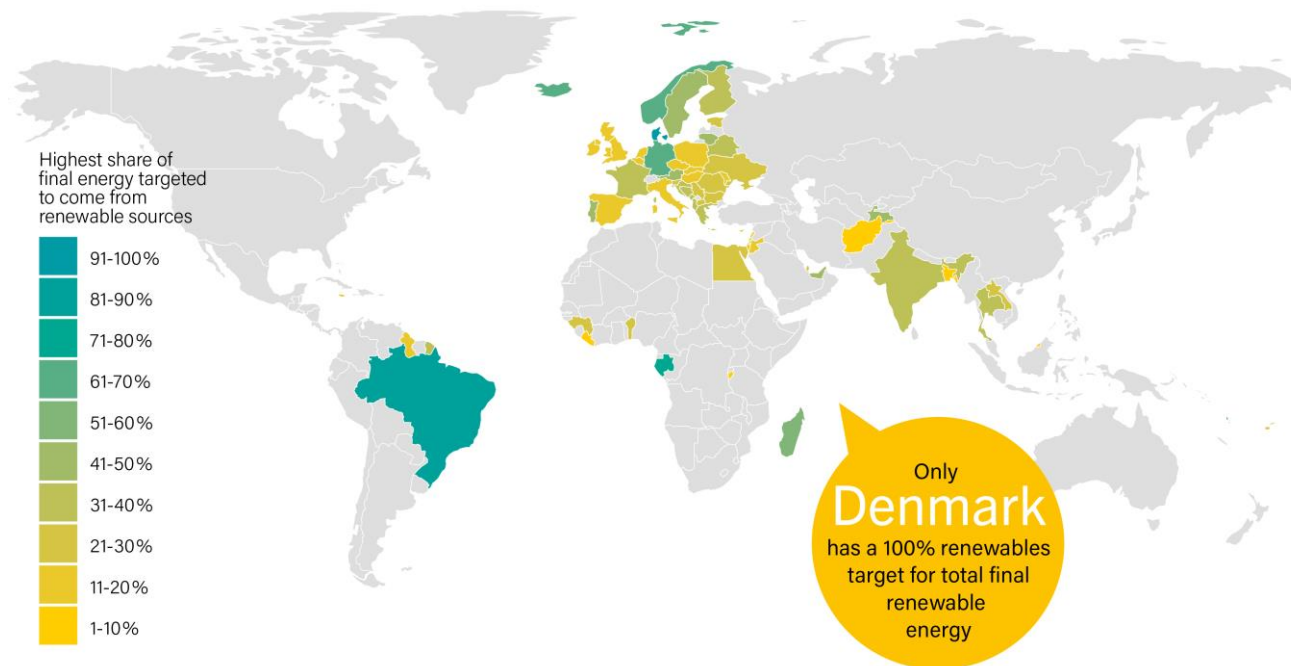
Targets for share of electricity generation from renewable sources in %



166

countries
have national
targets for
renewable energy
in power.

RENEWABLE ENERGY TARGETS AROUND THE WORLD

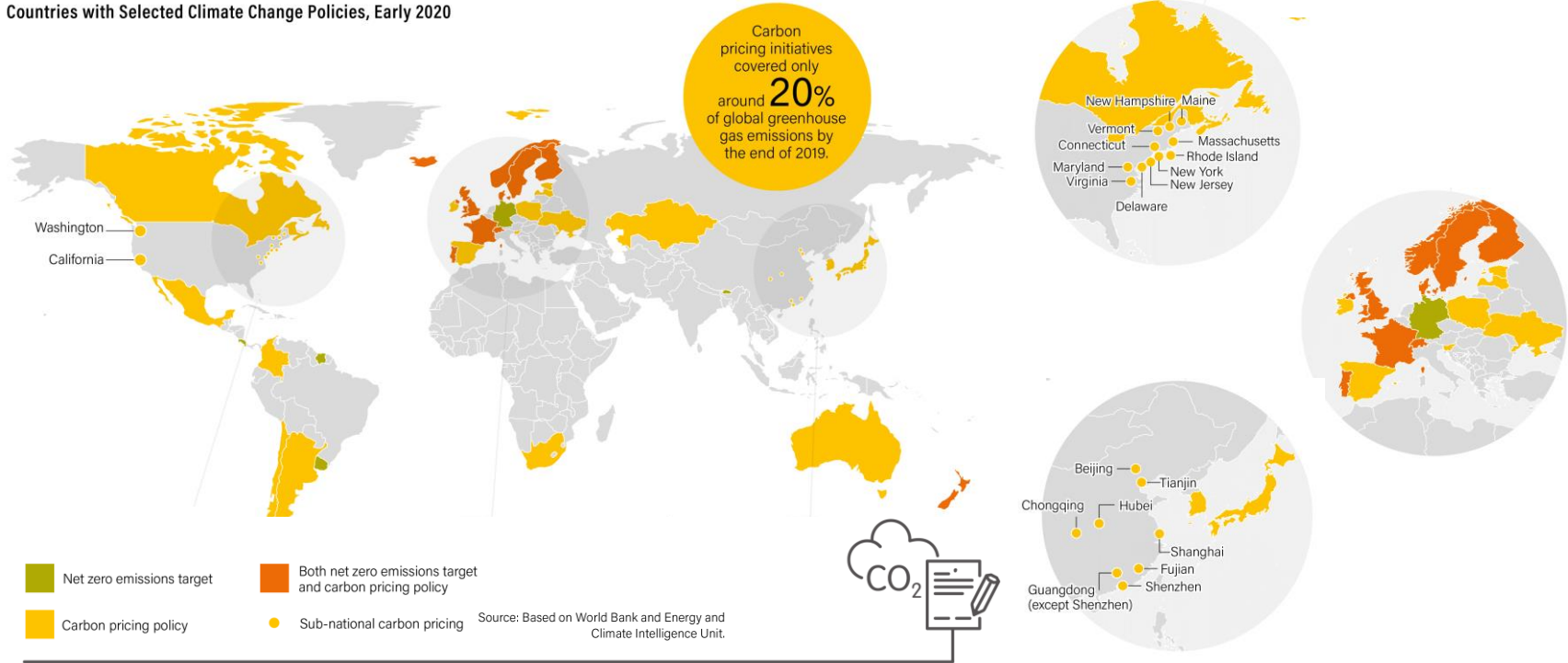


National Targets for Share of Renewable Energy in Final Energy, by a Specific Year, in Place at End-2019

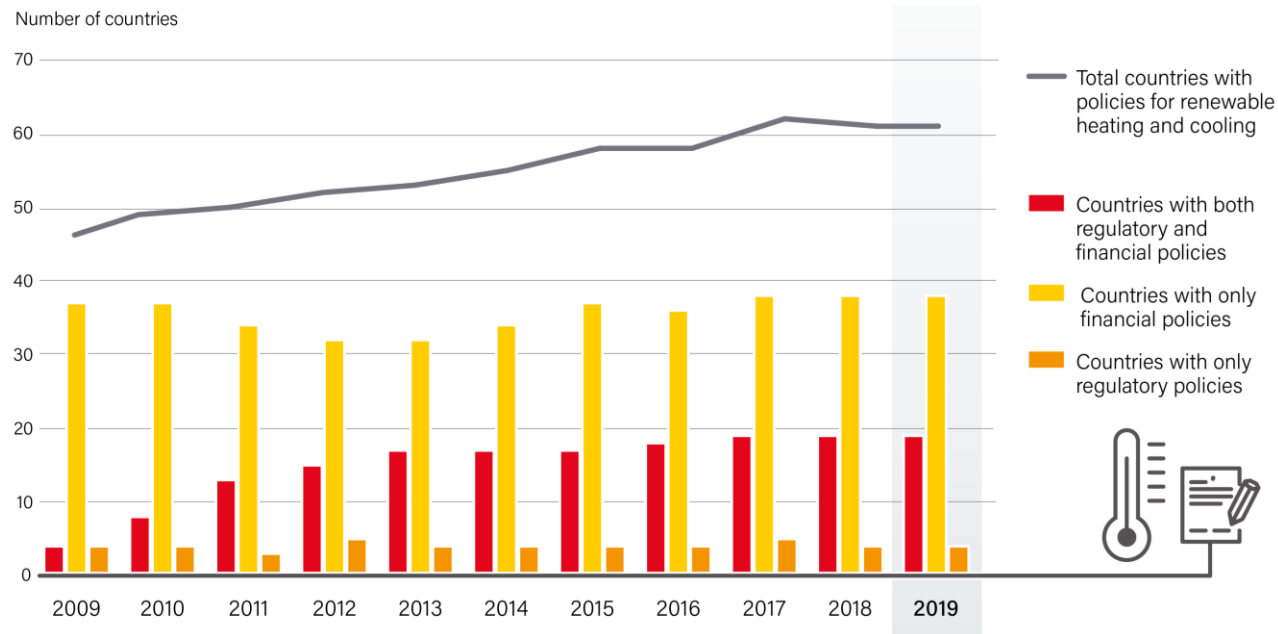
Only one new country (Spain) adopted an economy-wide renewable energy target during 2019.

CARBON PRICING SLOWLY EXPANDING

Countries with Selected Climate Change Policies, Early 2020



POLICY SUPPORT STAGNATING IN HEATING AND COOLING SECTOR

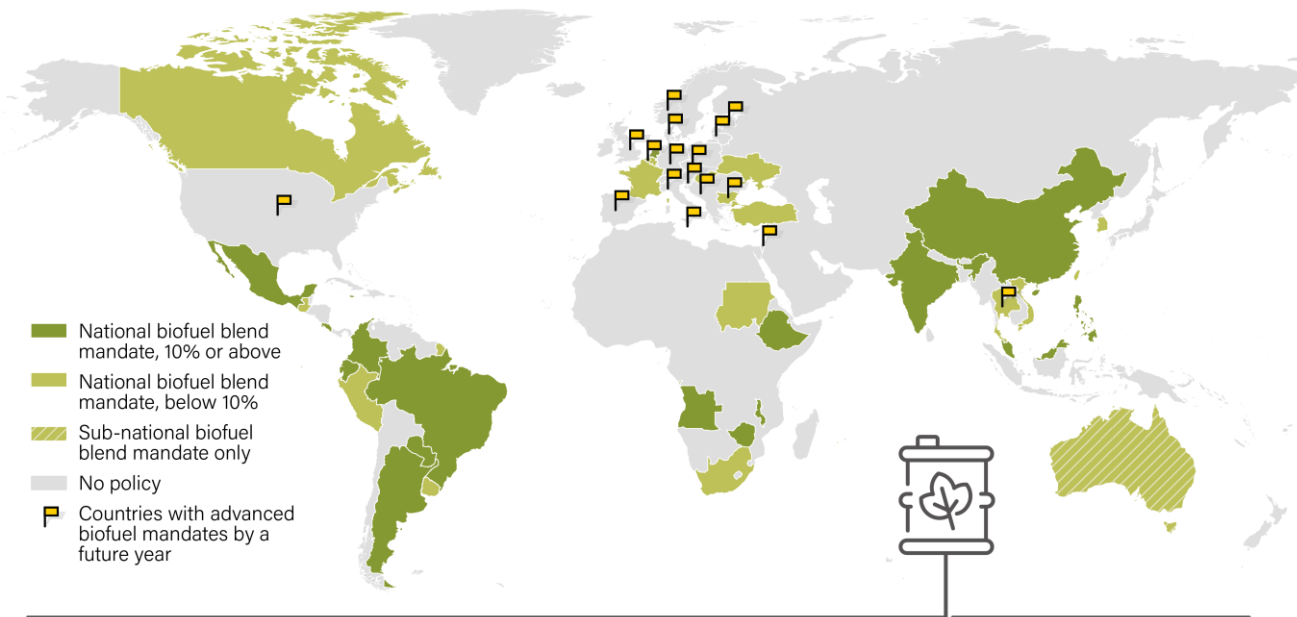


Countries with Policies for Renewable Heating and Cooling, 2009-2019

No new countries have adopted renewable energy financial support policies for heating and cooling since 2017.



POLICY SUPPORT REMAINS STATIC FOR TRANSPORT

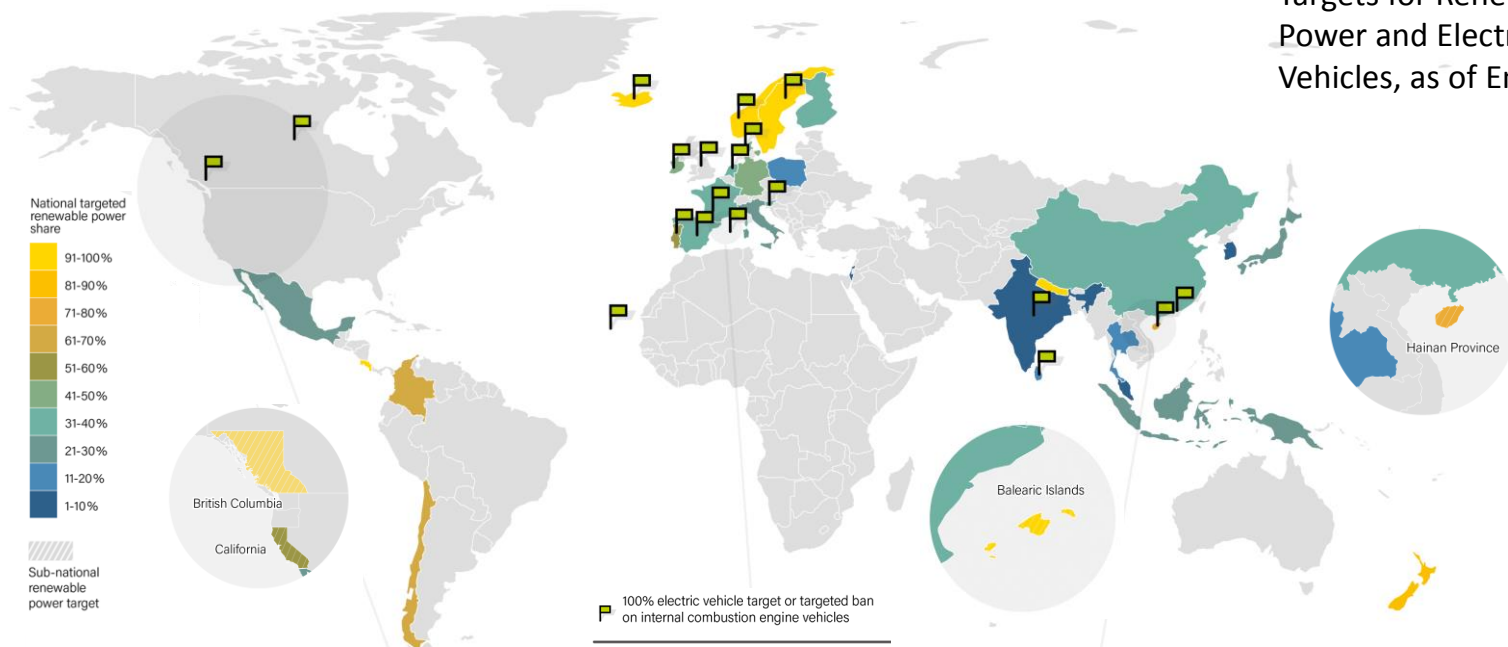


National and Sub-National Renewable Transport Mandates, as of End-2019

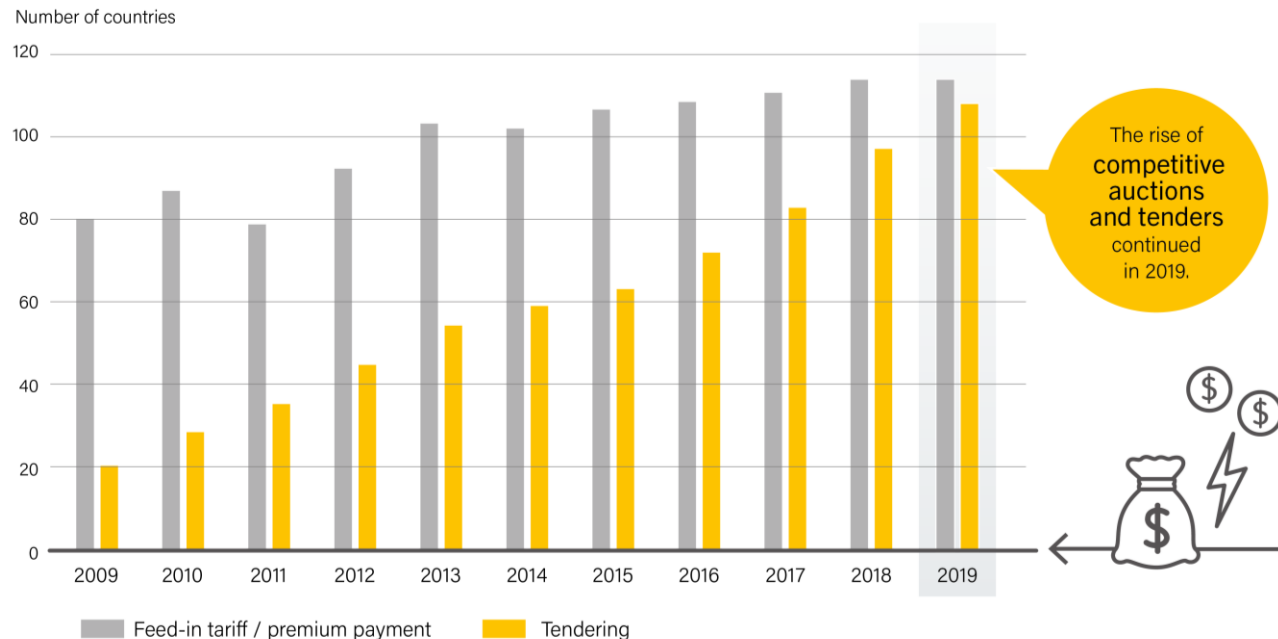
Biofuel blending mandates remain the most widely adopted renewable energy support policy in the transport sector.

