

DIGITAL & TRENDS

Global bioenergy industry

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06 Industry

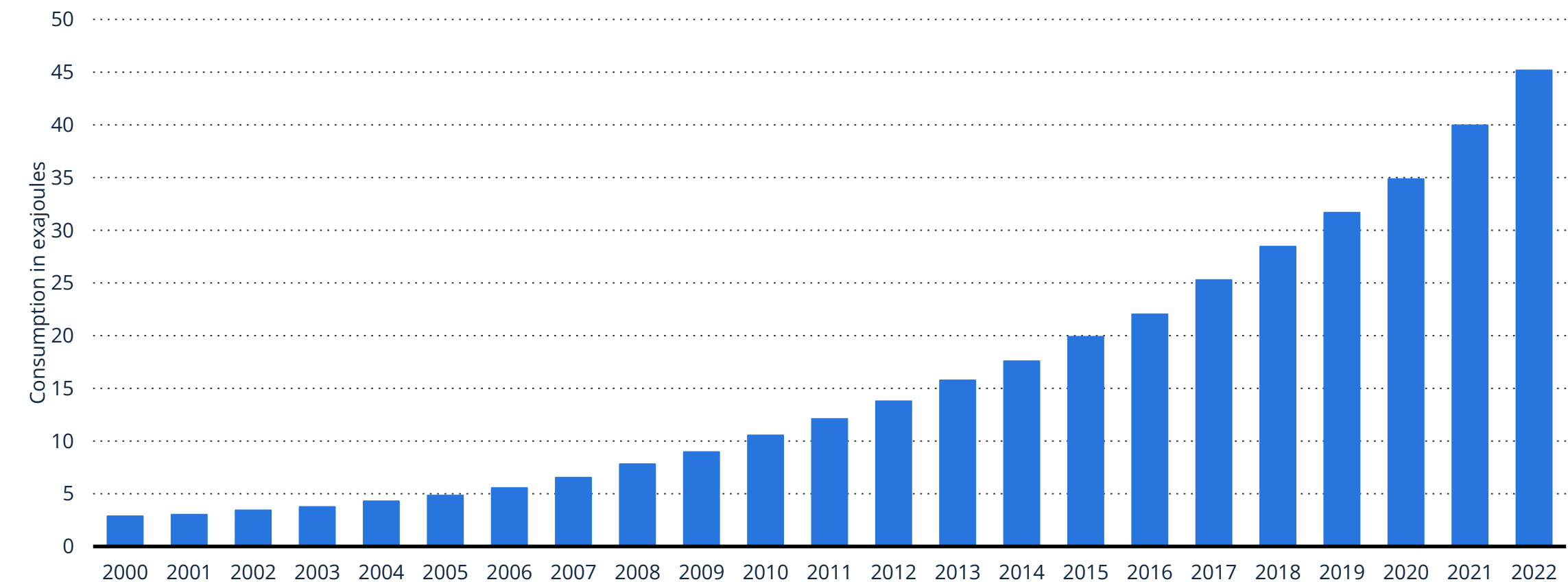
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CHAPTER 01

Overview

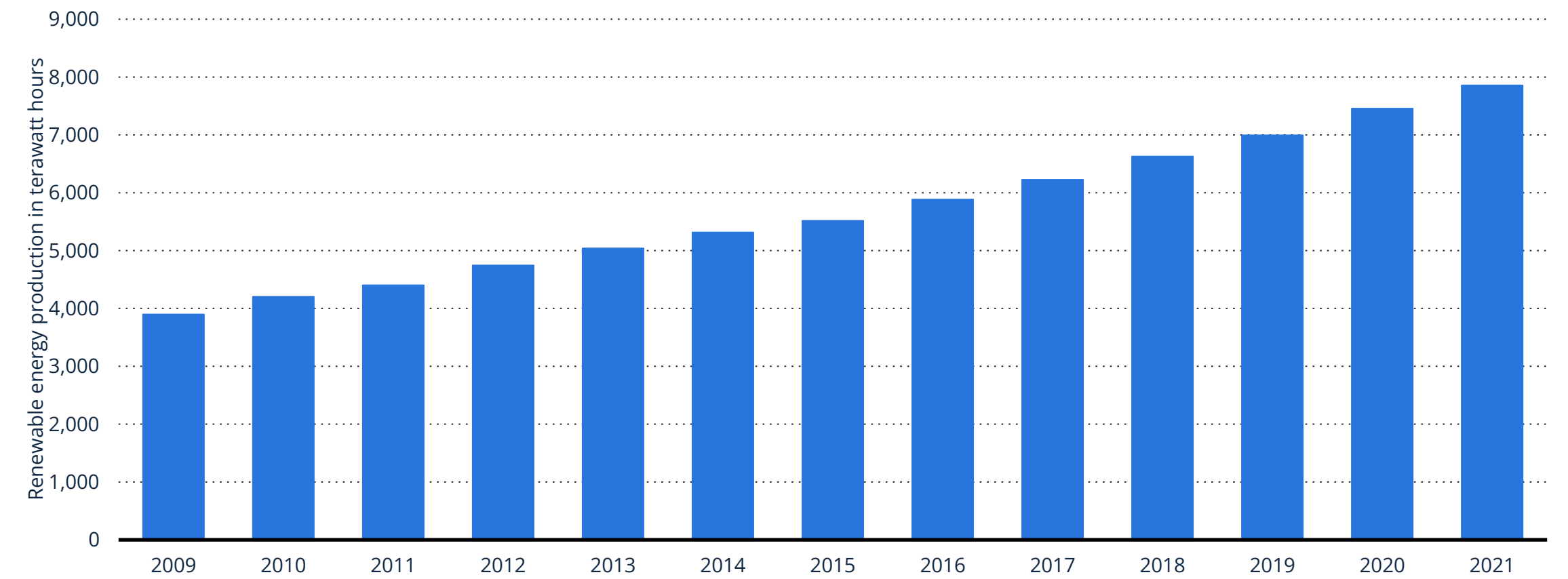
Renewable energy consumption worldwide from 2000 to 2022 (in exajoules)

Global renewable energy consumption 2000-2022



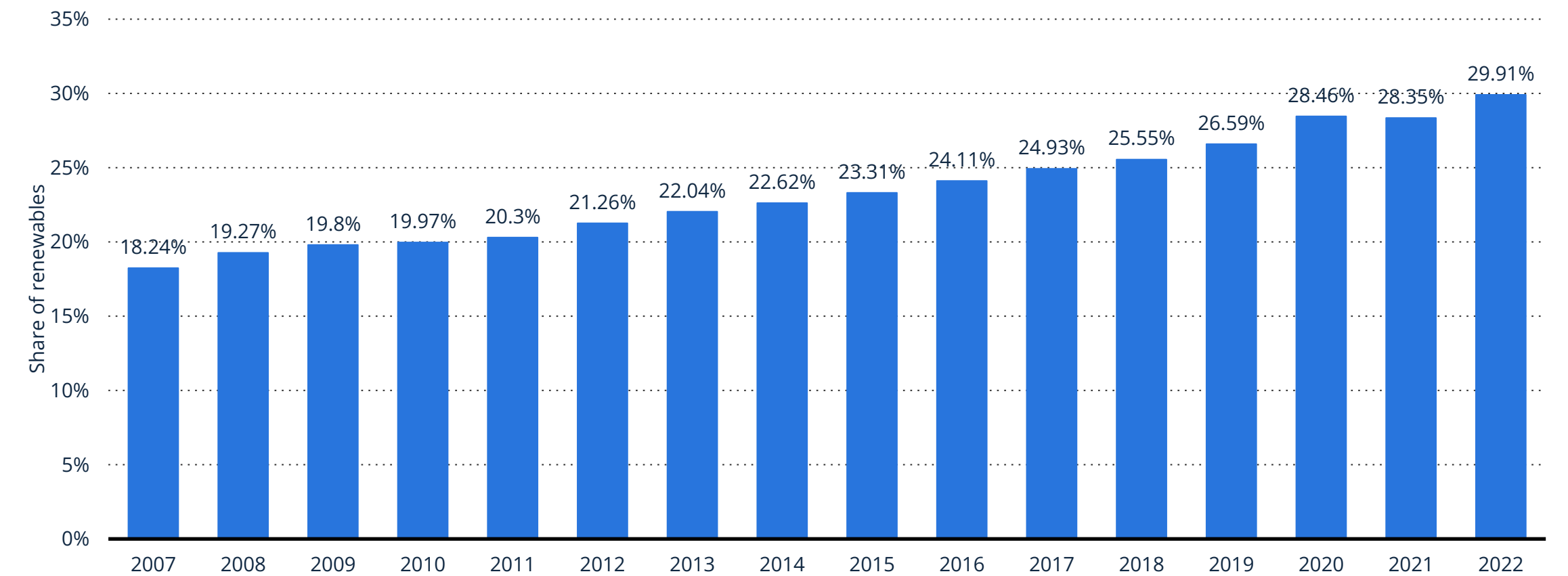
Production of renewable energy worldwide from 2009 to 2021 (in terawatt hours)