ONLY SEVERAL COUNTRIES HAVE TARGETS FOR EVS AND RENEWABLES

Targets for Renewable
Power and Electric
Vehicles, as of End-2019



THE RISE OF RENEWABLE POWER AUCTIONS CONTINUED

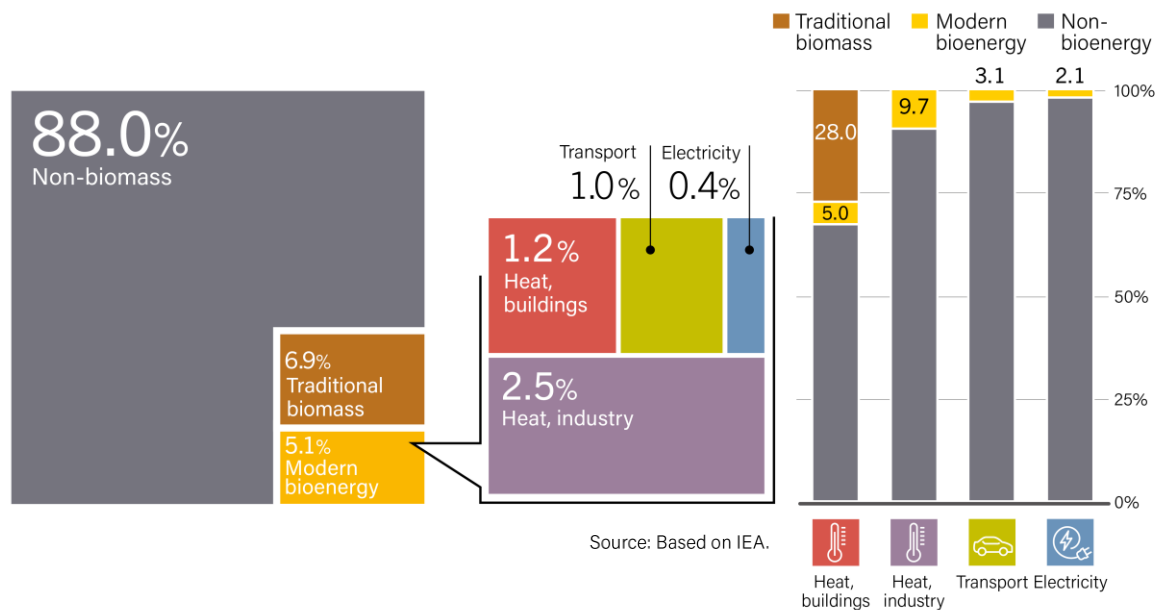


Cumulative Number of Countries with Feed-in or Tendering Policies, 2009-2019

109 countries had used auctions or tendering as of end-2019, up from 98 total countries in 2018.

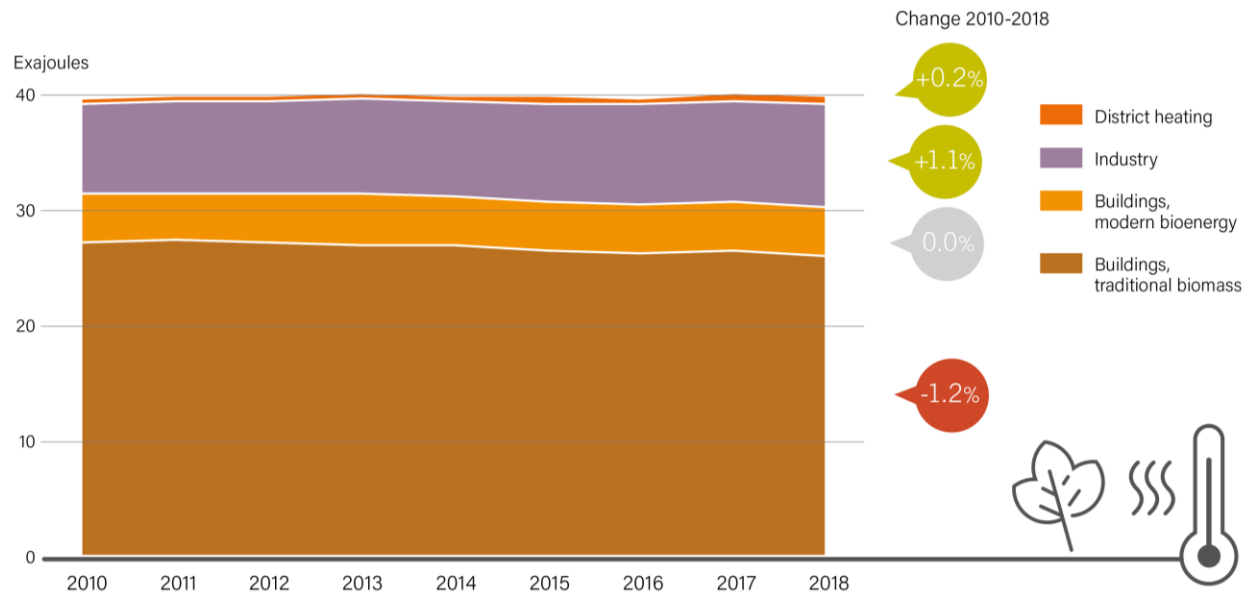
BIOENERGY MAKES LARGEST CONTRIBUTION TO RENEWABLE SUPPLY

Estimated Shares of Bioenergy in Total Final Energy Consumption, Overall and by End-Use Sector, 2018



Modern bioenergy supplies energy for heating, transport and electricity end-uses.

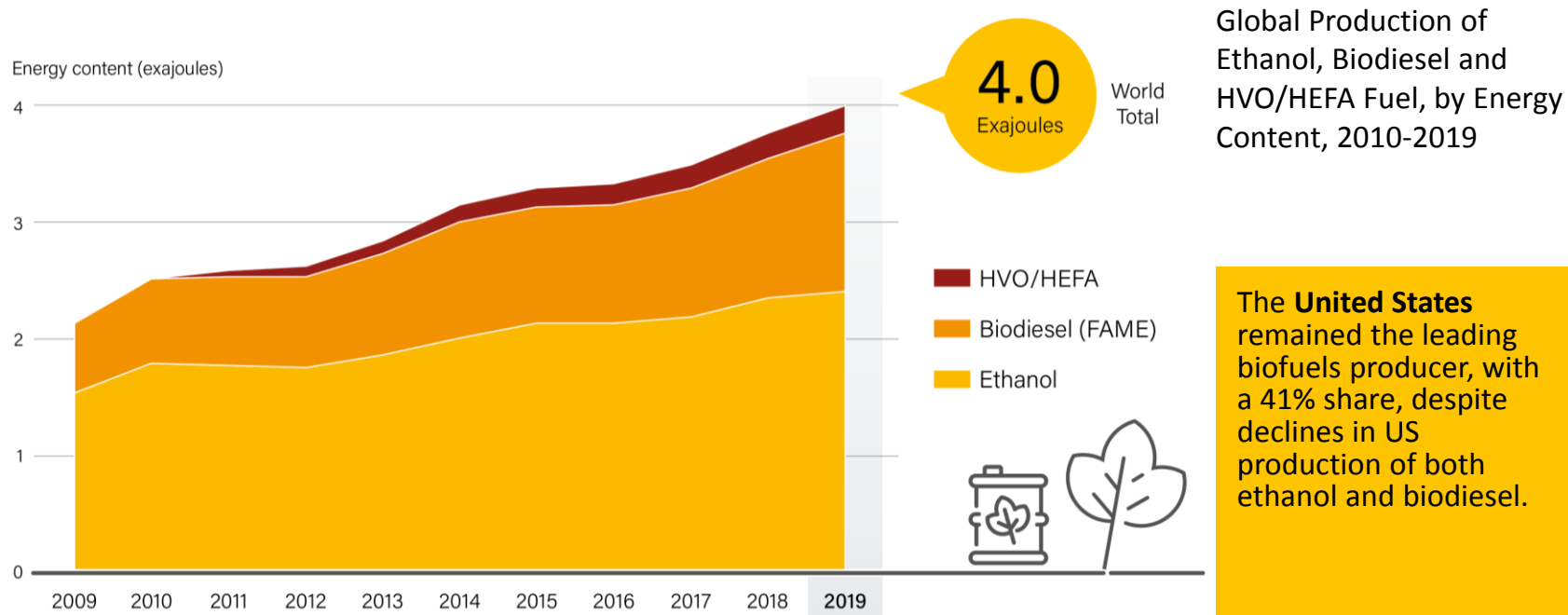
USE OF MODERN BIOENERGY IS INCREASING SLOWLY



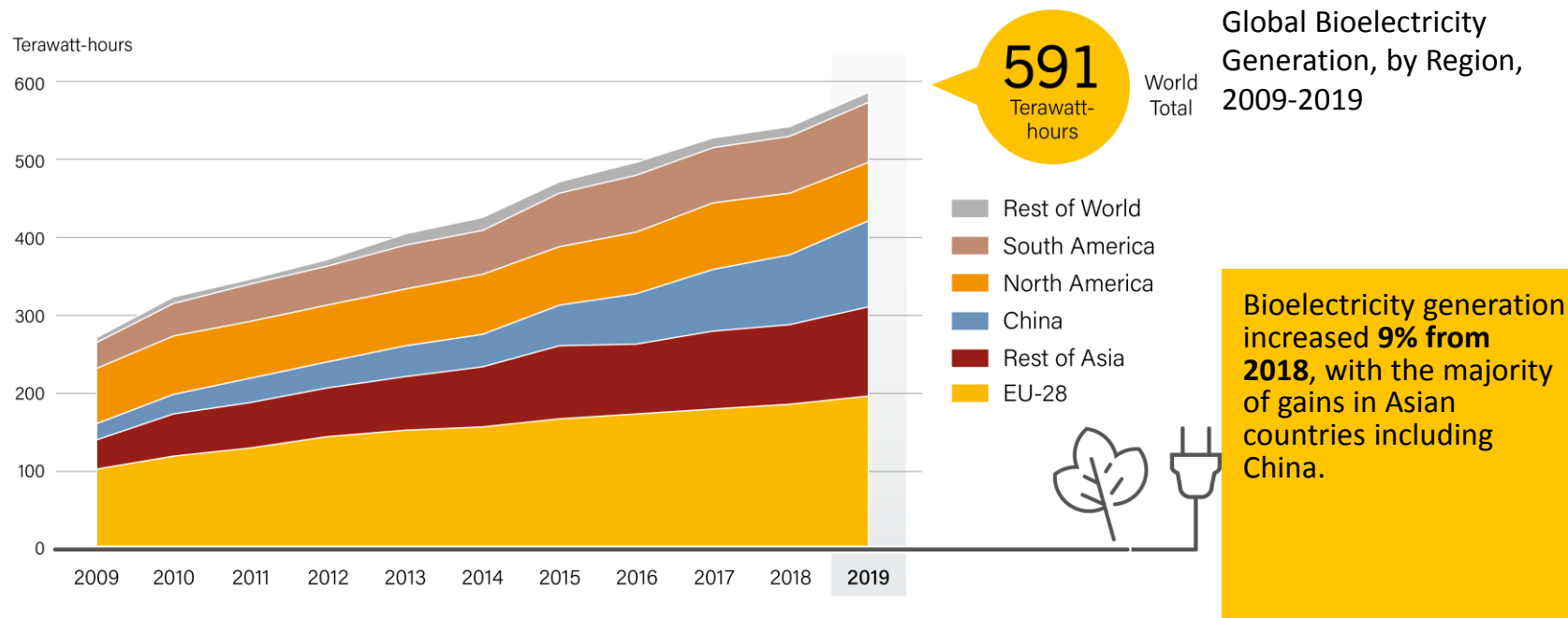
Global Bioenergy Use for Heating, by End-Use, 2010-2018

Bio-heat is used in **buildings and industry**, and often supplied by district energy networks.

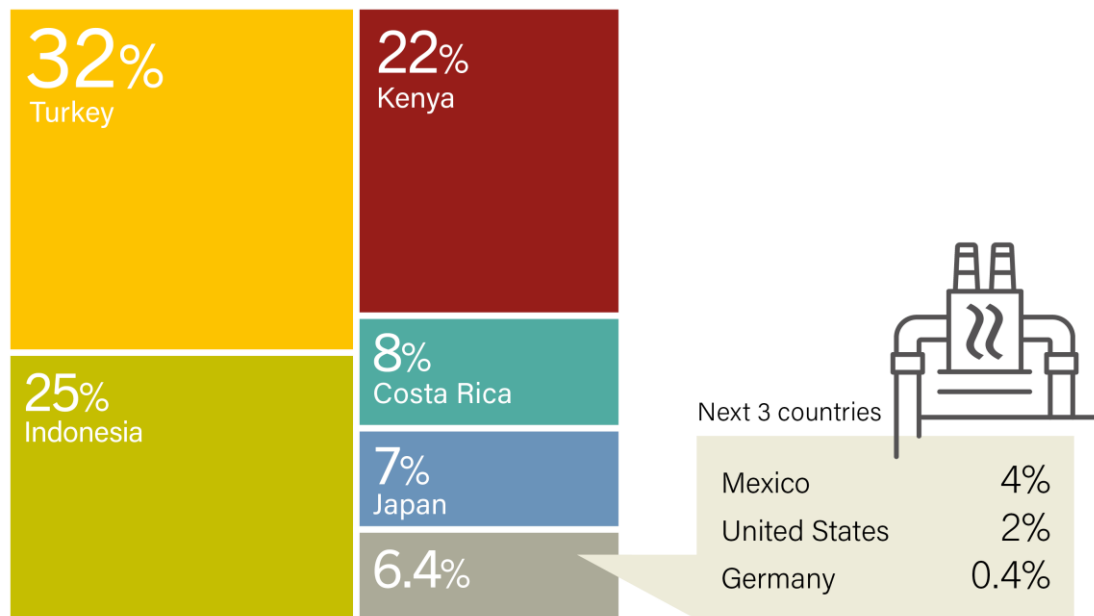
BIOFUELS PRODUCTION INCREASED, DOMINATED BY US AND BRAZIL



BIOELECTRICITY PRODUCTION HAS GROWN RAPIDLY



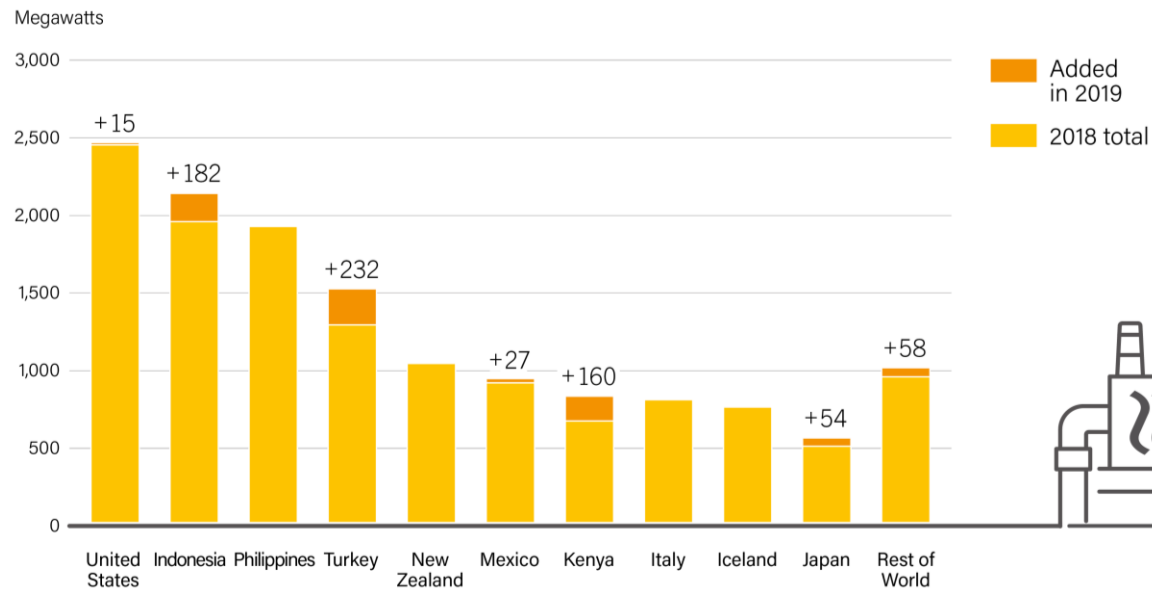
GEOHERMAL POWER CAPACITY ADDITIONS MAINLY IN THREE COUNTRIES



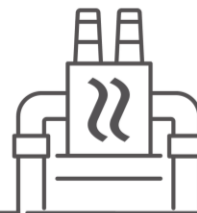
Geothermal Power
Capacity Global Additions,
Share by Country, 2019

Installed geothermal
power capacity grew by
5% in 2019.

TURKEY AND INDONESIA LED NEW GEOTHERMAL POWER INSTALLATIONS

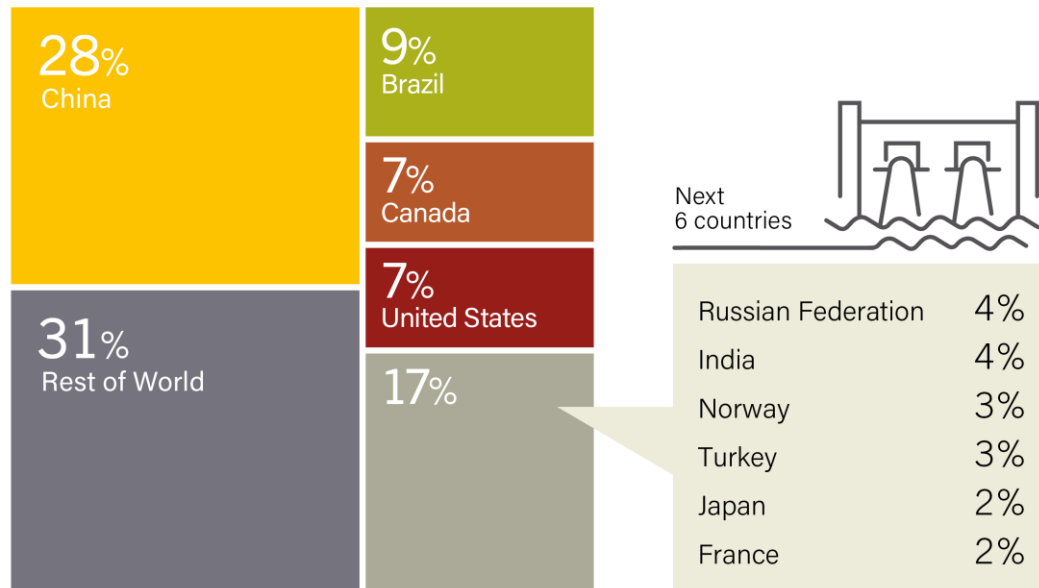


Geothermal Power Capacity and Additions, Top 10 Countries for Capacity Added and Rest of World, 2019



Turkey and Indonesia have been the most active geothermal power markets in recent years.

HYDROPOWER CHARACTERISED BY MARKET STABILITY



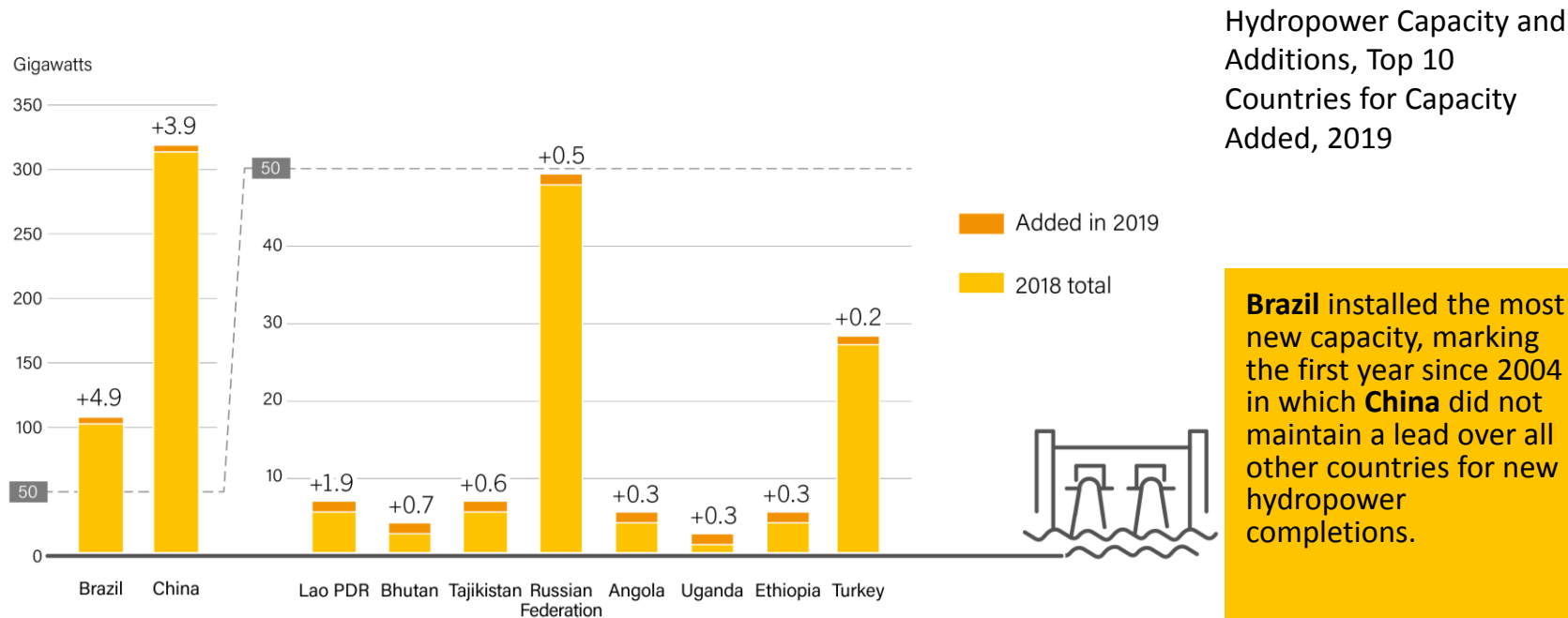
Hydropower Global Capacity, Shares of Top 10 Countries and Rest of World, 2019

Only 15.6 GW added in 2019, continuing a multi-year trend of market deceleration.

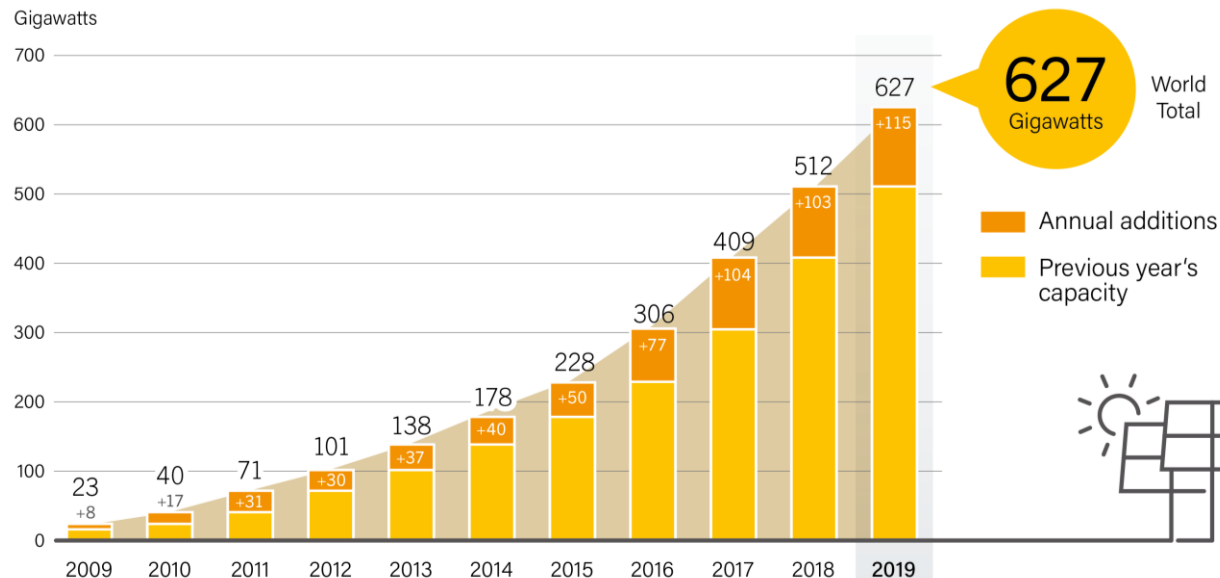
Note: Totals may not add up due to rounding.

Source: Global total from IHA.

HYDROPOWER CAPACITY ADDED IN NEARLY EVERY REGION



SOLAR PV CAPACITY ADDITIONS PASSED 115 GW MARK IN 2019



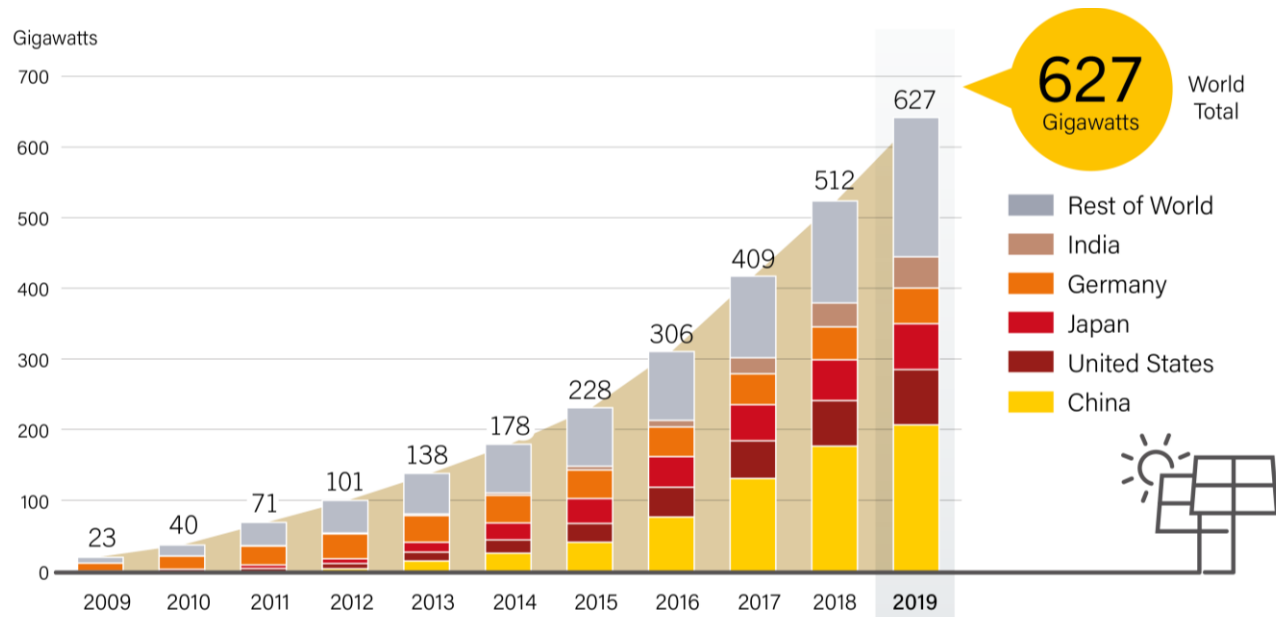
Solar PV Global Capacity and Annual Additions, 2009-2019

By the end of 2019, **22 countries** had enough capacity in operation to meet **at least 3% of their** electricity demand with solar PV.

Note: Data are provided in direct current (DC).
Totals may not add up due to rounding.

Source: Becquerel Institute and IEA PVPS.

SOLAR PV SPREADING TO NEW PARTS OF THE WORLD

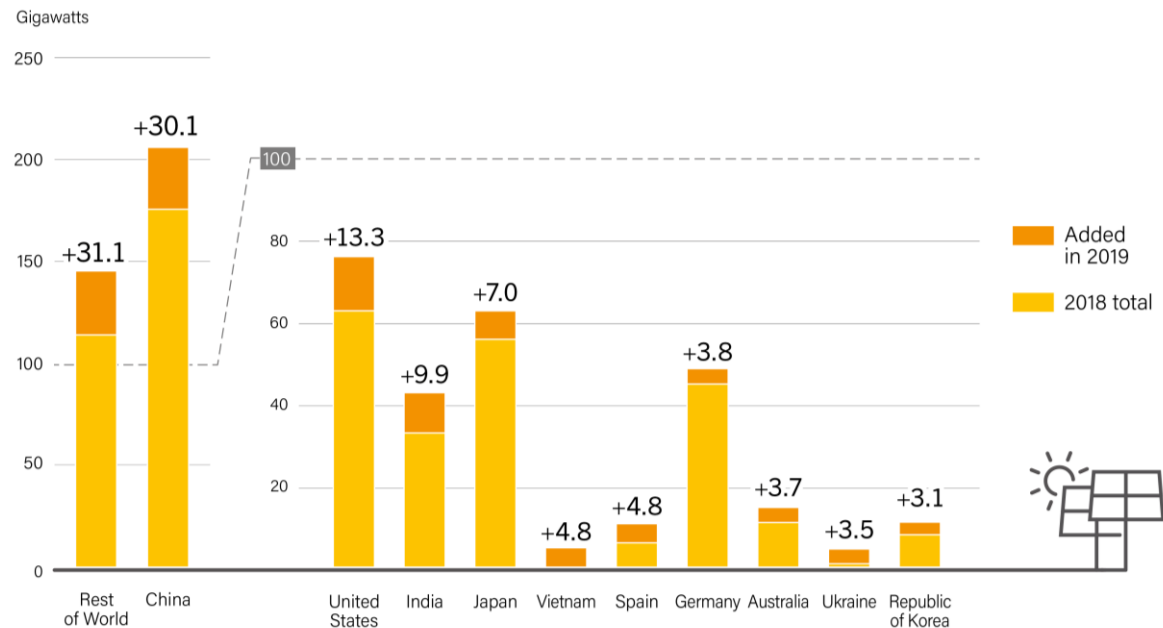


Note: Data are provided in direct current (DC).

Solar PV Global Capacity,
by Country and Region,
2009-2019

For the seventh consecutive year, Asia eclipsed all other regions for new installations, **accounting for half of global additions.**

CHINA REMAINS LEADER IN SOLAR PV DESPITE DECLINE IN MARKET

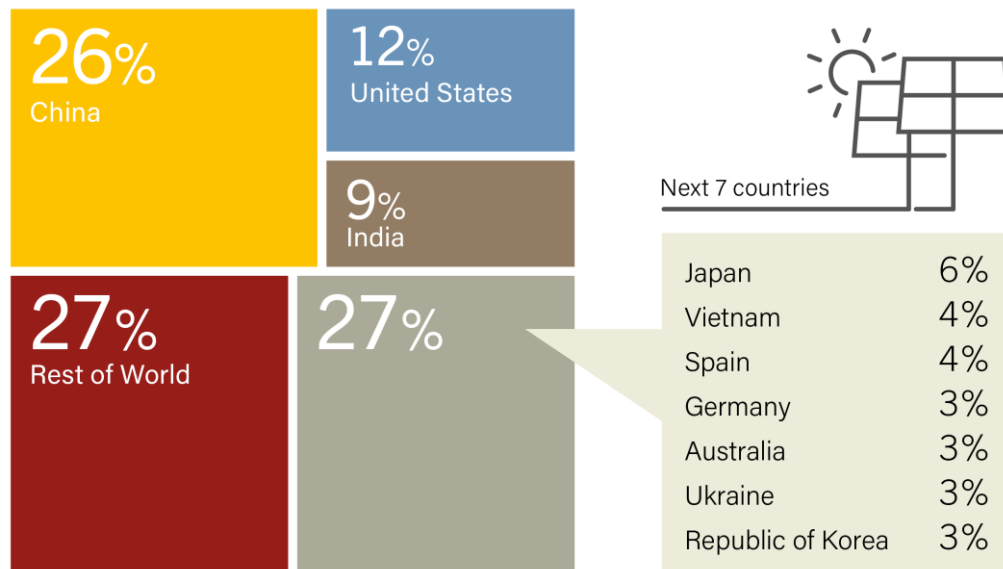


Solar PV Capacity and Additions, Top 10 Countries for Capacity Added, 2019

China's market decline attributed to **policy uncertainty** following the removal of a feed-in tariff law in 2018.