Global renewable energy generation 2009-2021



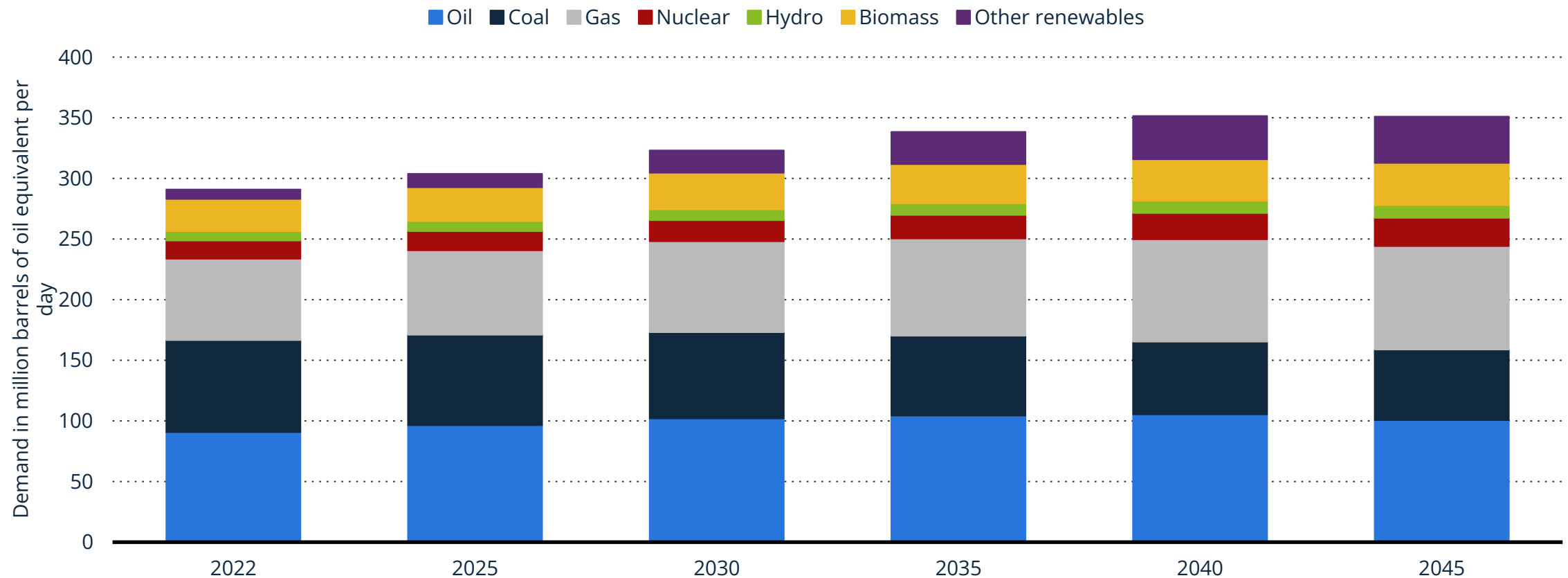
Share of renewable energy in electricity generation globally from 2007 to 2022

Share of renewables in global power production 2007-2022



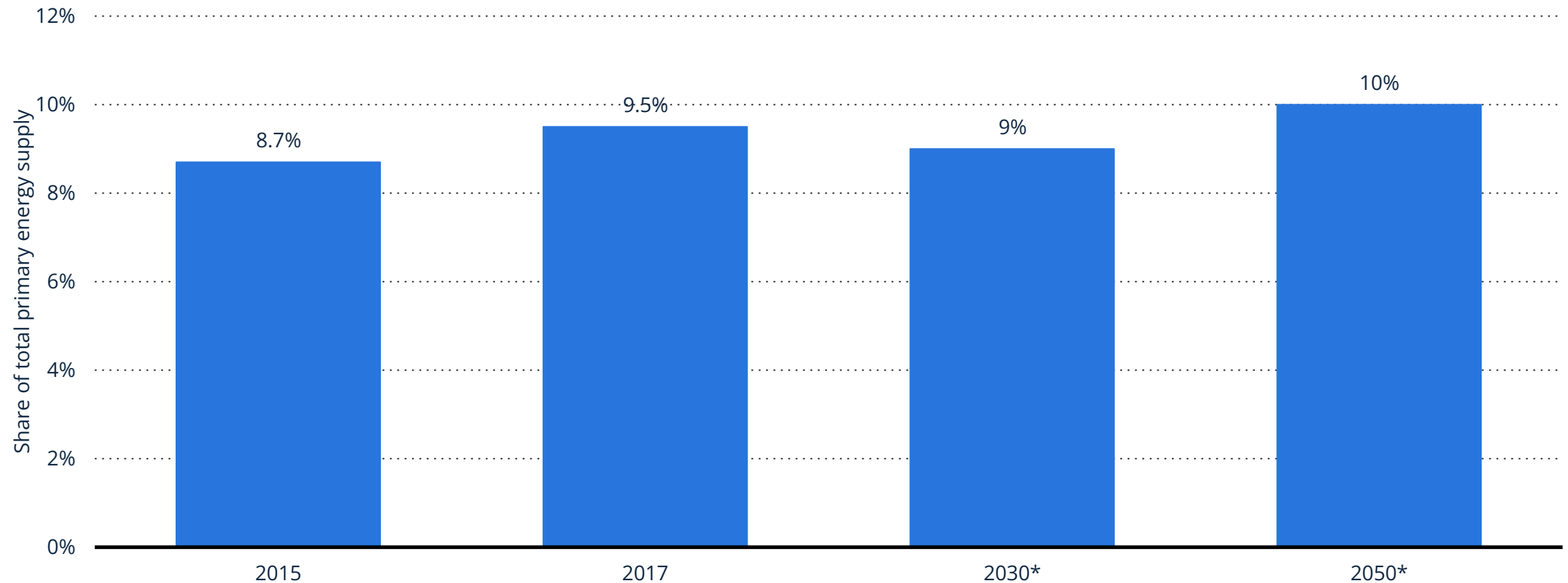
Primary energy demand worldwide in 2022, with a forecast until 2045, by fuel type (in million barrels of oil equivalent per day)

Global primary energy demand by fuel type 2022-2045



Share of bioenergy in total primary energy supply worldwide from 2015 to 2050*

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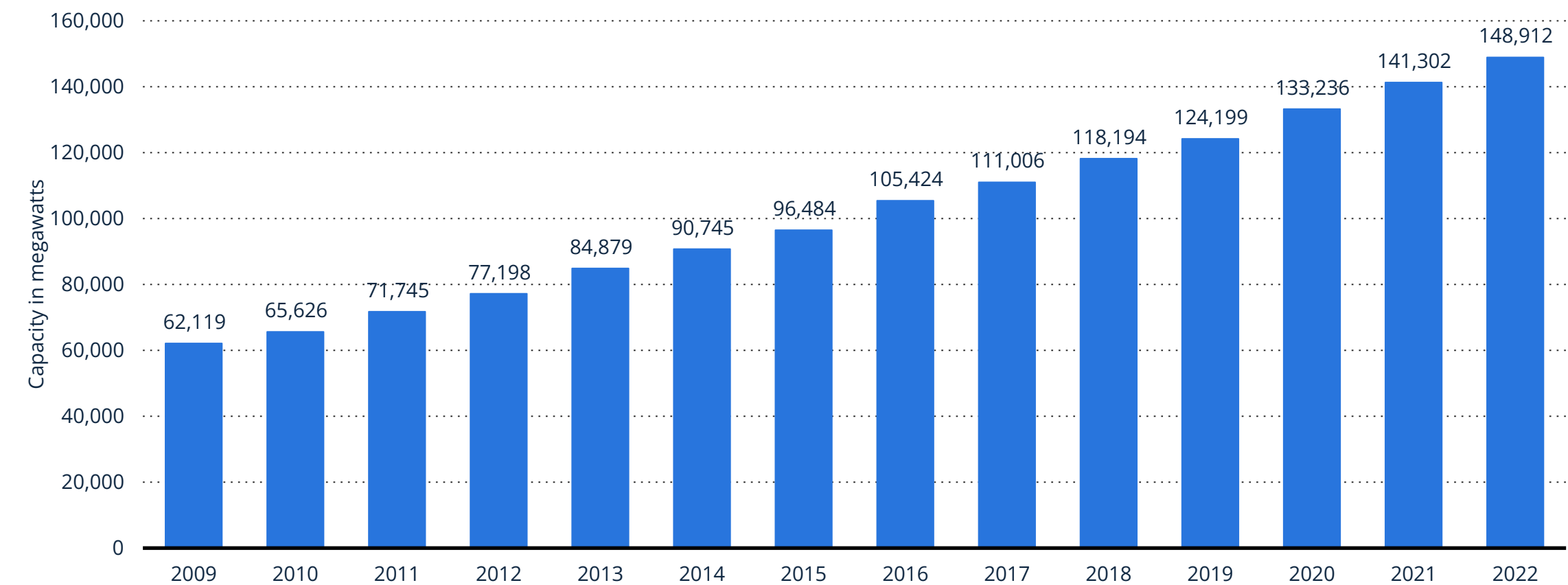