Note: Data are provided in direct current (DC).

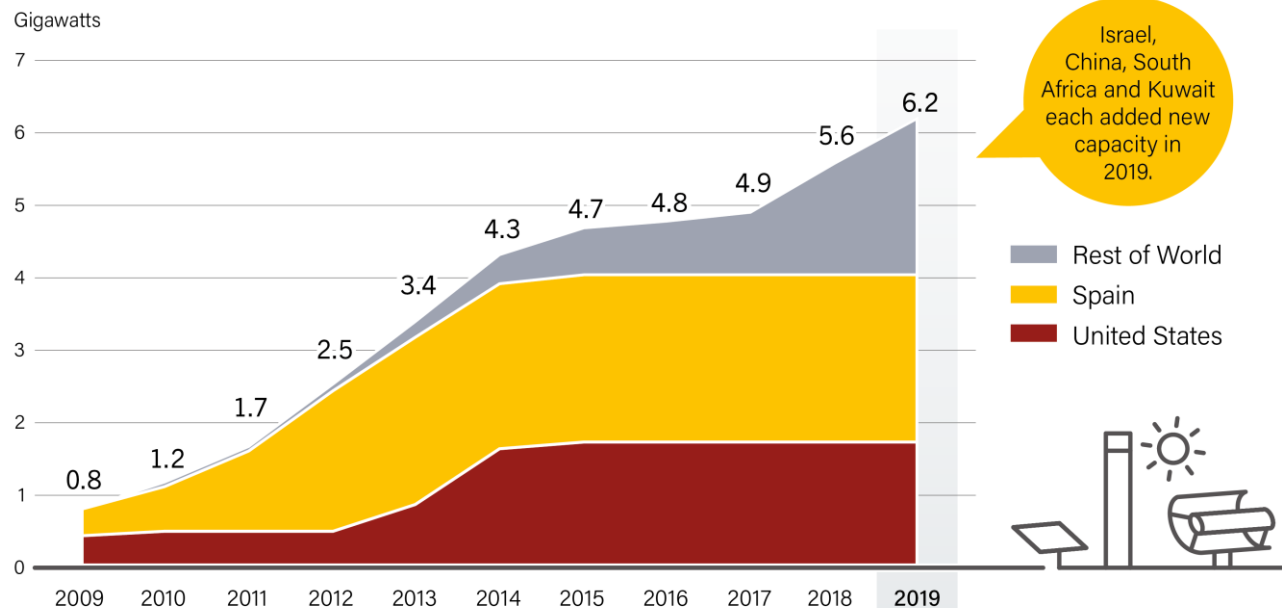
ASIA: MAIN REGIONAL SOLAR PV MARKET FOR 7TH CONSECUTIVE YEAR



Solar PV Global Capacity Additions, Shares of Top 10 Countries and Rest of World, 2019

Asia accounted for half of global additions, despite declines in the region's top three markets (China, India and Japan).

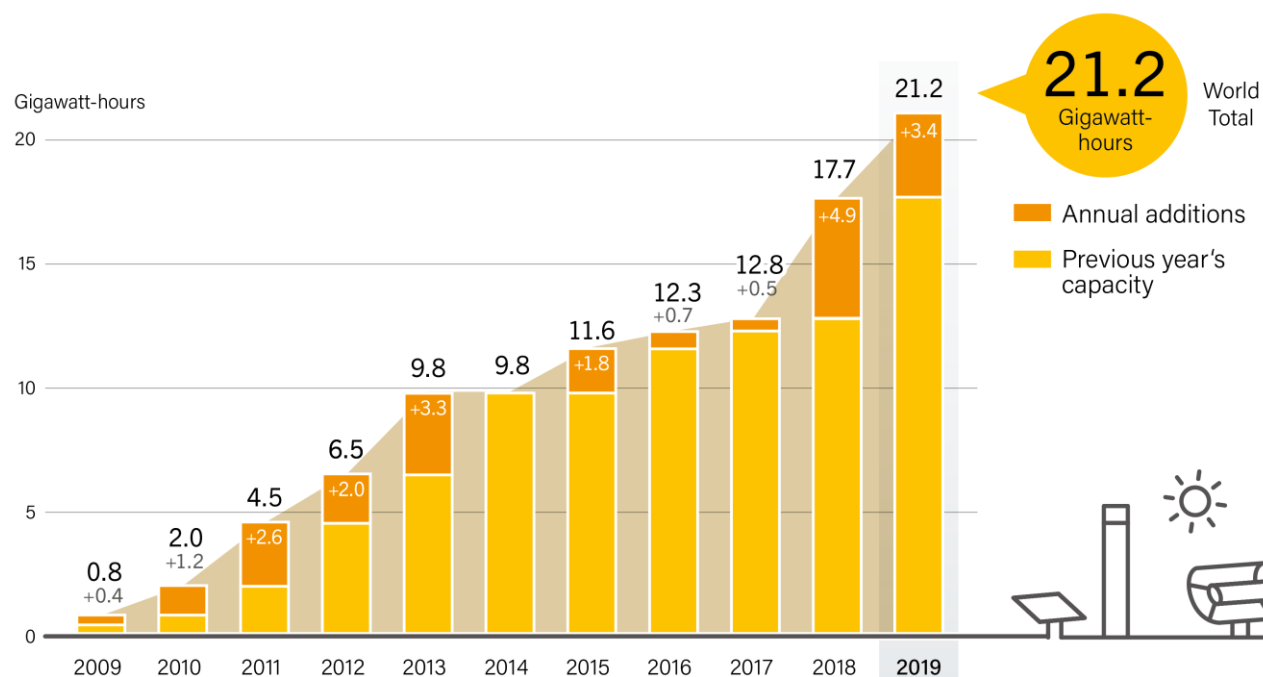
NEW CSP ADDITIONS EXCLUSIVELY IN EMERGING MARKETS



Concentrating Solar Thermal Power Global Capacity, by Country and Region, 2009-2019

Global CSP capacity **grew 11% in 2019**, with around 600 MW of capacity coming online.

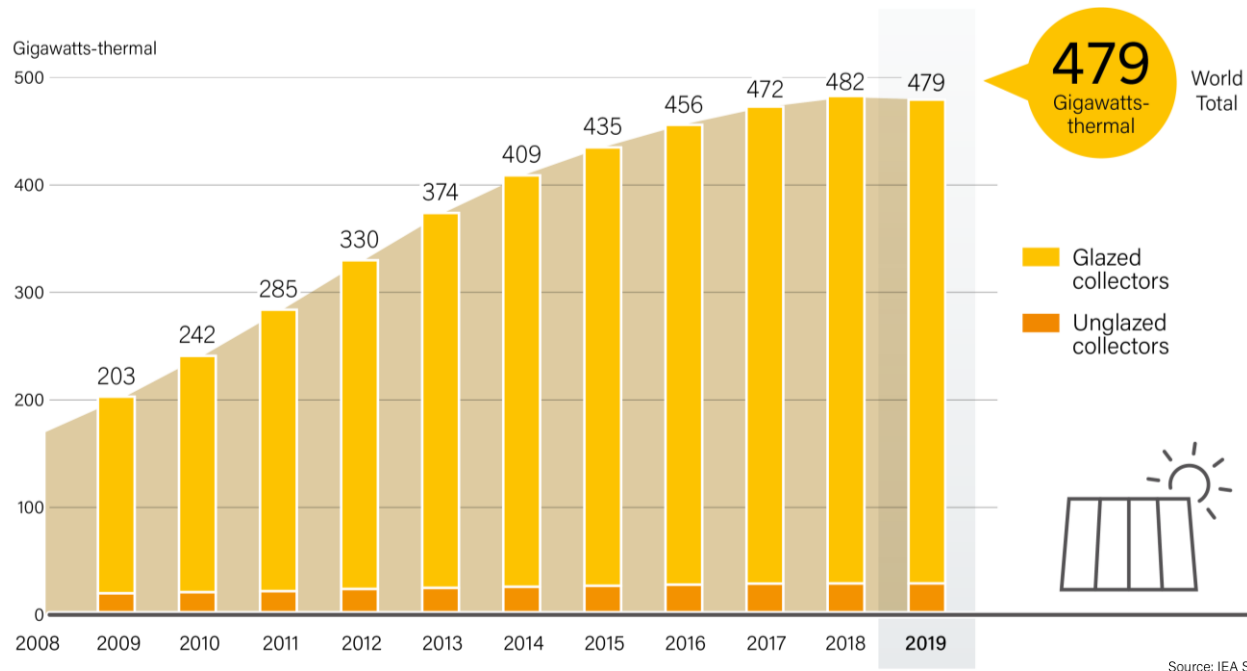
NEARLY ALL CSP PLANTS USE THERMAL ENERGY STORAGE



CSP Thermal Energy Storage Global Capacity and Annual Additions, 2009-2019

21 of the 23 CSP plants completed globally since the end of 2014 have incorporated thermal energy storage.

INSTALLED SOLAR WATER HEATING CAPACITY DECLINED

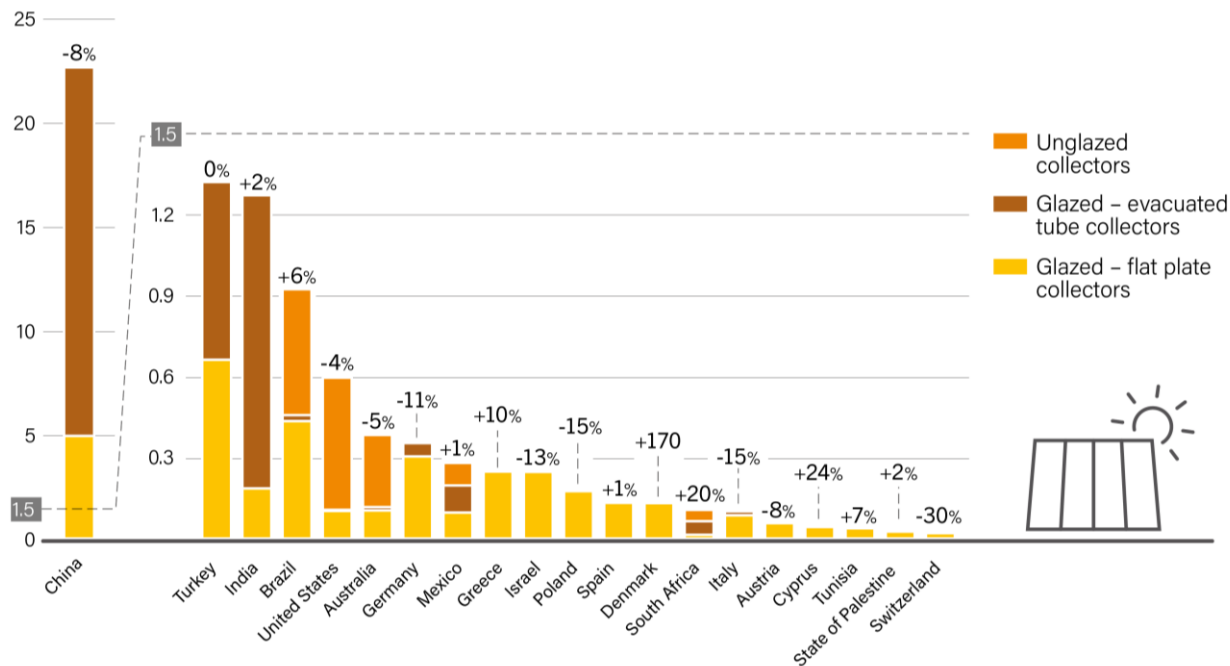


Solar Water Heating
Collectors Global Capacity,
2009-2019

For the first time ever,
global operating solar
thermal capacity
declined, down 1% from
2018.

CONTRACTION IN SOME MARKETS, GROWTH IN OTHERS

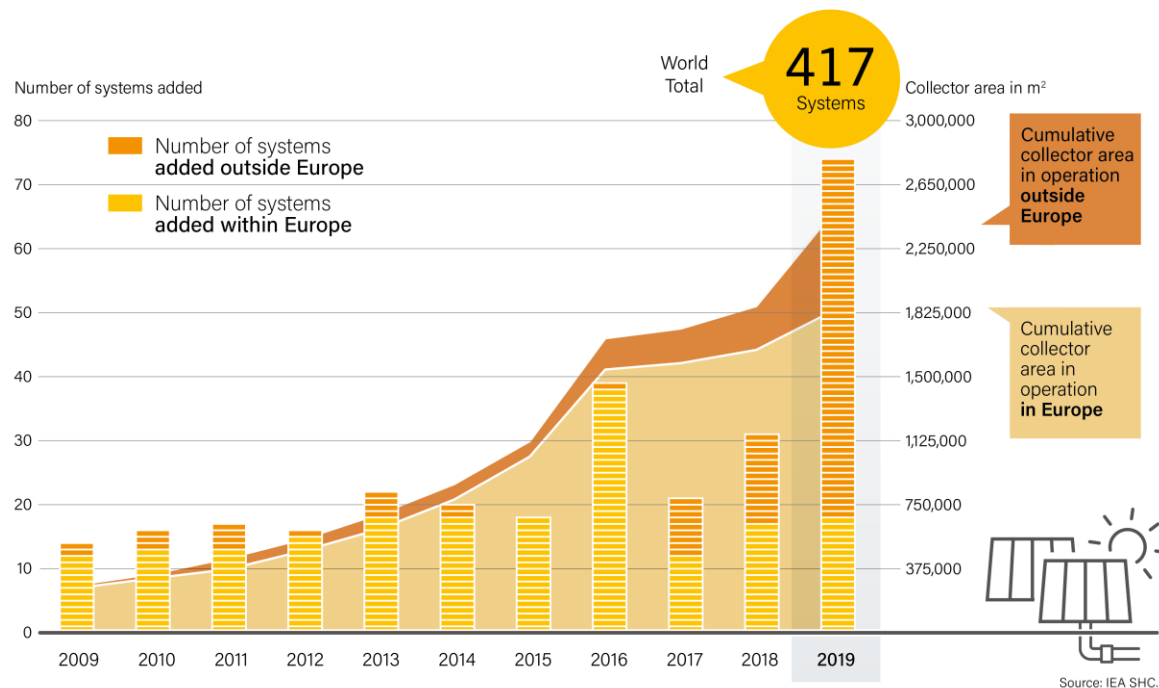
Gigawatts-thermal



Solar Water Heating
Collector Additions, Top
20 Countries for Capacity
Added, 2019

Outside China, new additions in the largest solar heating and cooling markets were stable, with **growth** in some markets **balancing declines** in others.

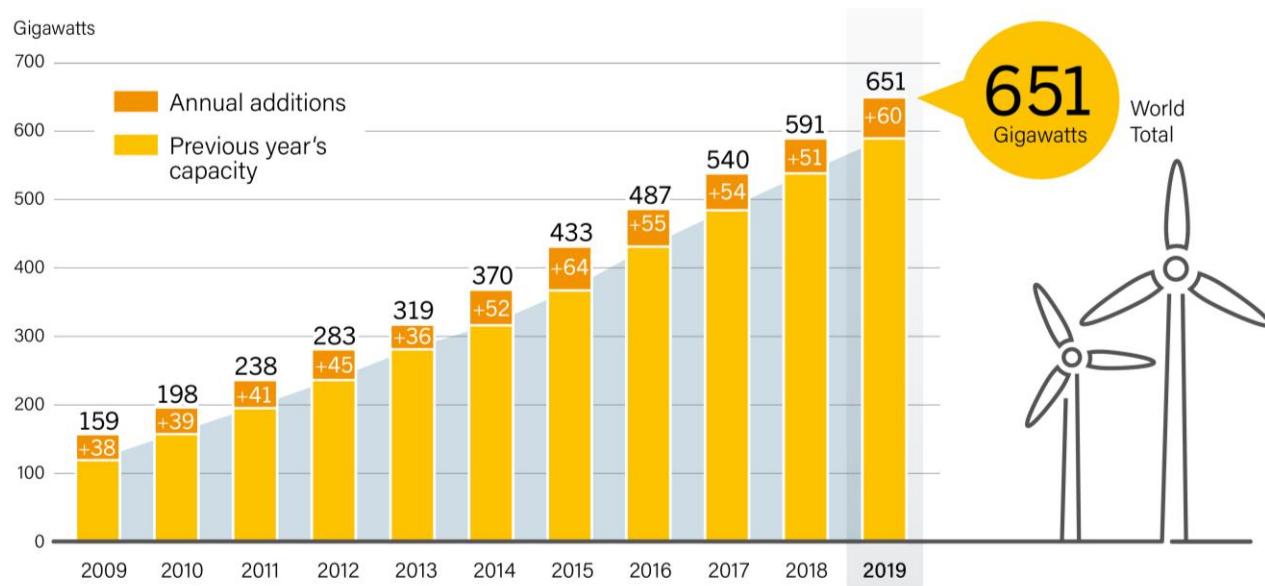
LARGE INCREASE IN SOLAR DISTRICT HEATING SYSTEMS



Solar District Heating Systems, Global Annual Additions and Total Area in Operation, 2009-2019

Leading markets for solar district heating were **Denmark, China and Germany.**

WIND POWER CAPACITY CONTINUES INCREASE STEADILY YEAR-ON-YEAR



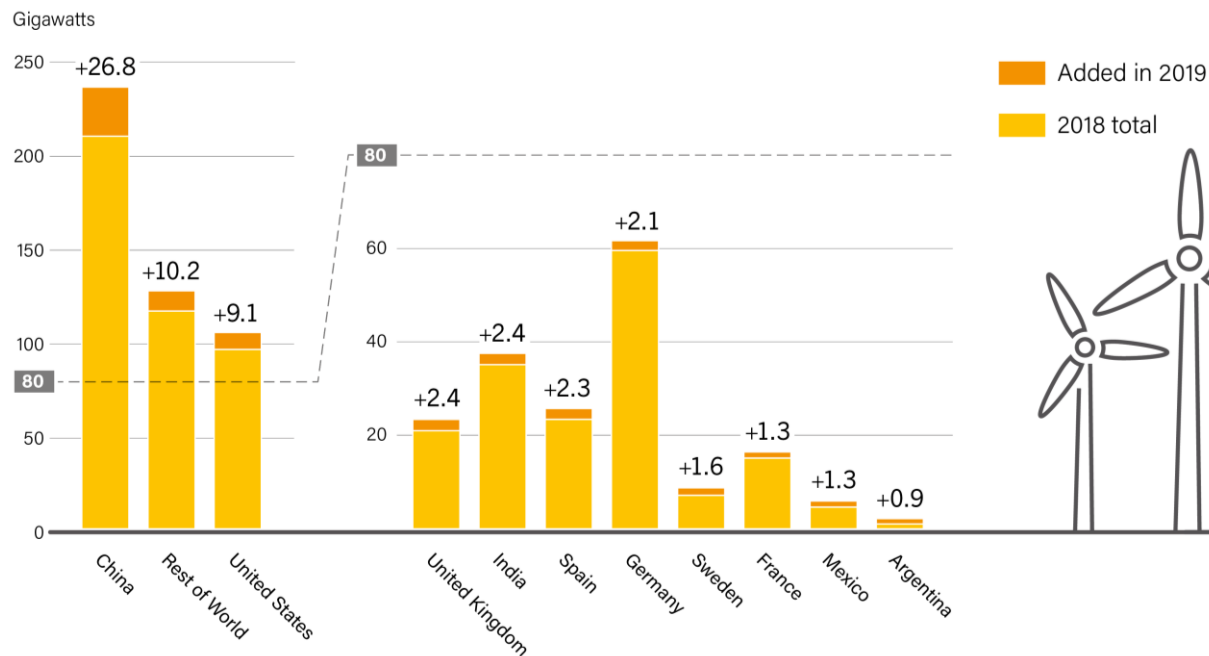
Wind Power Global Capacity and Annual Additions, 2009-2019

The global wind power market saw its **second largest** annual increase in 2019.

Note: Totals may not add up due to rounding.

Source: GWEC.

MORE THAN HALF OF NEW WIND POWER CAPACITY IN ASIA

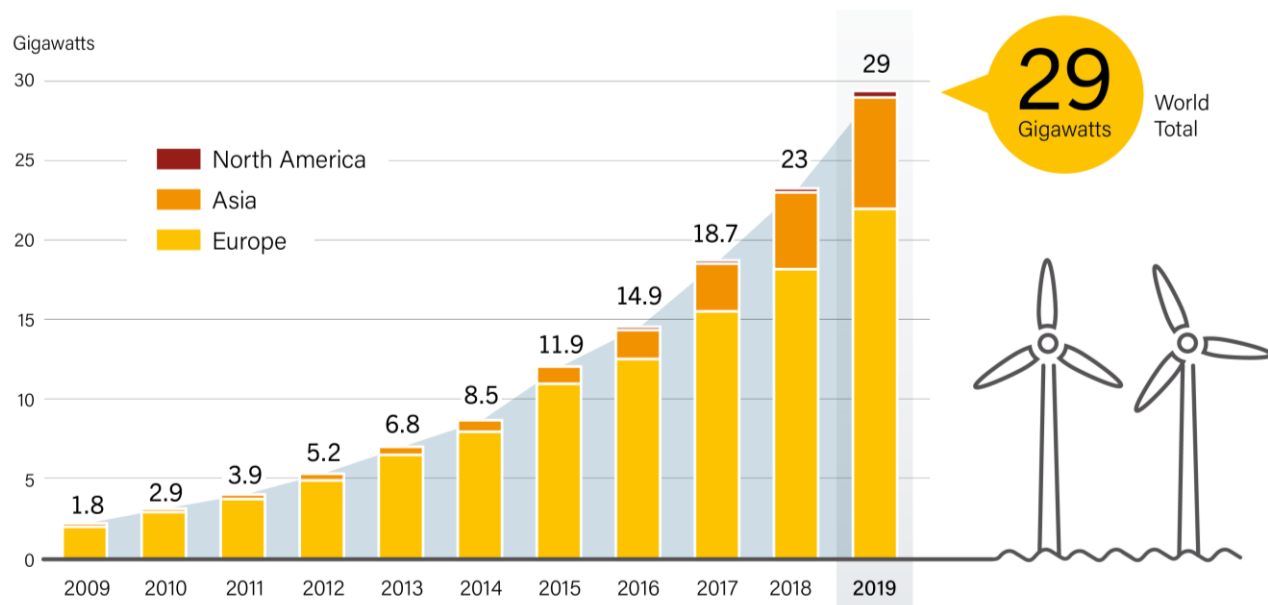


Wind Power Capacity and Additions, Top 10 Countries, 2019



China again saw an increase in new installations (**up 22%**) during 2019, adding around 26.8 GW.

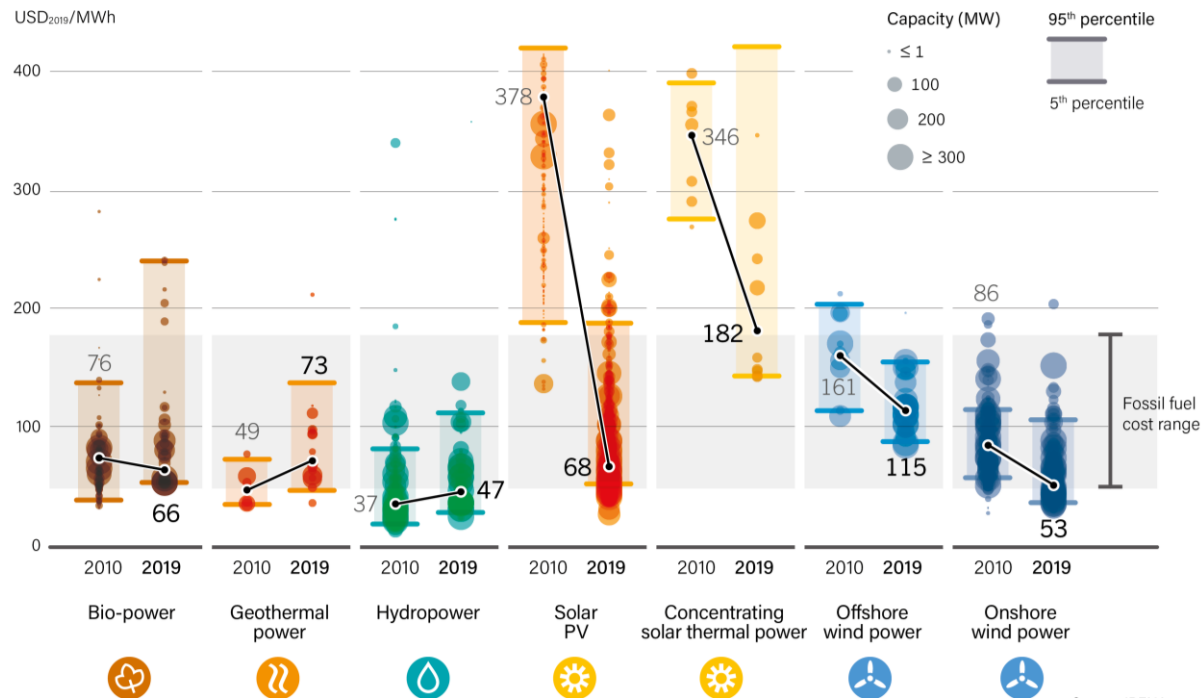
SUCCESS OF OFFSHORE WIND IN EUROPE SPARKED INTEREST ELSEWHERE



Wind Power Offshore
Global Capacity by Region,
2009-2019

Offshore wind power
accounted for a record
**10% of wind power
additions** in 2019.

RENEWABLE POWER COSTS KEEP FALLING

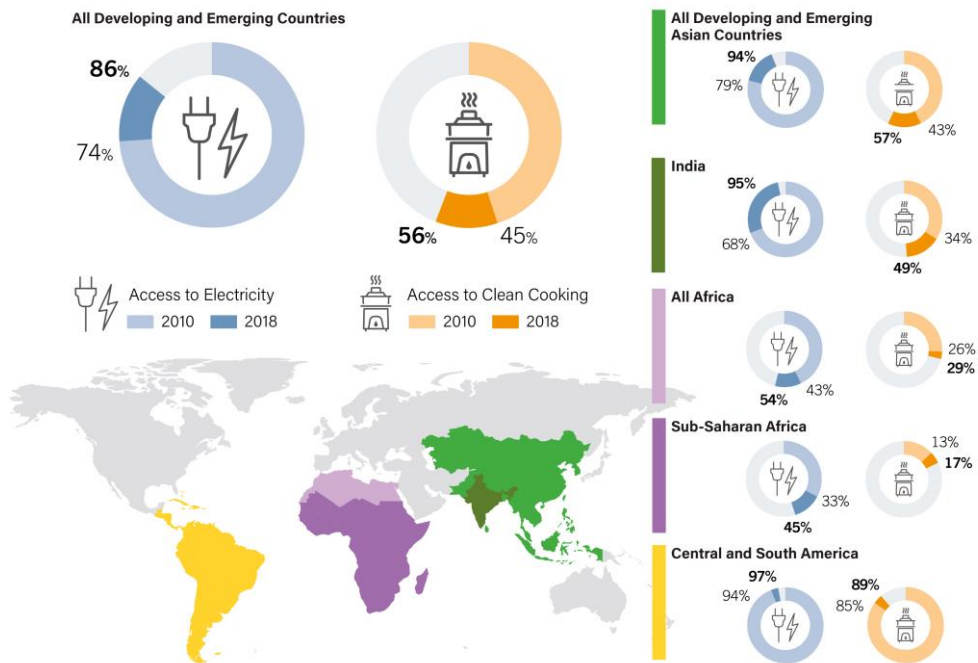


Source: IRENA.

Global Levelised Cost of Electricity from Newly Commissioned, Utility-scale Renewable Power Generation Technologies, 2010-2019

Costs for solar PV and CSP as well as onshore and offshore wind have **fallen sharply over the past decade.**

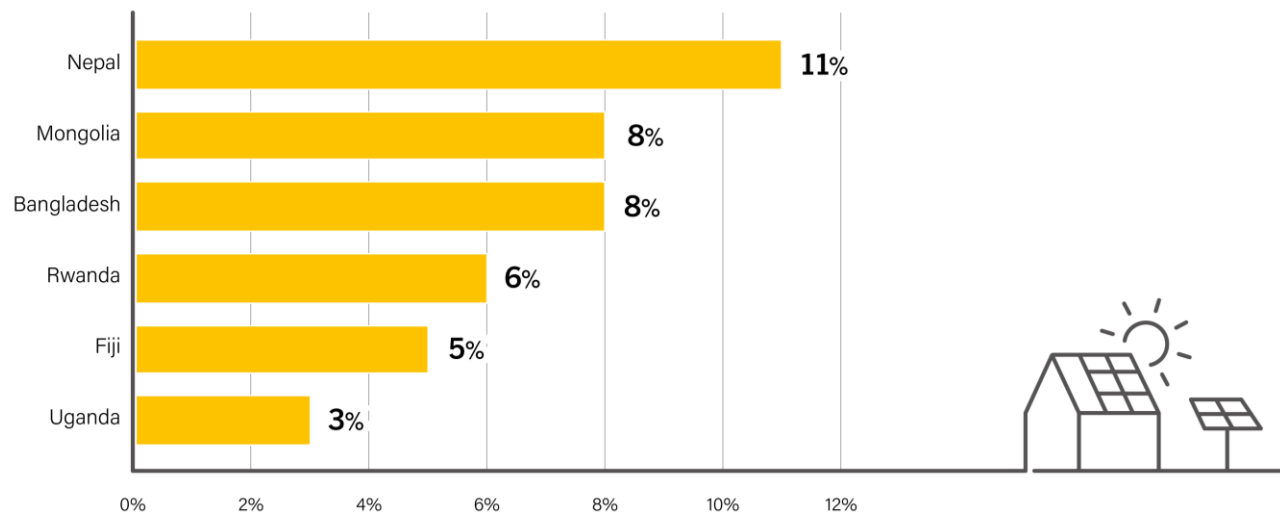
ACCESS TO ENERGY EXPANDS, ALBEIT UNEVENLY



Access to Electricity and Clean Cooking by Region, 2010 and 2018

By the end of 2018, the global population without access to electricity fell to **860 million**, while **2.65 billion** people lived without access to clean cooking facilities

DISTRIBUTED RENEWABLES: KEY SOLUTIONS TO PROVIDE ENERGY ACCESS



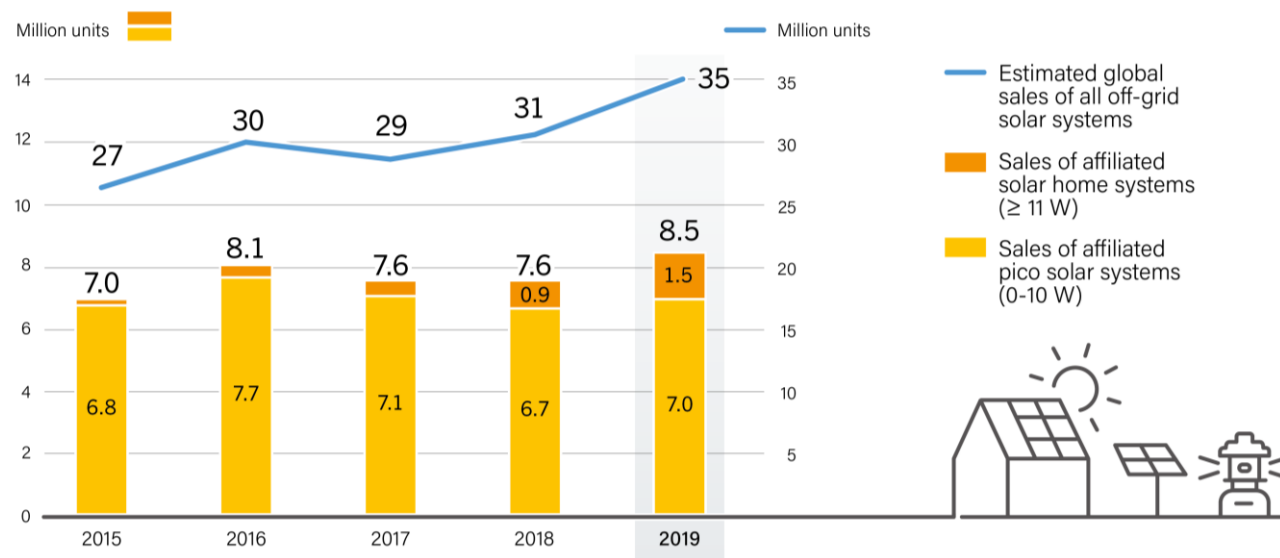
Top 6 Countries with Highest Electricity Access Rate from Off-grid Solar Solutions (Tier 1+), 2017

Beyond the opportunity to accelerate energy access in many regions of the world, DREA systems offer **social, environmental and economic co-benefits.**

Note: Data in figure include solar home systems and mini-grids but exclude solar lights. Data are rounded to the nearest ones. Tier 1+ access technologies include small solar home systems (11-50 W), large solar home systems (>50 W) and mini-grids.