CHAPTER 02

Plants & capacities

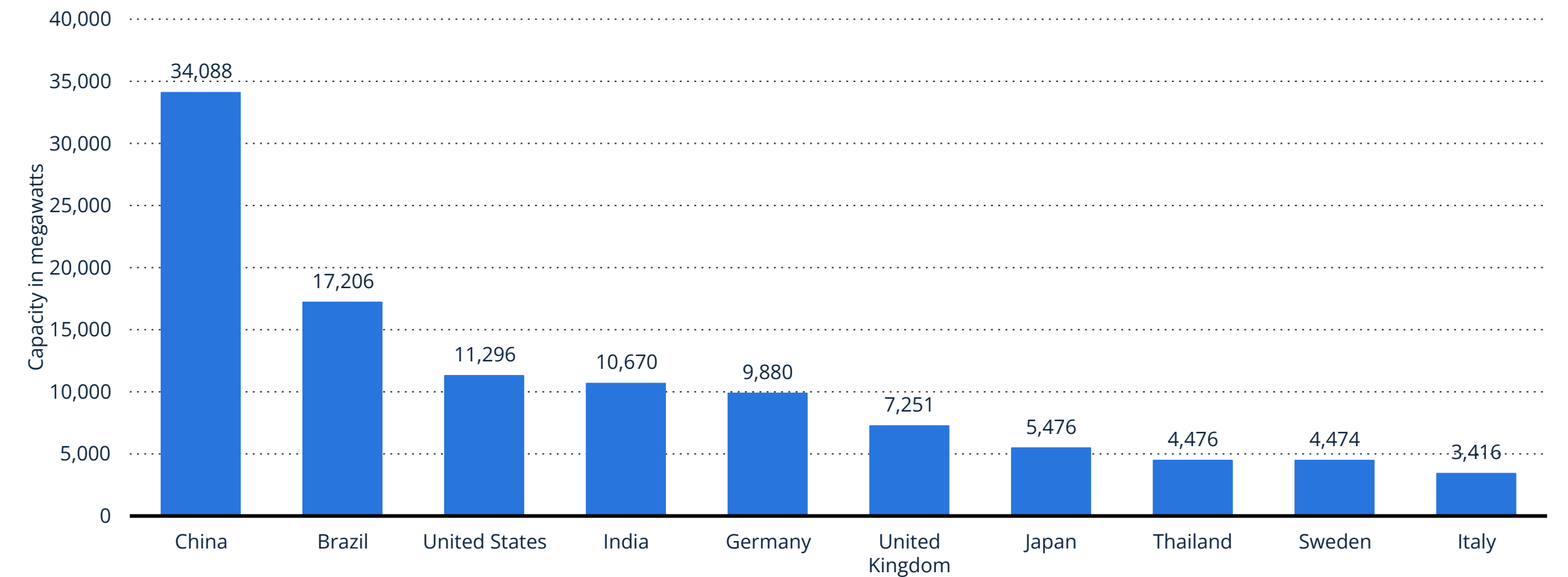
Bioenergy capacity worldwide from 2009 to 2022 (in megawatts)

Global capacity of bioenergy power 2009-2022



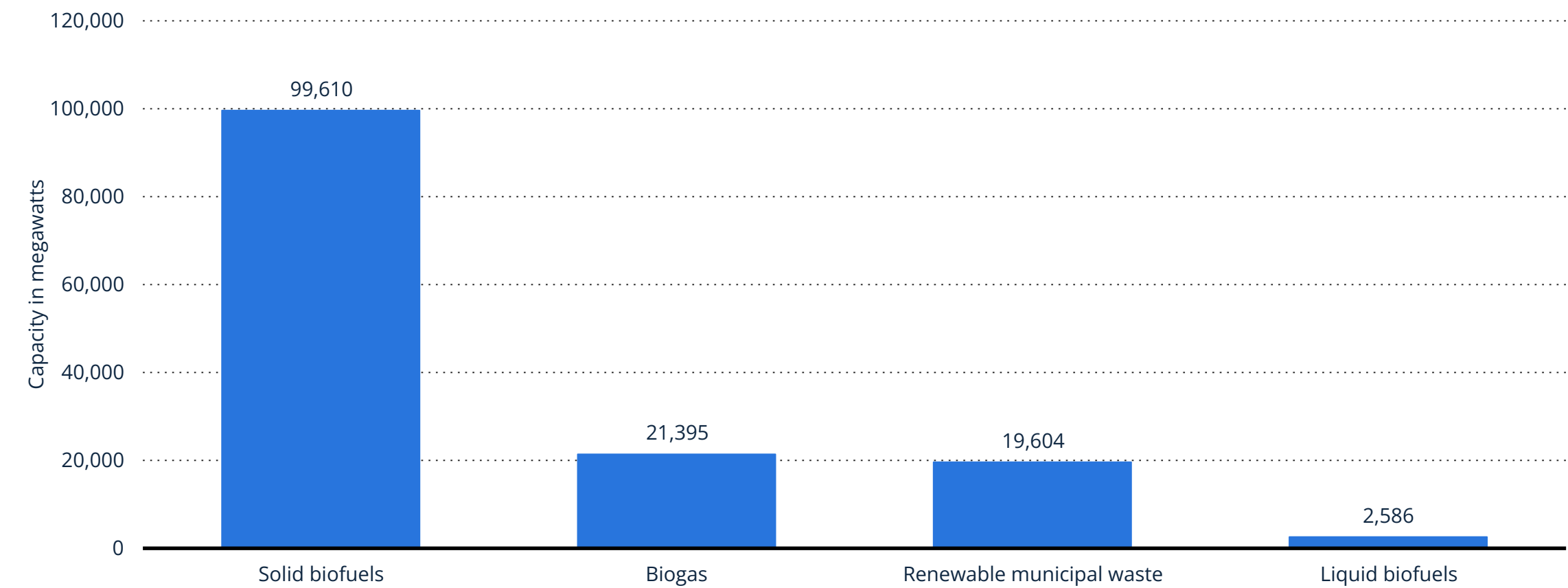
Leading countries in bioenergy capacity worldwide in 2022

Global bioenergy capacity 2022, by country



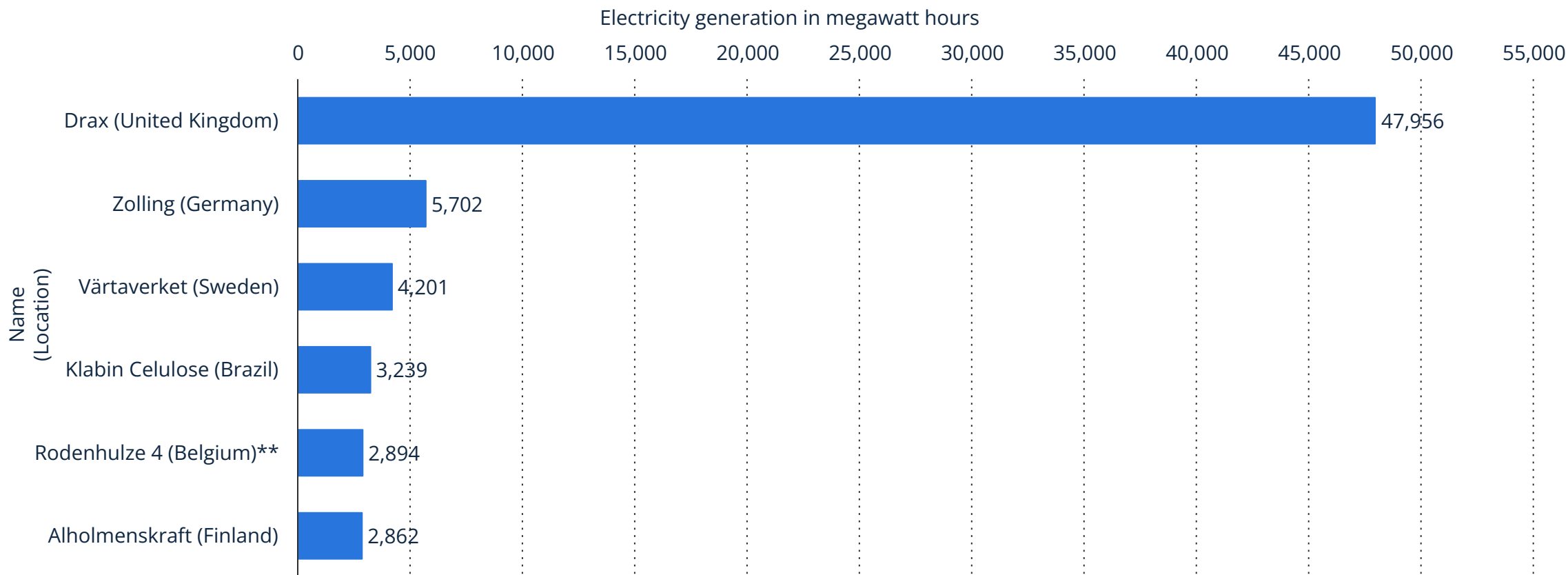
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Leading biomass power plants based on generation worldwide as of 2018 (in megawatt hours)*

Global energy generation of select biomass power plants 2018

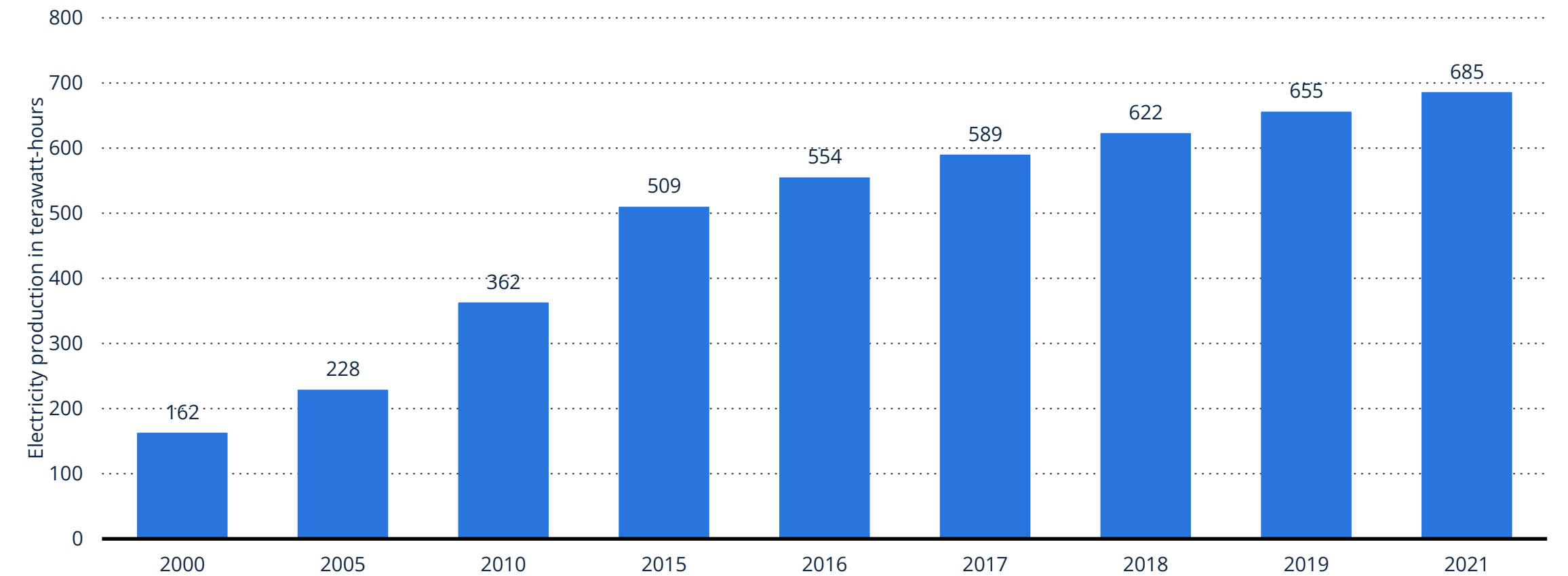


CHAPTER 03

Production

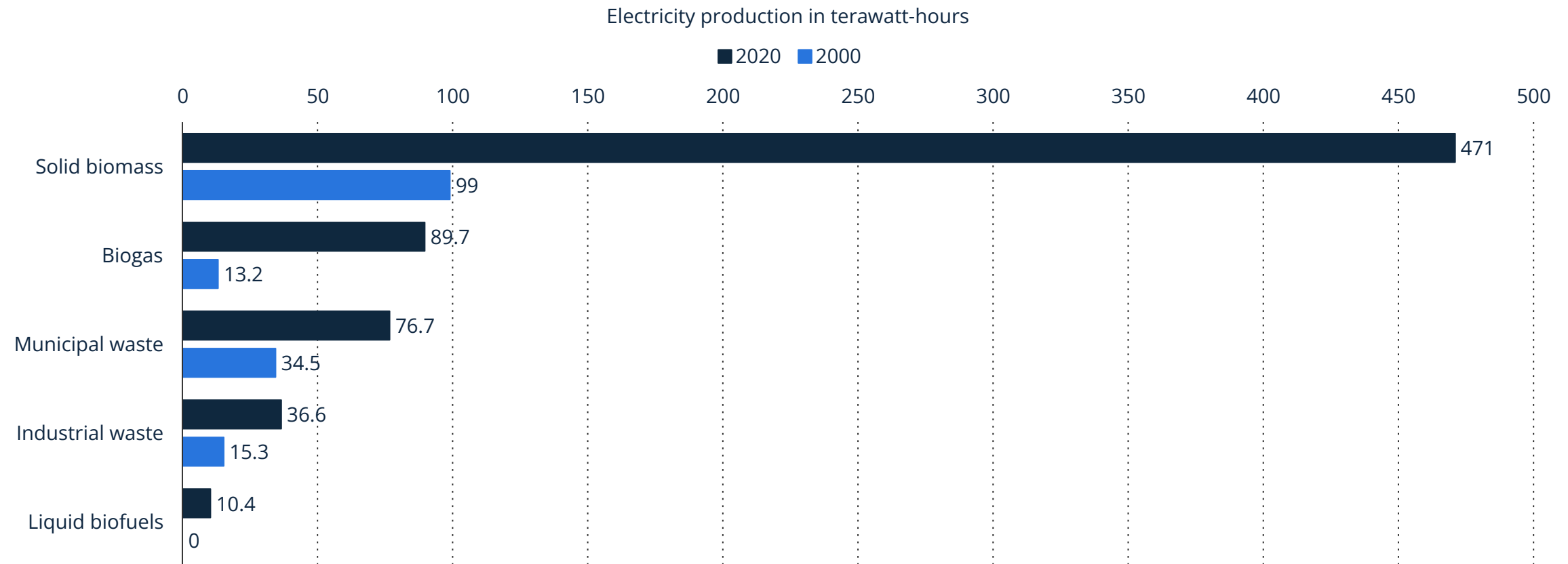
Biomass electricity generation worldwide from 2000 to 2020 (in terawatt-hours)

Global electricity production from biomass 2000-2020



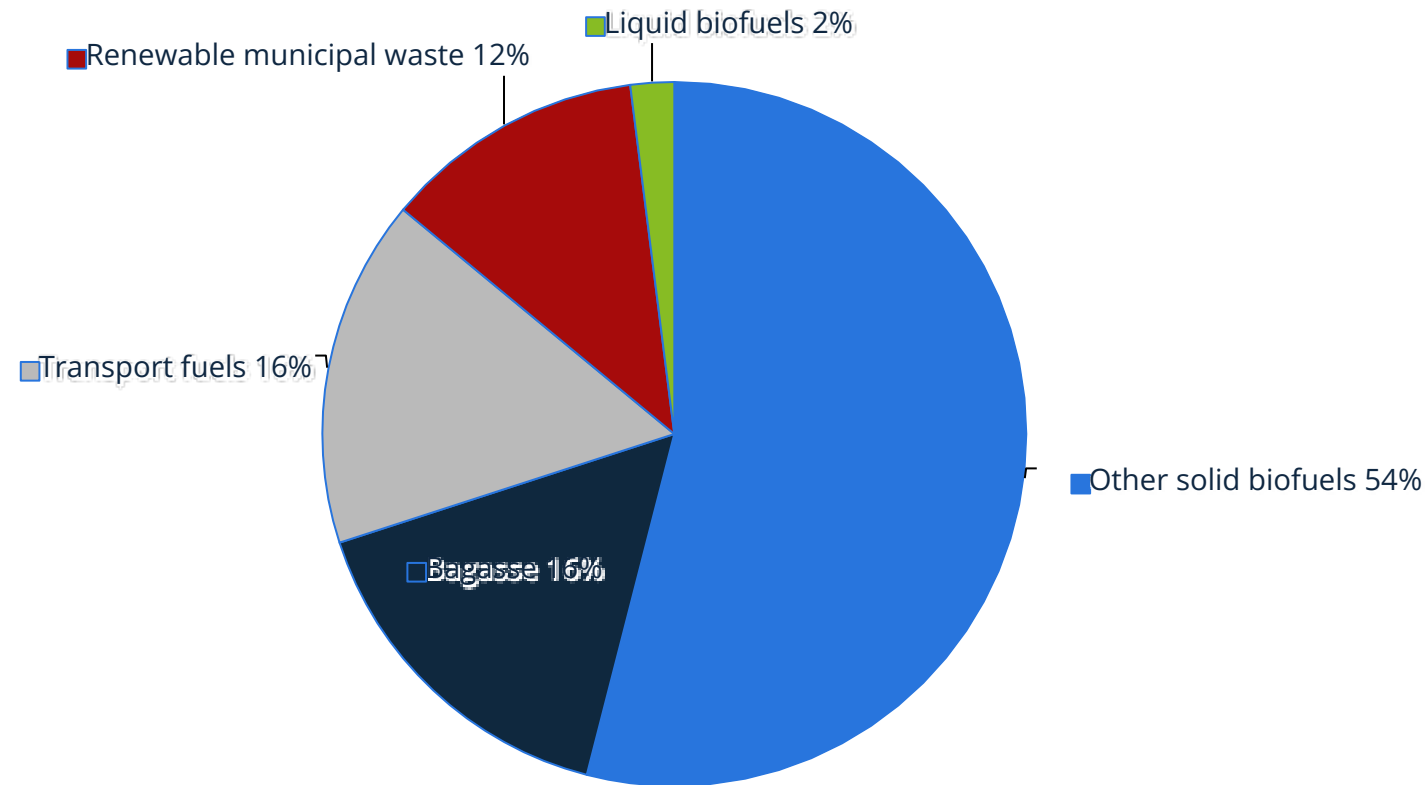
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Global electricity production from biomass 2000-2020, by fuel type