Source: World Bank.

GLOBAL SALES OF OFF-GRID SOLAR SYSTEMS SEES STRONG GROWTH

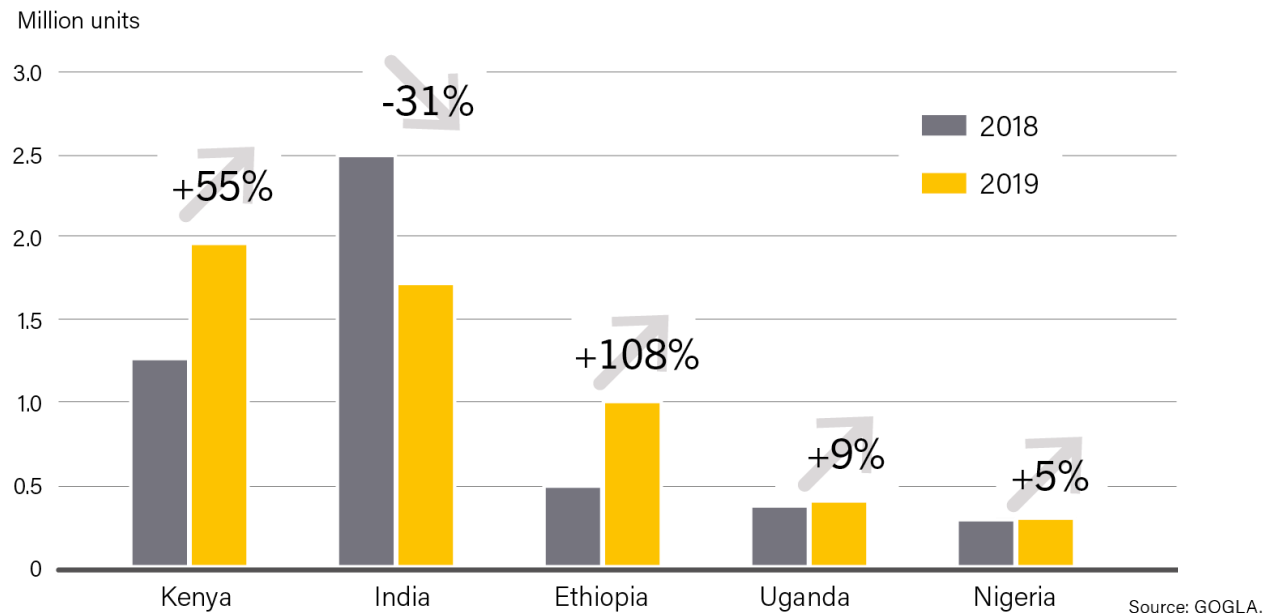


Note: Affiliated products are those sold by companies that are connected to any of the partner organisations involved in the semi-annual GOGLA sales data reporting process, including GOGLA members and companies selling products that meet Lighting Global Quality Standards.

Source: IFC and GOGLA.

The market for solar lighting systems and solar home systems **grew 13%** in 2019 – the highest growth of the past five years.

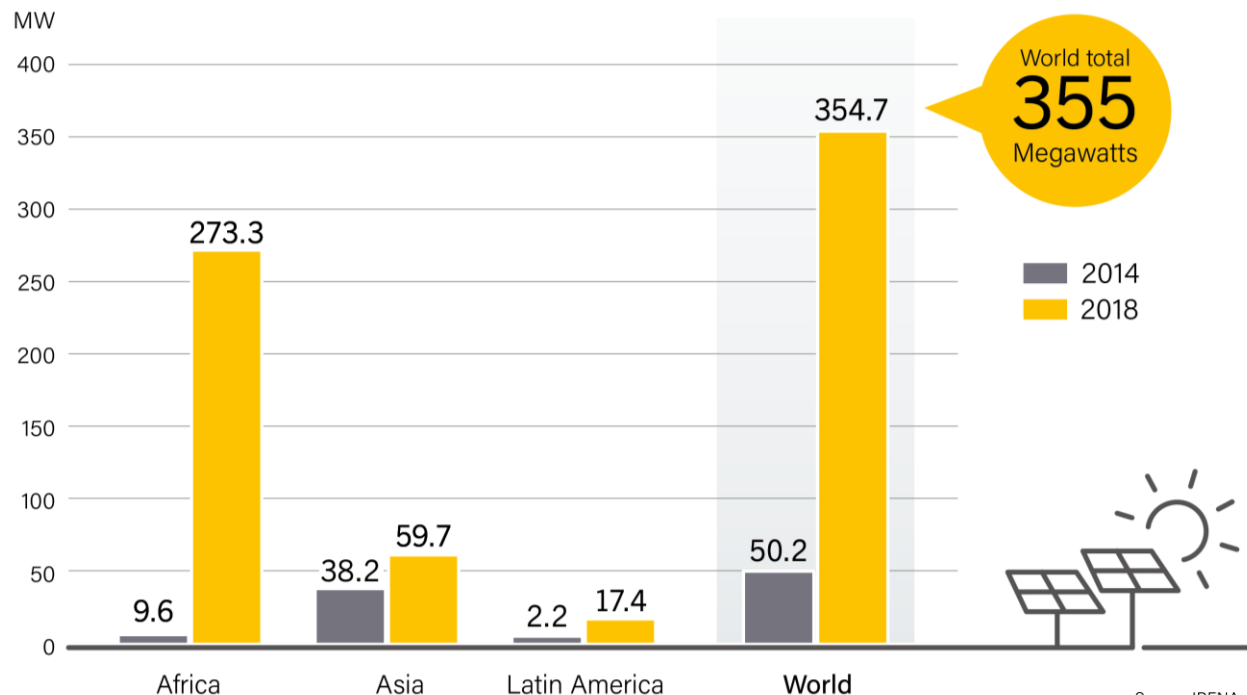
MARKETS FOR OFF-GRID SOLAR SYSTEMS EVOLVING



Sales Volumes of Affiliated Off-Grid Solar Systems in Top 5 Countries, 2018 and 2019

Sales of affiliated off-grid solar systems **expanded the most in Ethiopia and Kenya**, contrasting with a **drop in India**.

RENEWABLE ENERGY-BASED MINI-GRIDS GAIN MOMENTUM

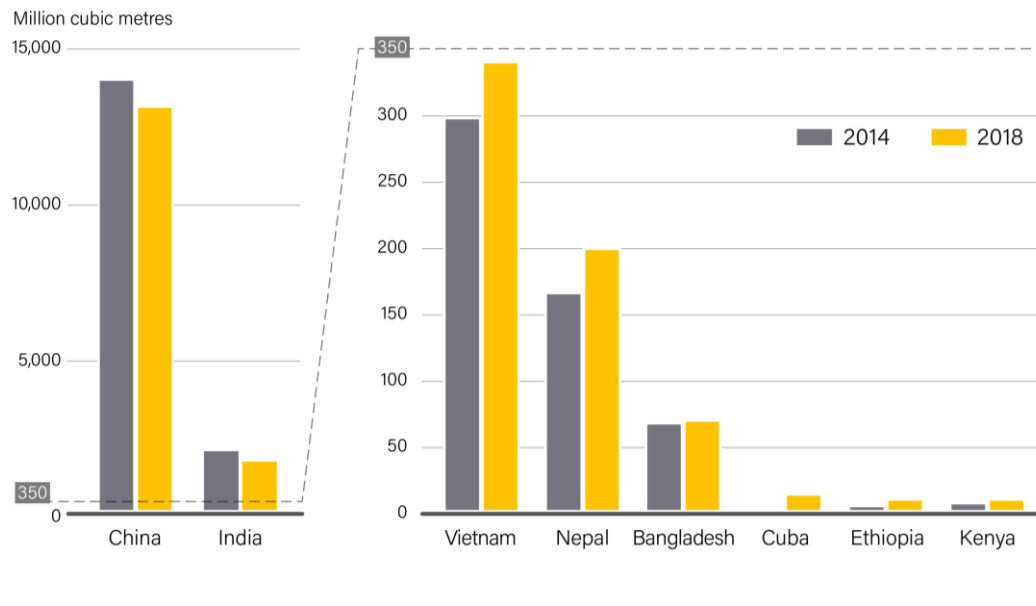


Source: IRENA.

Installed Capacity of Solar PV Mini-Grids, Selected Regions and World, 2014 and 2018

Solar PV mini-grids are increasingly the **preferred technology** for providing electricity access across Africa and Asia.

PRODUCTION OF BIOGAS FOR COOKING EXPANDS IN NEW MARKETS



Production of Biogas for Cooking in Selected Countries, 2014 and 2018

An estimated **125 million** people worldwide used biogas for cooking in 2018.

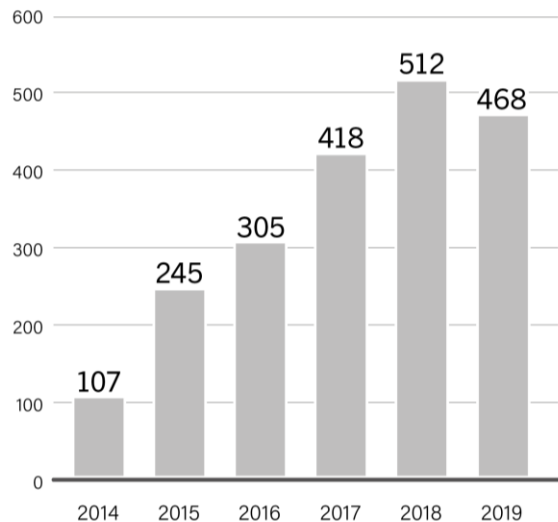


Source: IRENA.

INVESTMENT IN OFF-GRID ELECTRICITY ACCESS FACED A DECREASE

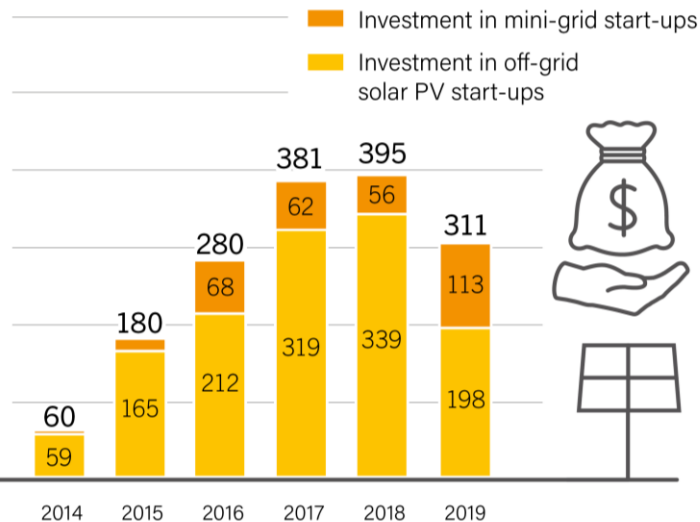
Corporate-level investment in off-grid electricity access activities

USD million



Investment in off-grid electricity access start-ups

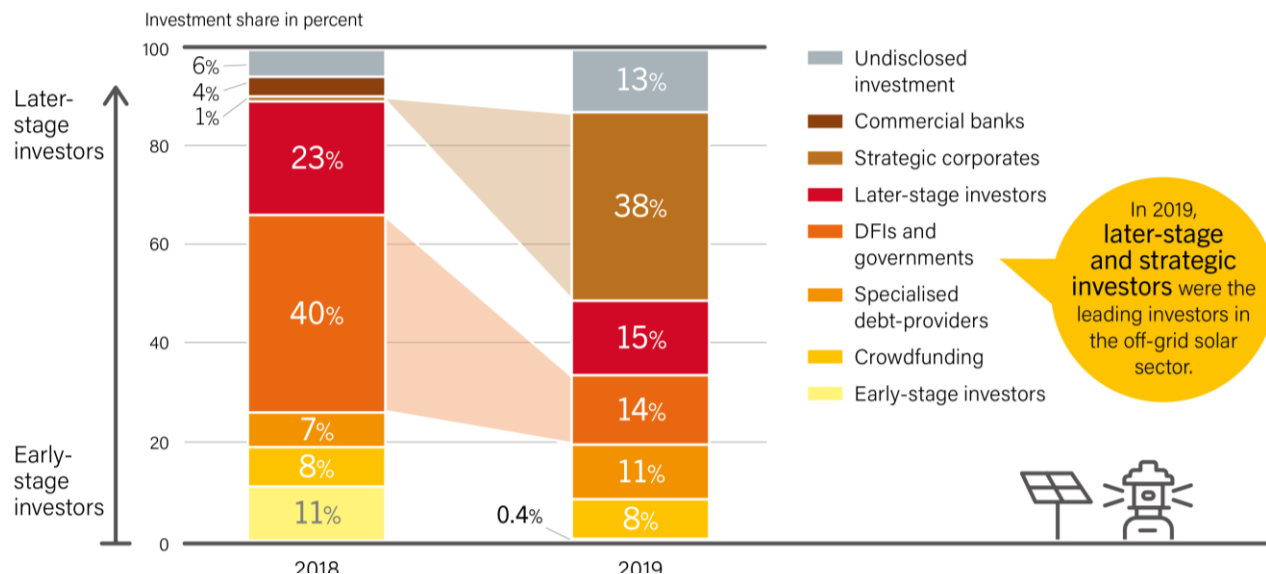
USD million



Global Investment in Off-Grid Electricity Access Activities, 2014-2019

Investments in off-grid solar start-ups dropped 42%, whereas capital flows in mini-grid start-ups more than doubled to a record USD 113 million in 2019.

THE TYPE OF INVESTORS IN DREA MARKETS SHIFTED NOTABLY IN 2019

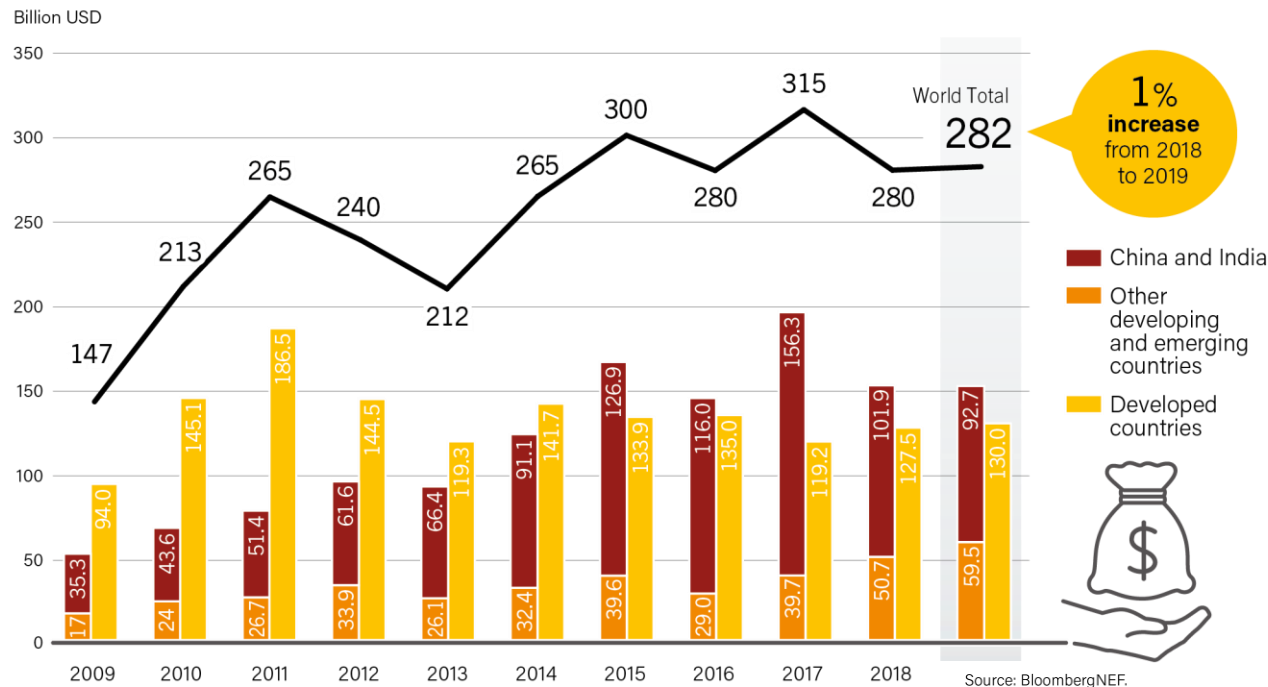


Share of Investment in Off-Grid Solar PV Companies, by Type of Investor, 2018 and 2019

Strategic corporate investors predominantly invested in off-grid solar companies.