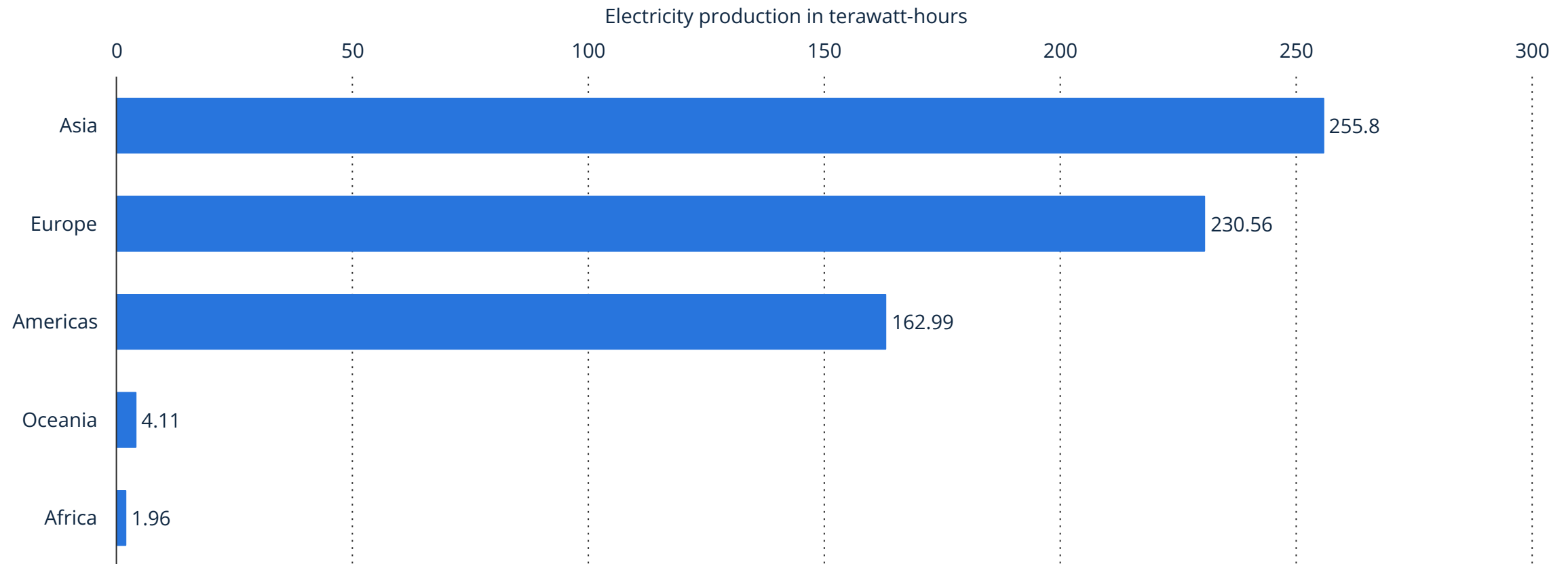
Distribution of bioelectricity generation worldwide in 2020, by biomass feedstock

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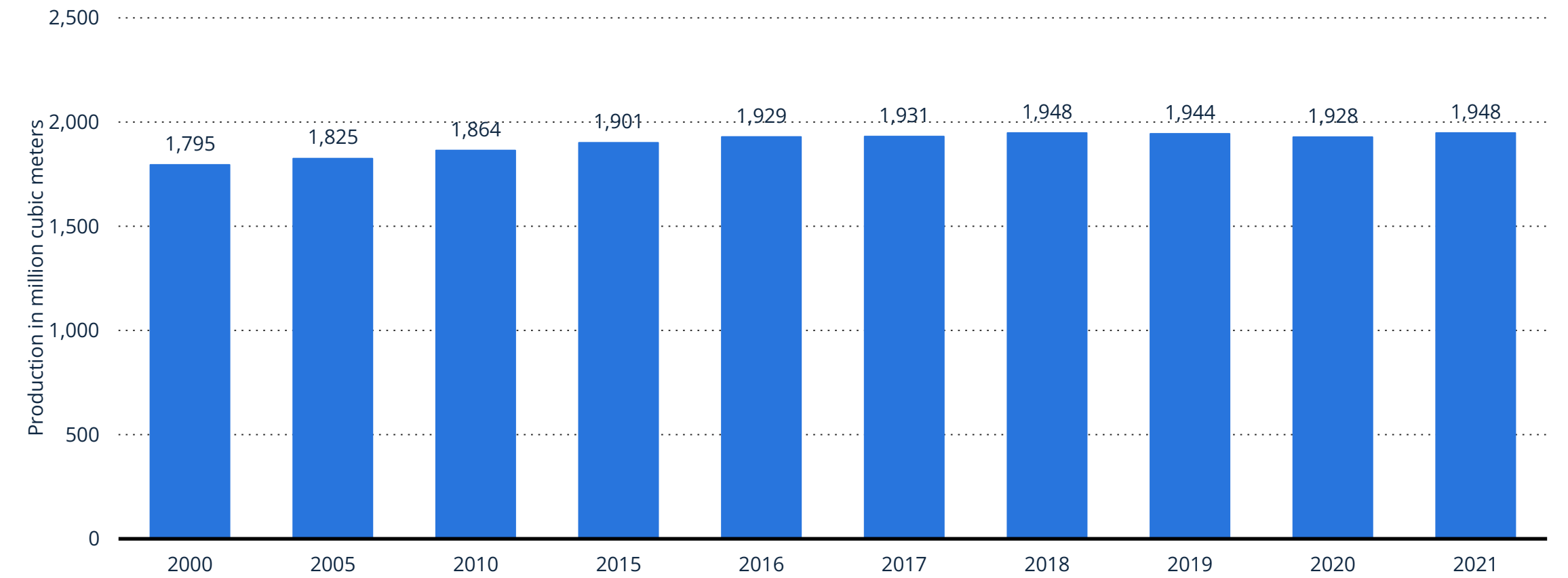
Electricity generation from biomass worldwide in 2019, by region (in terawatt-hours)

Global biomass power production 2019, by region



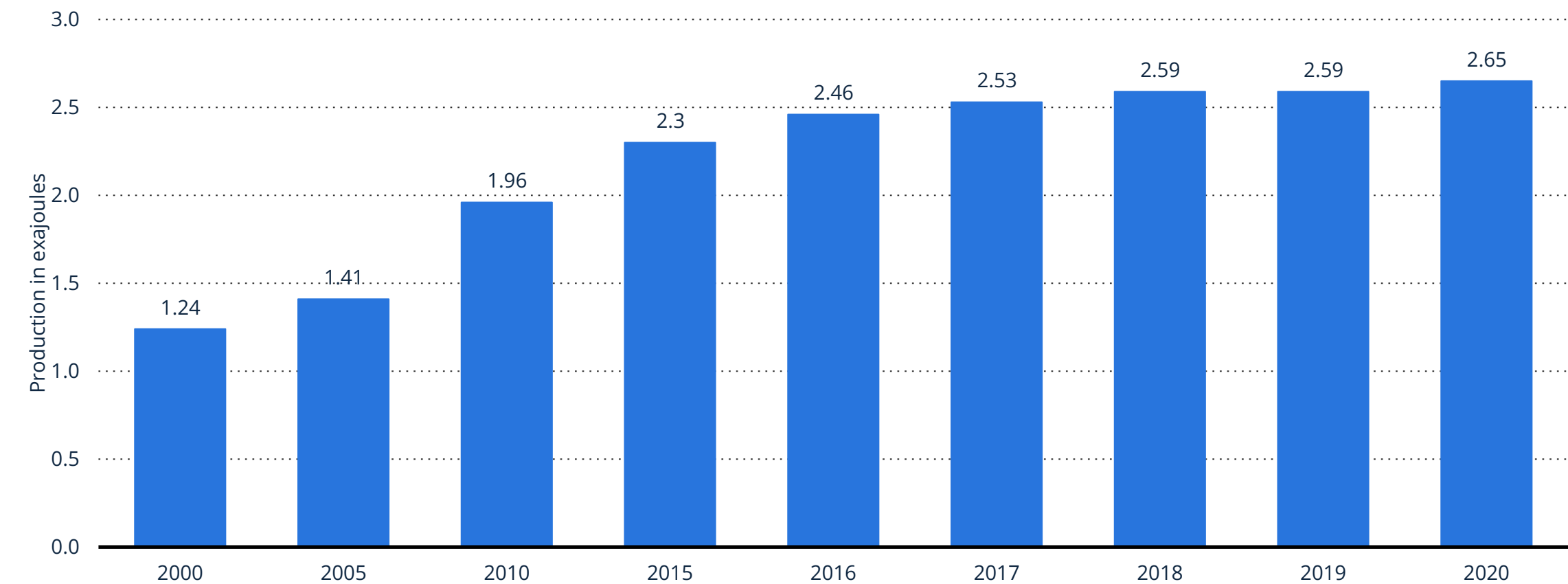
Production of wood fuel worldwide from 2000 to 2021 (in million cubic meters)

Global wood fuel production 2000-2021



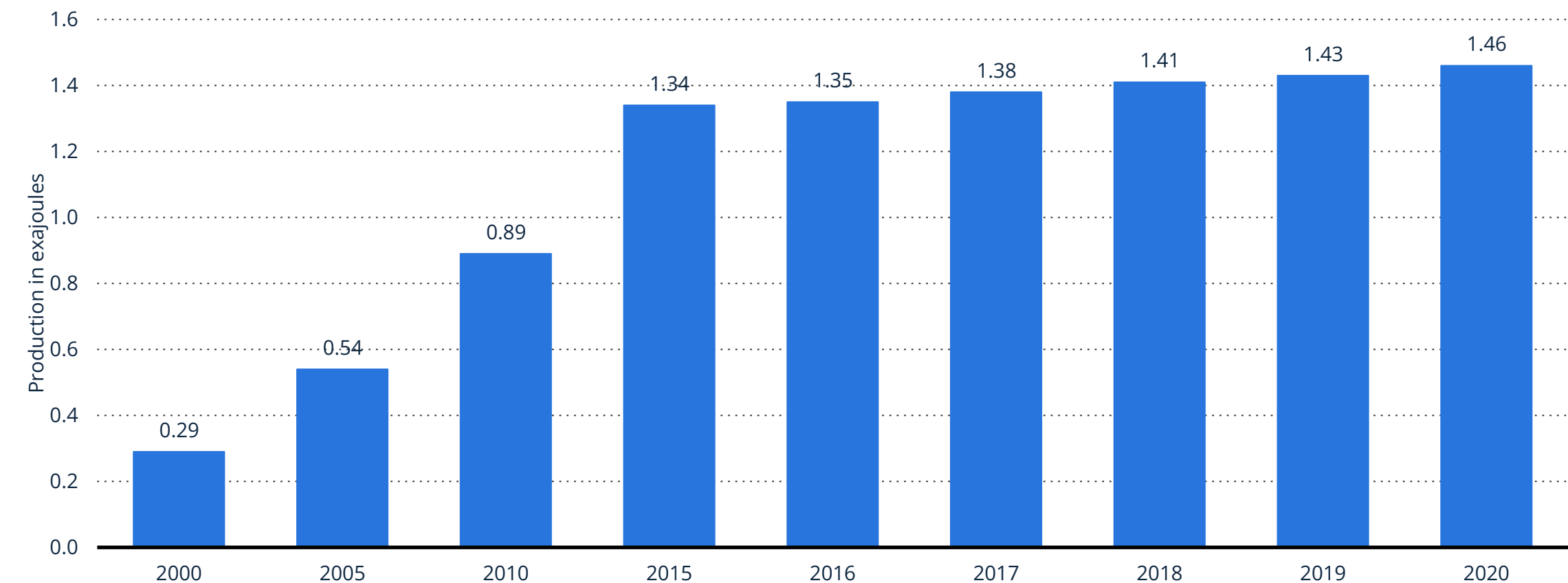
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Global biogas production 2000-2020

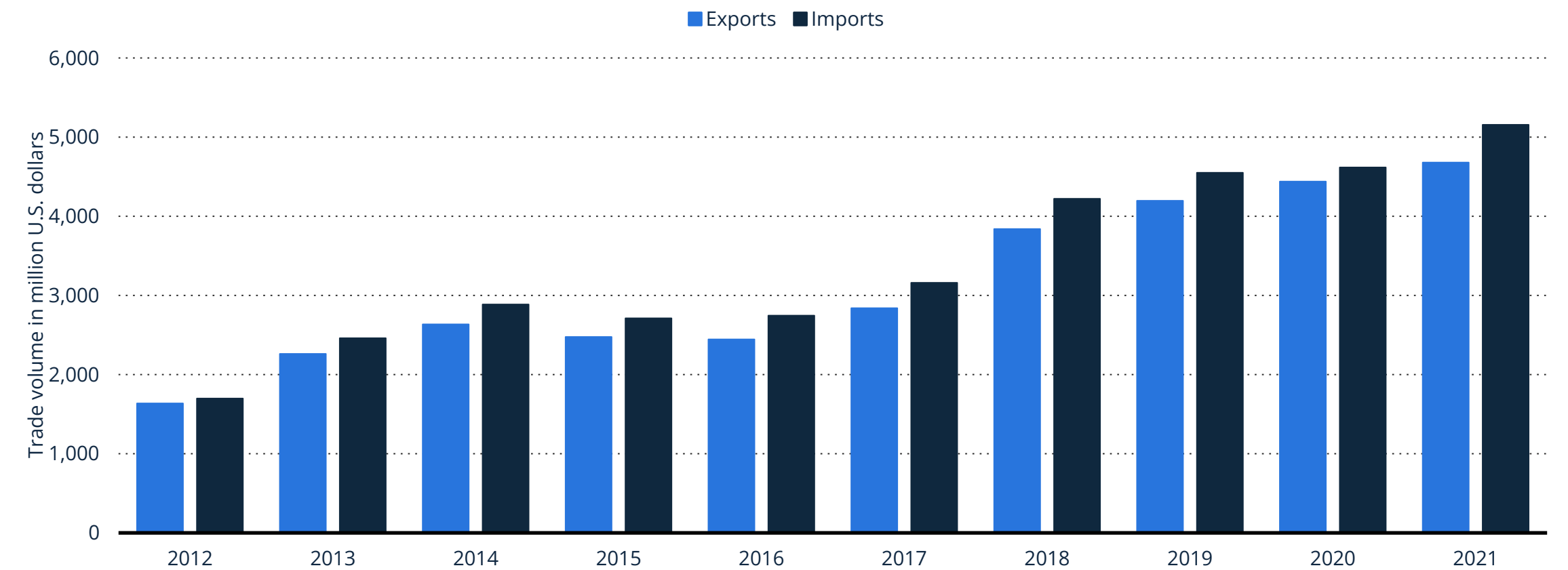


CHAPTER 04

Trade

Export and import value of wood pellets worldwide from 2012 to 2021 (in million U.S. dollars)

Global wood pellet trade value 2012-2021



Export and import volume of wood pellets worldwide from 2012 to 2020 (in million metric tons)*

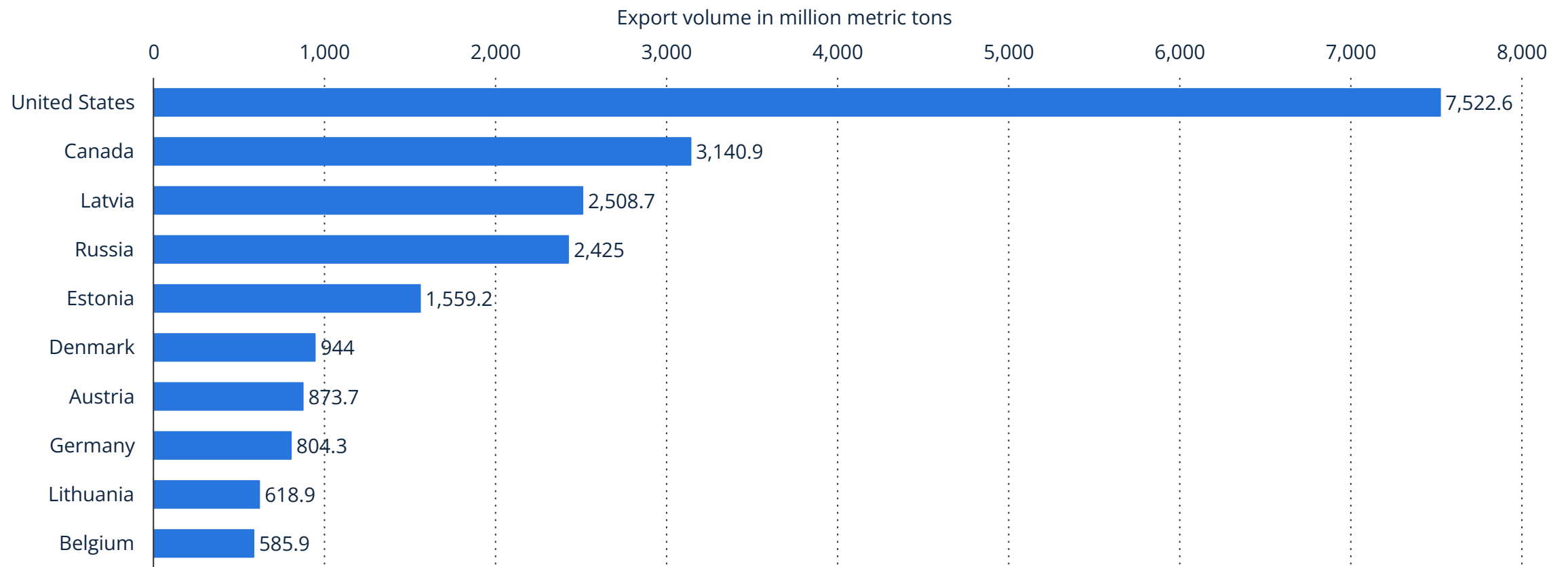
Global wood pellet trade volume 2012-2020