Still, **DFIs and governments** continued to be the main investors in mini-grid start-ups.

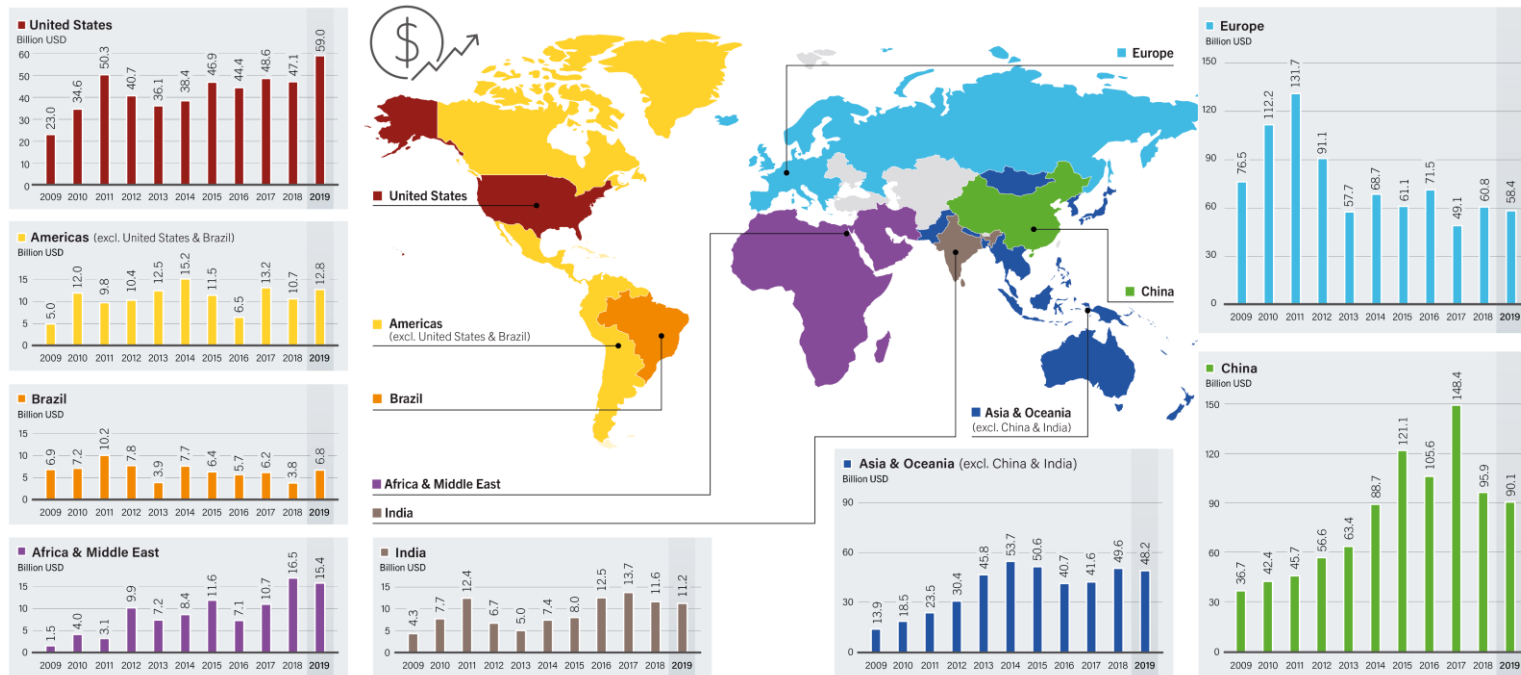
INVESTMENT IN RENEWABLES HAS BARELY GROWN



Global New Investment in Renewable Power and Fuel Capacity in Developed, Emerging and Developing Countries, 2009-2019

Developing and emerging economies surpassed developed countries in renewable energy capacity investment for the fifth year running, reaching USD 152 billion.

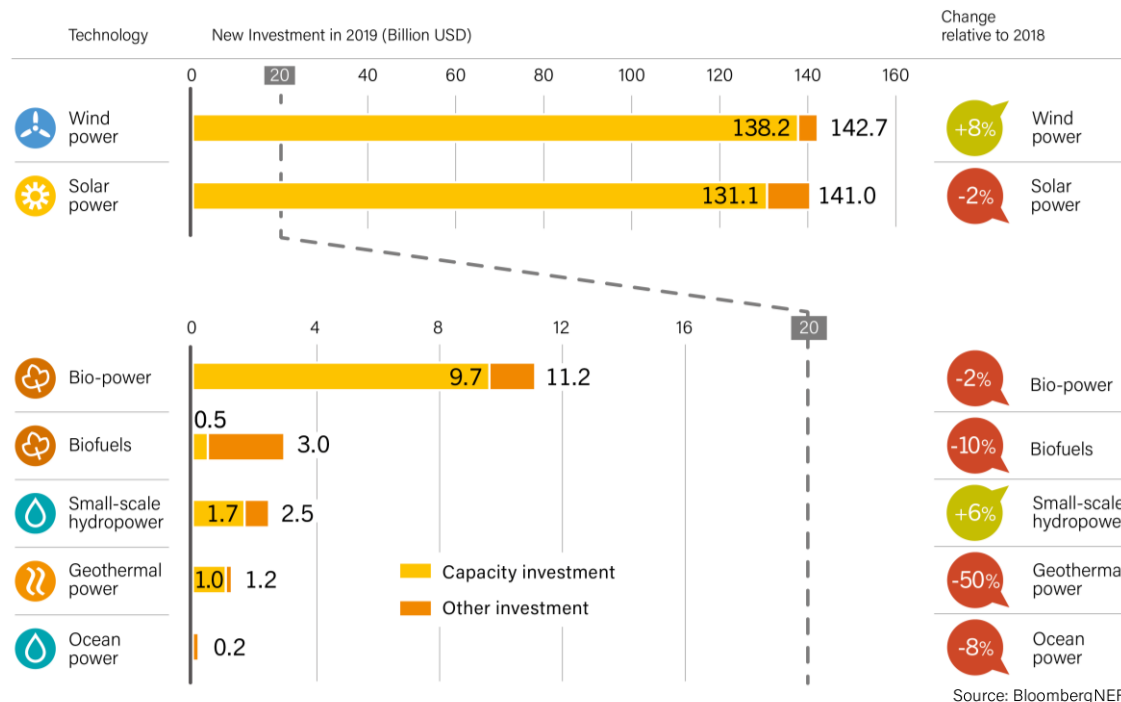
INVESTMENT GREW IN THE AMERICAS, BUT DECREASED ELSEWHERE



Global New Investment in Renewable Power and Fuels, by Country and Region, 2009-2019

Source: BloombergNEF.

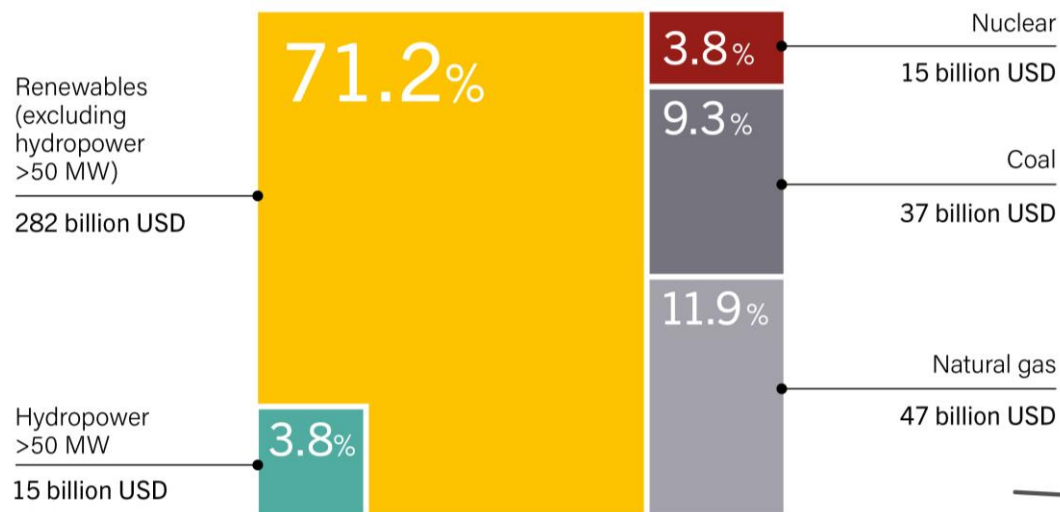
INVESTMENT IN SOLAR PV AND WIND POWER CONTINUE TO LEAD



Global New Investment in Renewable Energy by Technology, 2019

Wind power and solar PV continued to dominate new investment in renewable energy in 2019, each accounting for roughly 47% of the total.

3X MORE INVESTMENT IN RENEWABLES THAN IN COAL, GAS AND NUCLEAR



Note: Renewable investment data in figure exclude biofuels and some types of non-capacity investment.

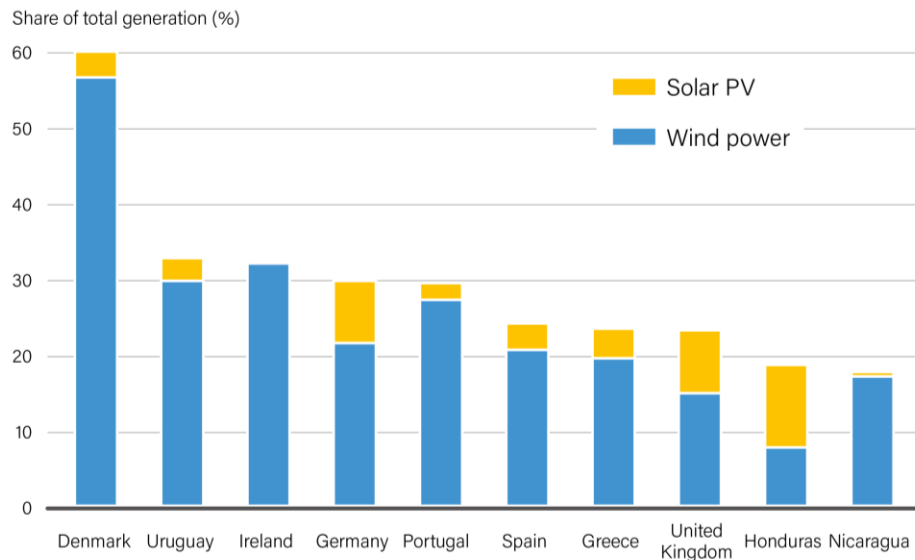
Global Investment in New Power Capacity by Type (Renewables, Coal, Gas and Nuclear Power), 2019



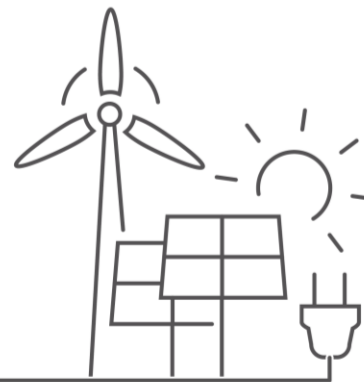
In 2019, **renewable power technologies continued to attract far more investment dollars** than did coal, natural gas or nuclear power generating plants.

Source: BloombergNEF.

VARIABLE RENEWABLES REACHING HIGH SHARES IN MANY COUNTRIES

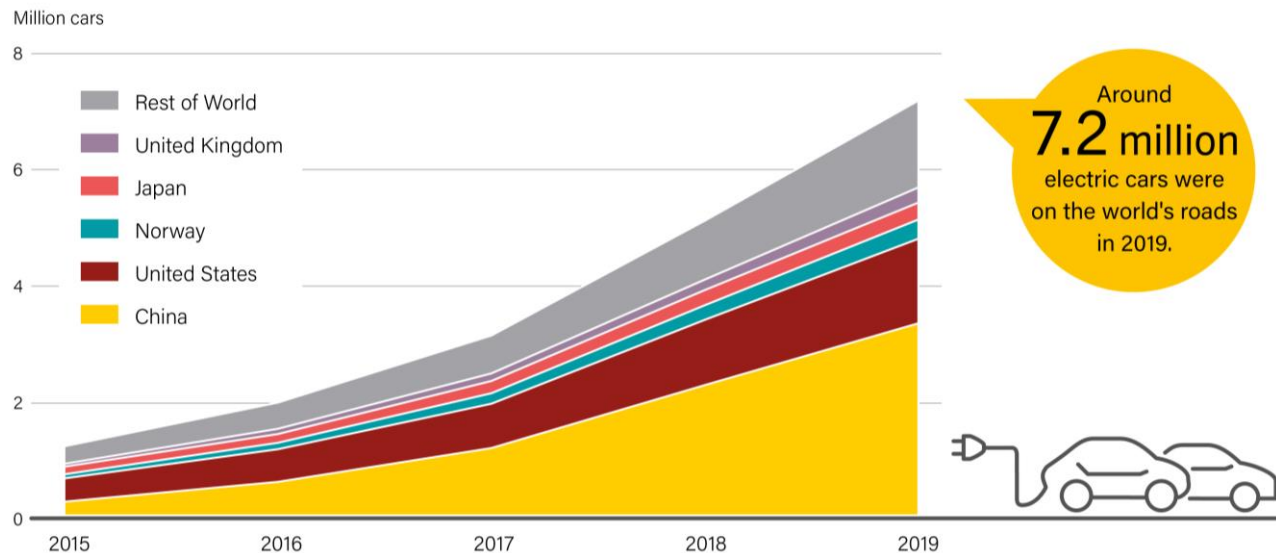


Share of Electricity Generation from Variable Renewable Electricity, Top Countries, 2019



At least four countries met **more than 30%** of their electricity generation from VRE in 2019 including **Denmark, Germany, Ireland and Uruguay.**

ELECTRIC CAR STOCK INCREASED 40% IN 2019



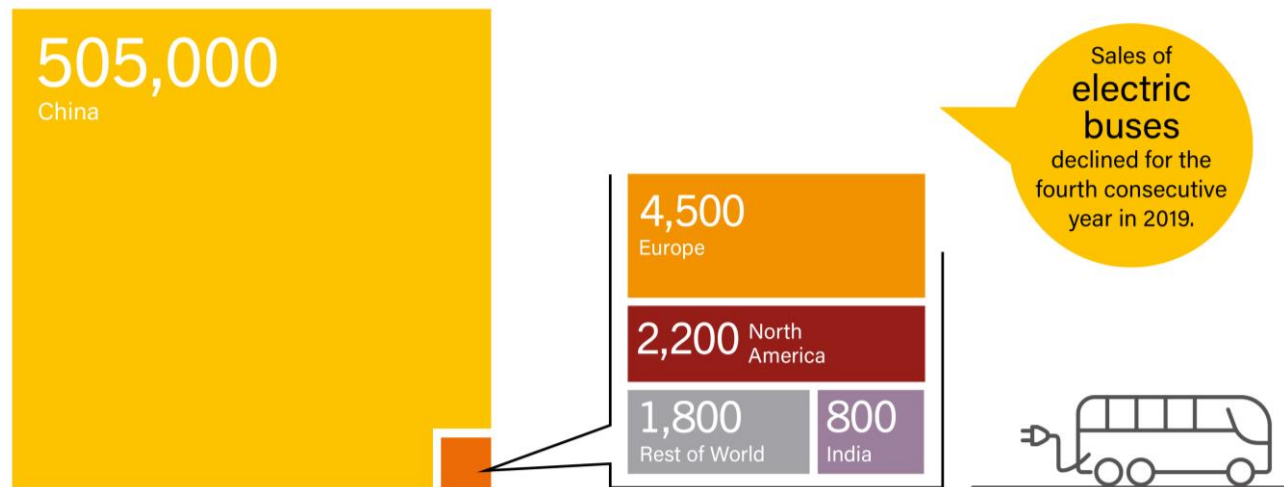
Electric Car Global Stock,
Top Countries and Rest of
World, 2015-2019

Share of electric cars in
new car sales reached
2.5%, a **record high**.

Source: IEA.