23 **Description:** Over 28 million metric tons of wood pellets were exported worldwide in 2020. This figure represents a peak in the period of consideration, and translated into roughly 4.4 billion U.S. dollars in export value. Wood pellets are made from compressed sawdust and have a greater combustion efficiency than wood logs, making them a highly desirable biofuel. [Read more](#)
Note(s): Worldwide; 2012 to 2020; * Discrepancy between export and import figures is a result of non reporting countries Release date set as access date. No other date given. Figures are reviewed on a constant basis. [Read more](#)
Source(s): International Trade Centre; Trade Map; UN Comtrade

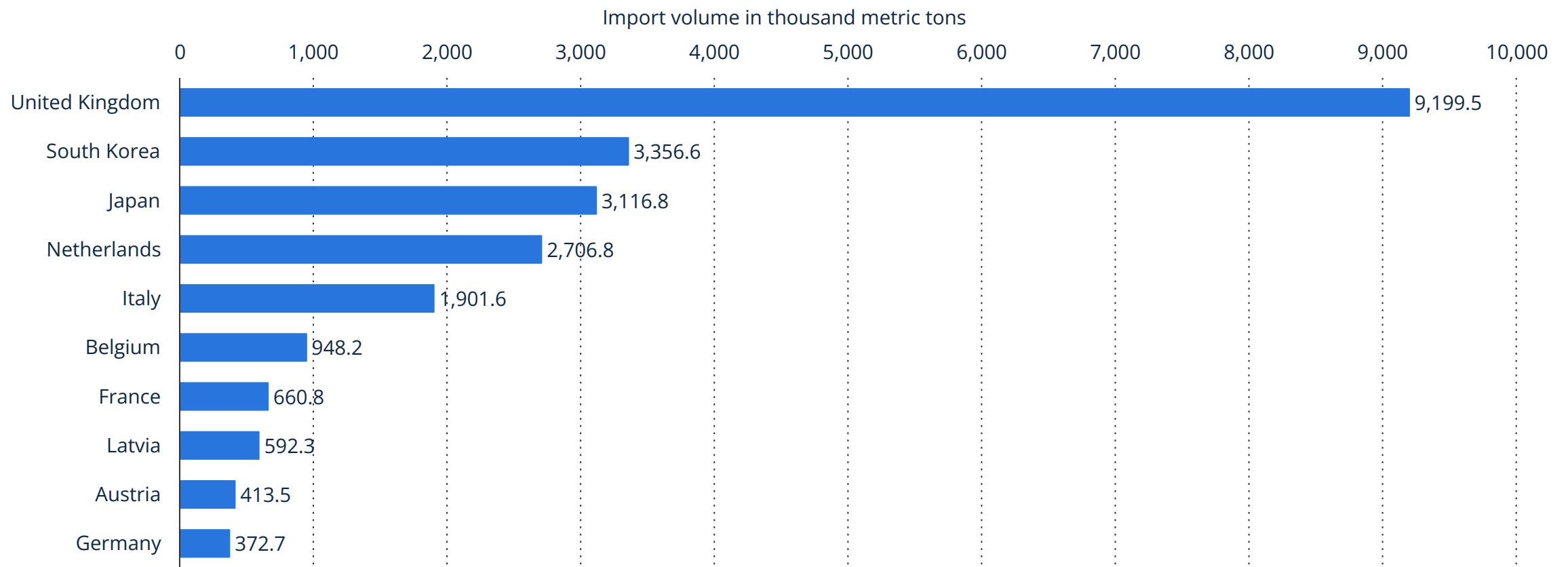
Export volume of wood pellets worldwide in 2021, by major country (in 1,000 metric tons)

Wood pellet exports by major country worldwide 2021



Import volume of wood pellets worldwide in 2021, by major country (in 1,000 metric tons)