VIRTUALLY ALL ELECTRIC BUSES ARE IN CHINA

Number of electric buses



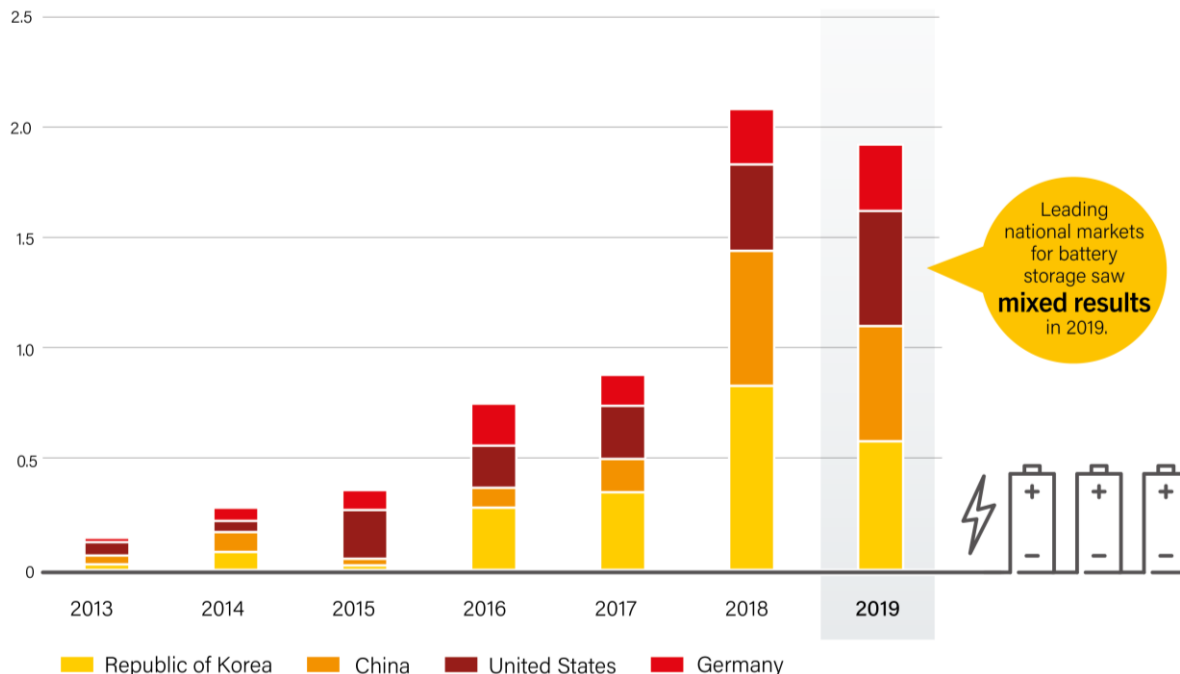
Electric Bus Global Stock,
China and Selected
Regions, 2019

Sales of electric buses
declined for the fourth
consecutive year.

Source: IEA.

THE LEADING MARKETS FOR BATTERY STORAGE SAW MIXED RESULTS

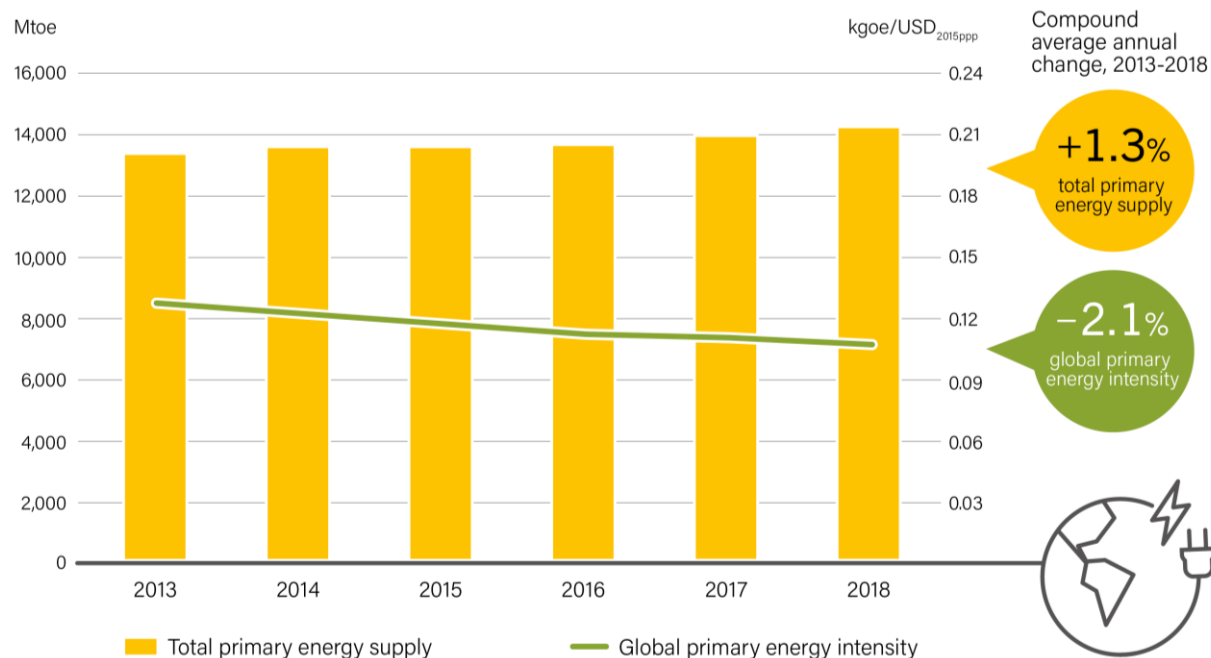
Gigawatts



Battery Storage Annual Additions, Selected Countries, 2013-2019

Battery storage markets grew in the United States and Germany, but declined in Republic of Korea, China and Europe as a whole.

GLOBAL PRIMARY ENERGY INTENSITY CONTINUES TO FALL

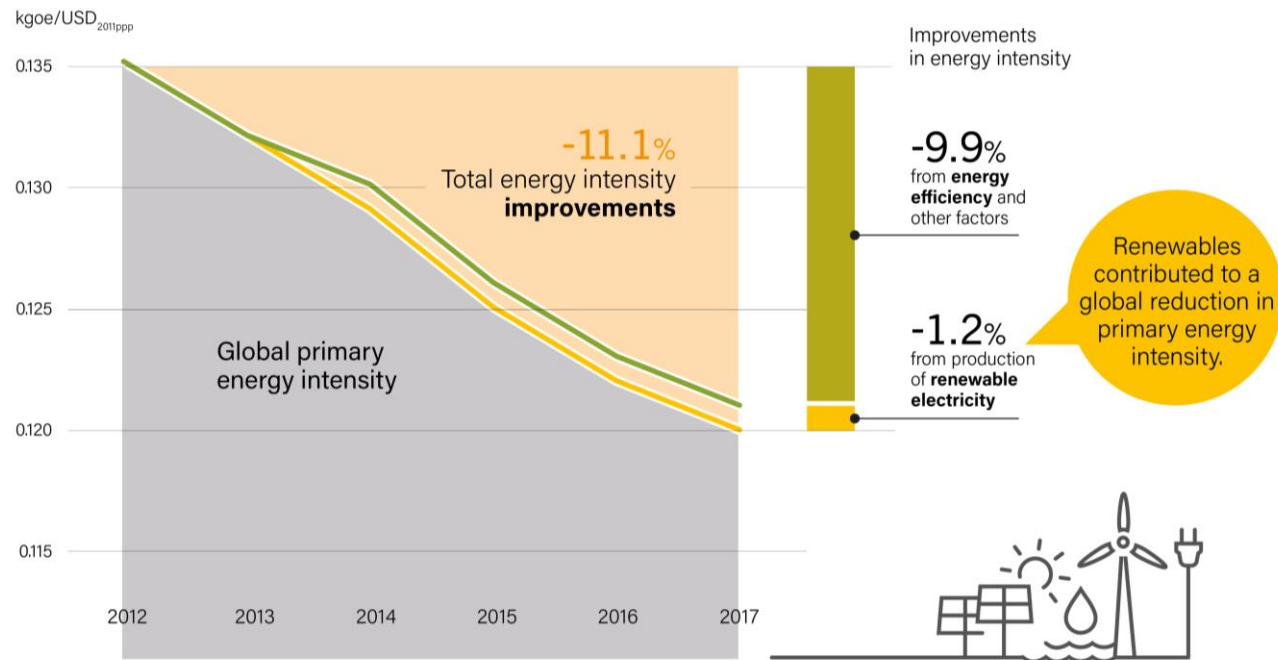


Global Primary Energy Intensity and Total Primary Energy Supply, 2013-2018

Global primary energy intensity decreased more than 10% during the five-year period between 2013 and 2018, at an average annual rate of 2.1%.

Source: Enerdata.

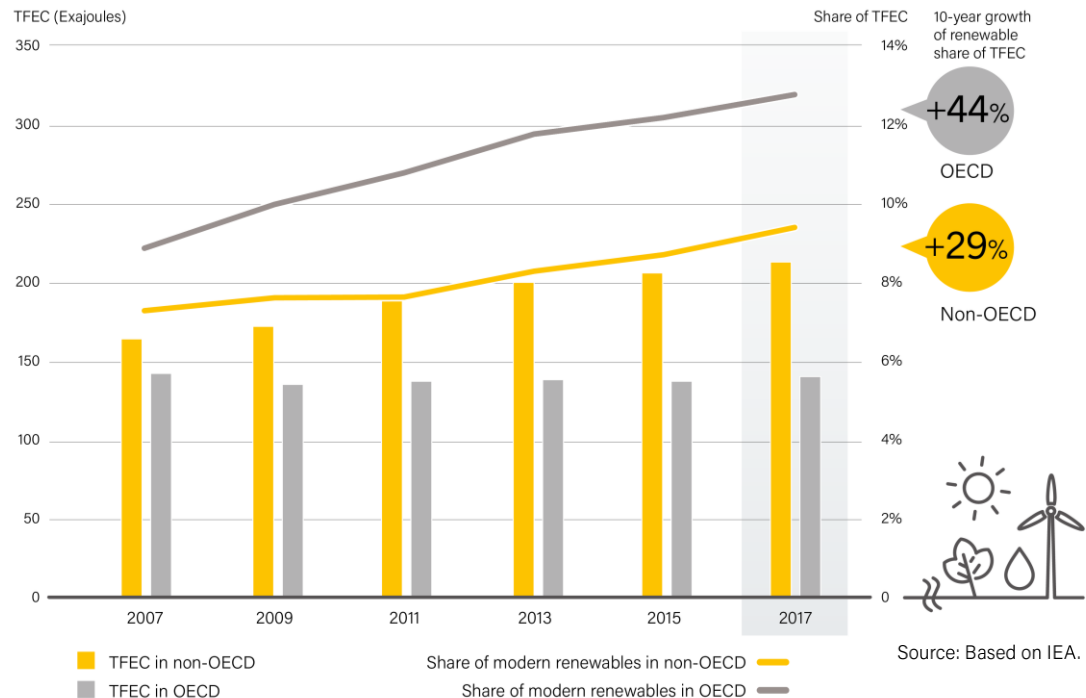
RENEWABLES CONTRIBUTE TO HIGHER ENERGY EFFICIENCY



Estimated Impact of Increased Renewable electricity Production on Global Primary Energy Intensity, 2012-2017

Increased renewable electricity production has been responsible for improvements in primary energy intensity.

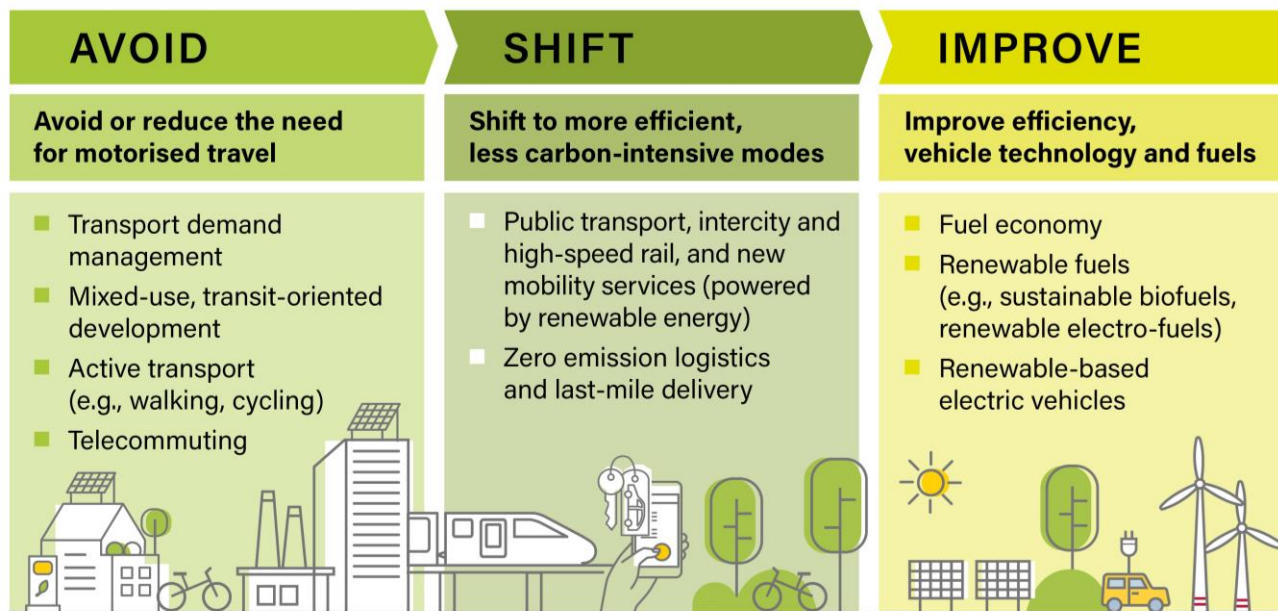
ENERGY DEMAND TRENDS VARY BASED ON COUNTRY



Total Final energy
Consumption and Share of
Modern Renewables in
OECD and non-OECD
countries, 2007-2017

Increases in final energy demand have been driven by economic growth and improved energy access in developing and emerging economies.

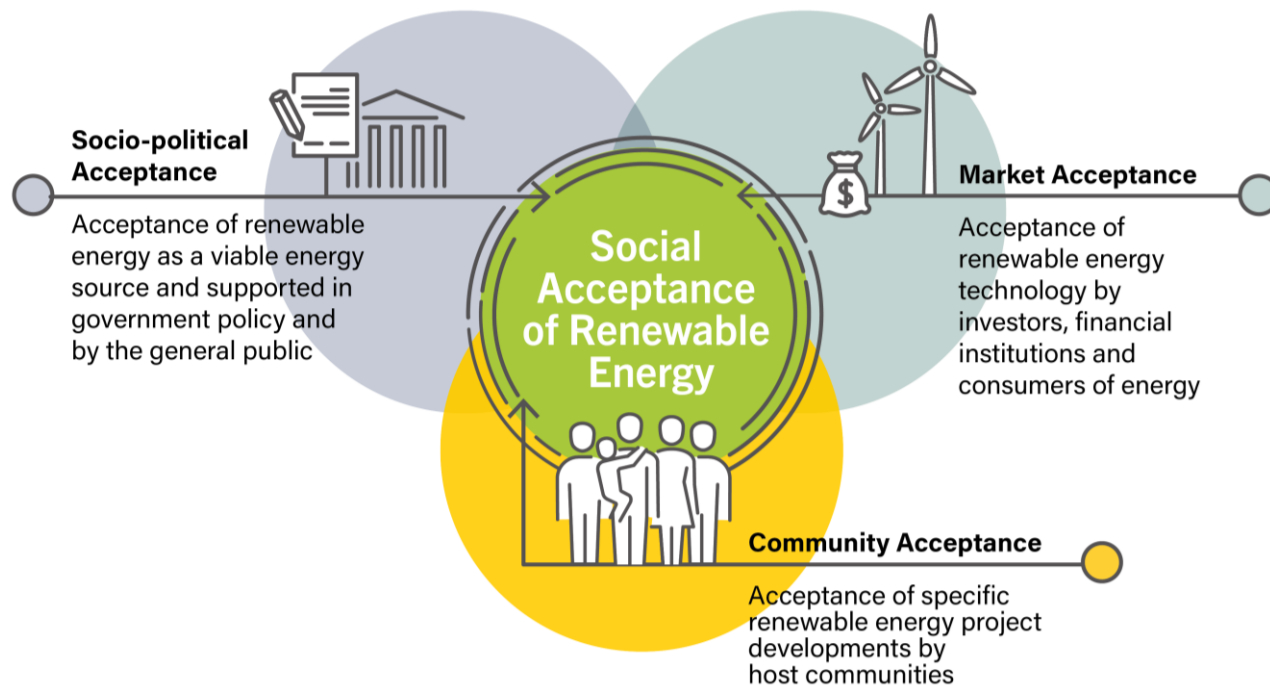
AVOID-SHIFT-IMPROVE TO REDUCE ENERGY DEMAND IN TRANSPORT



Avoid-Shift-Improve Framework in the Transport Sector

Renewable energy can benefit from **wider initiatives to decrease energy demand** in the sector, as this could help boost the renewable share.

PUBLIC SUPPORT FOR RENEWABLES



Dimensions of Social Acceptance of Renewable Energy

Opinion polls suggest a widespread societal support for renewables but some people are still against local projects.

JOBS IN RENEWABLE ENERGY KEEP GROWING



Source: IRENA.



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