Wood pellet imports volume by major country 2021

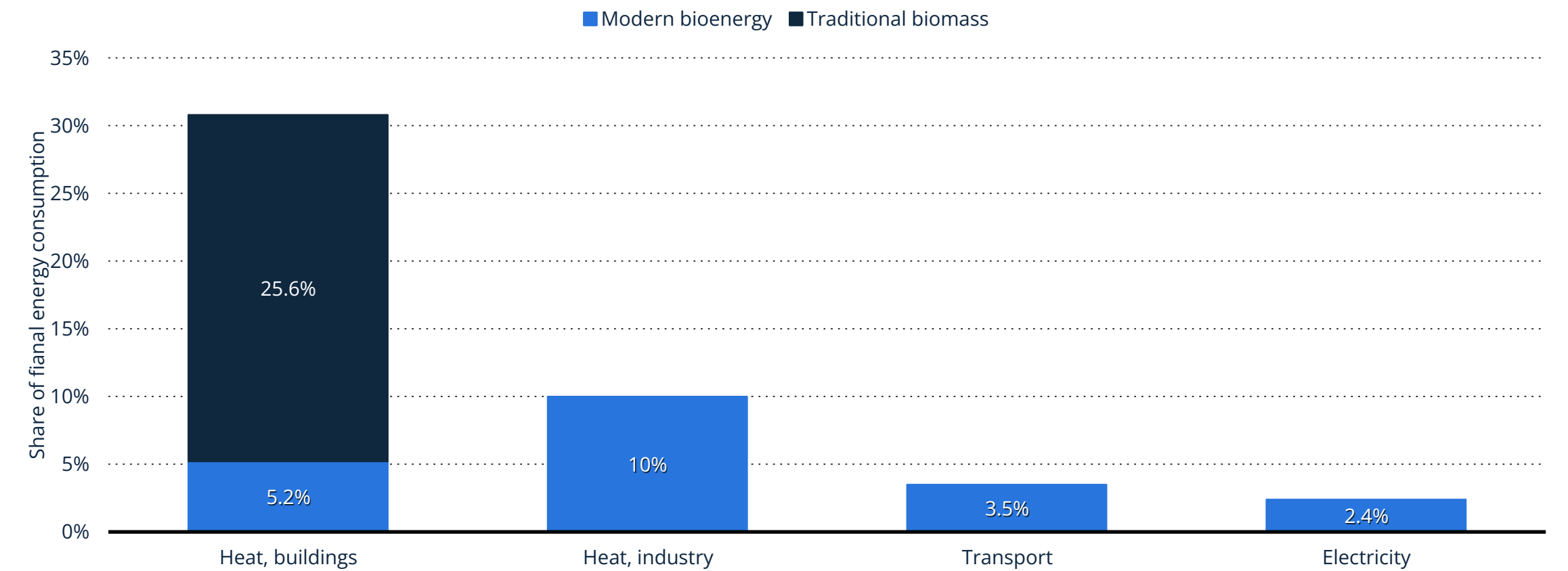


CHAPTER 05

Supply & consumption

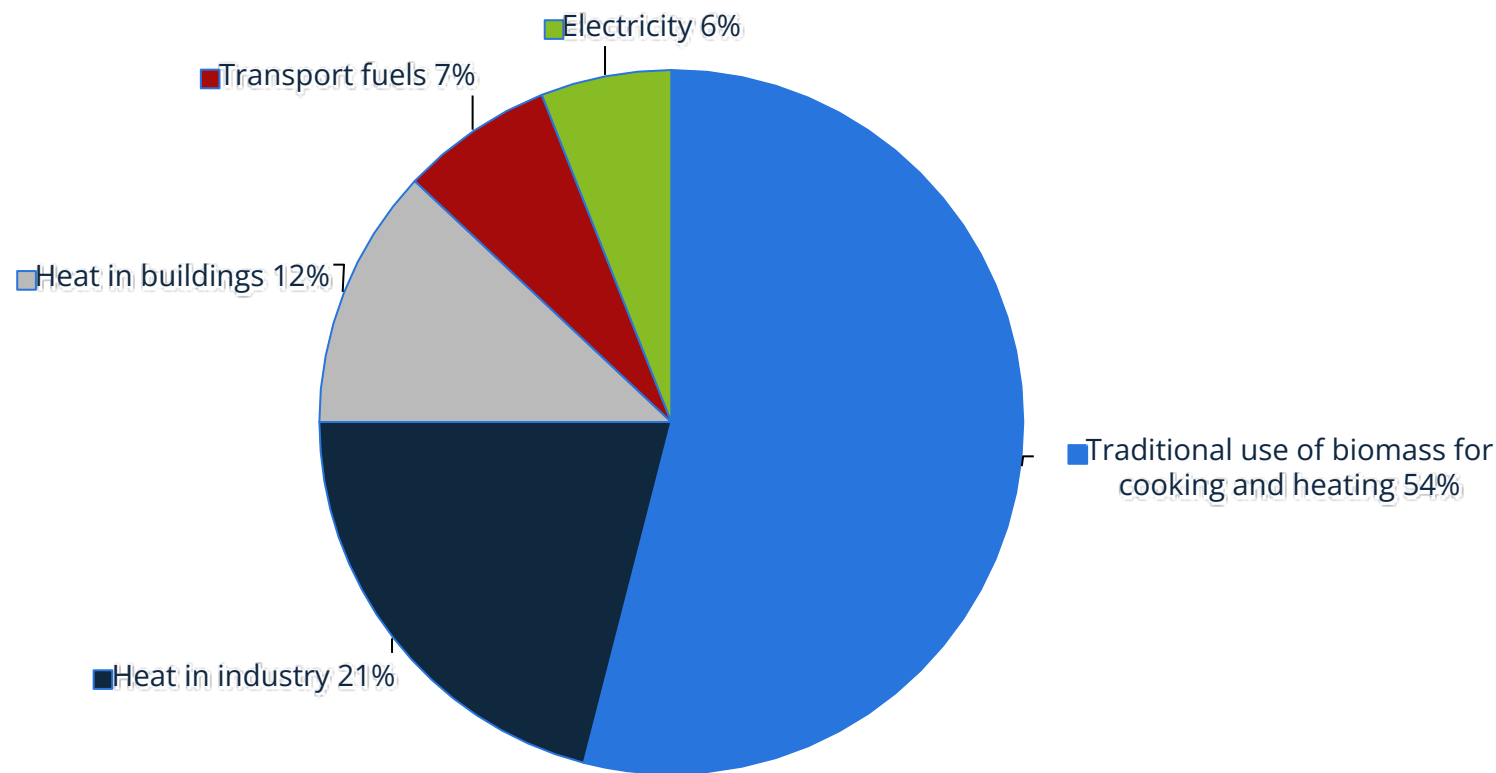
Shares of bioenergy in final energy consumption worldwide in 2020, by end use sector

Global bioenergy share in final energy consumption 2020, by end use



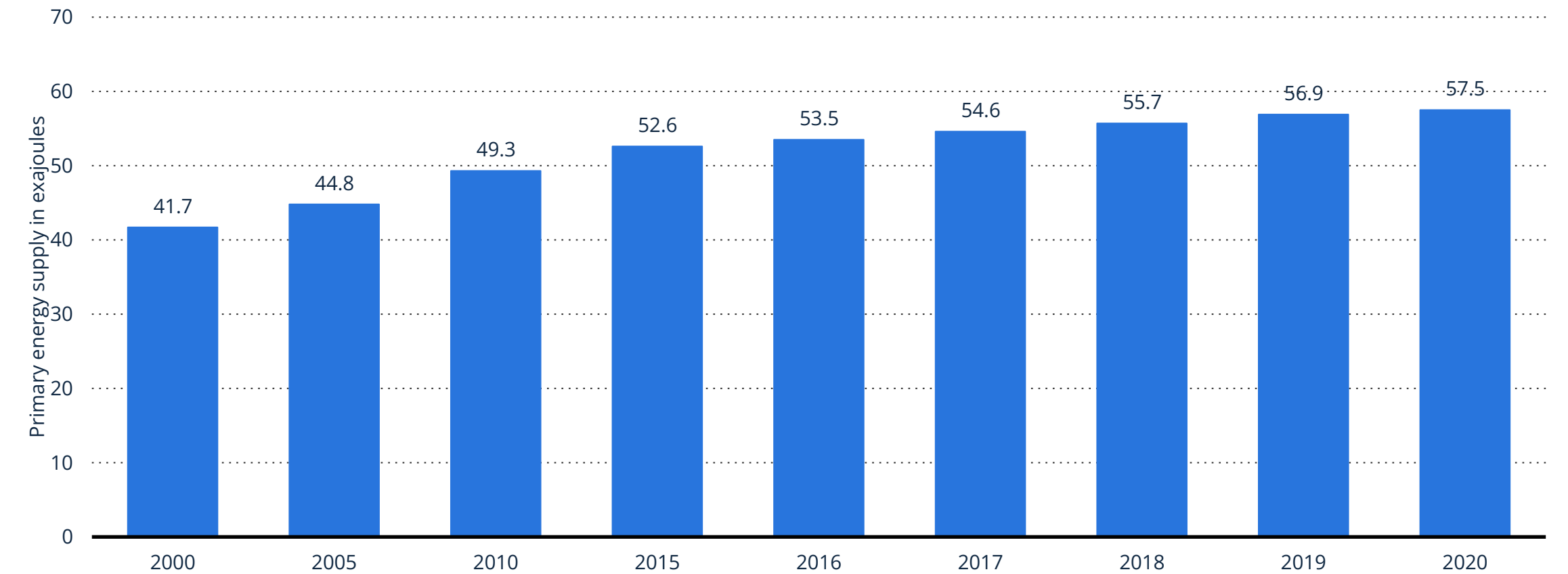
Distribution of bioenergy consumption worldwide in 2020, by end use

Global bioenergy consumption breakdown 2020, by end use



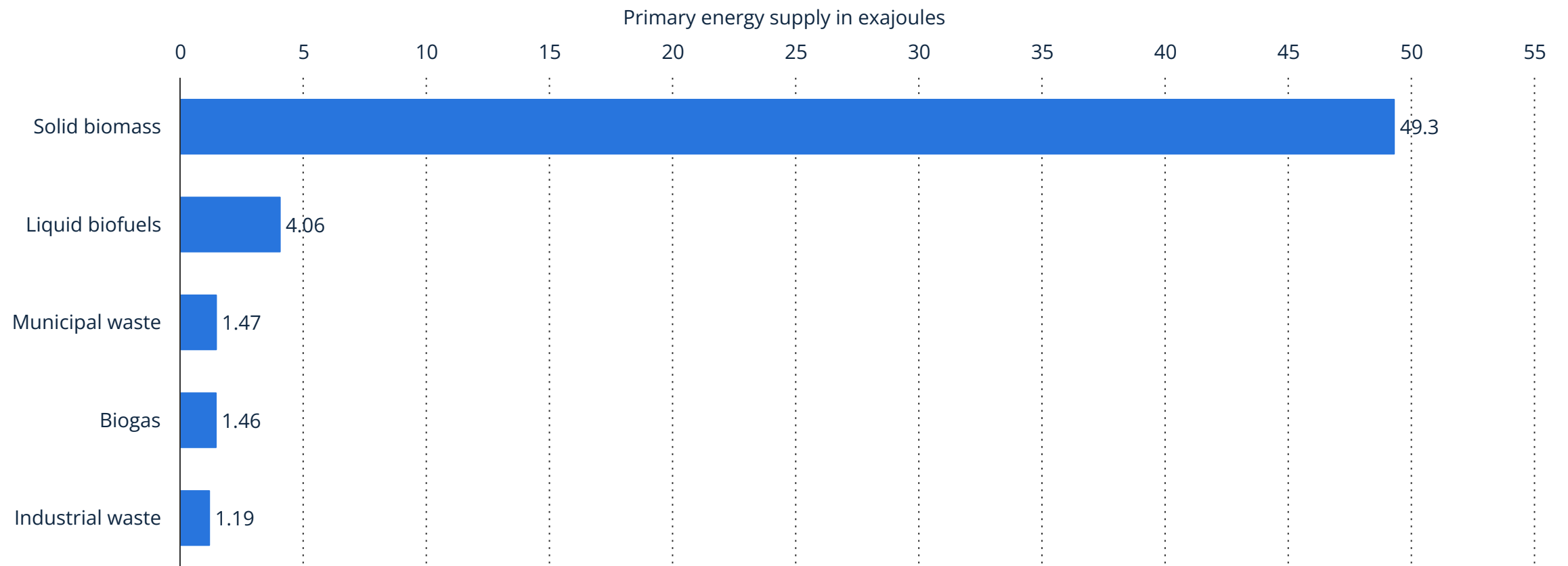
Domestic supply of primary energy from biomass worldwide from 2000 to 2020 (in exajoules)

Global biomass primary energy supply 2000-2020



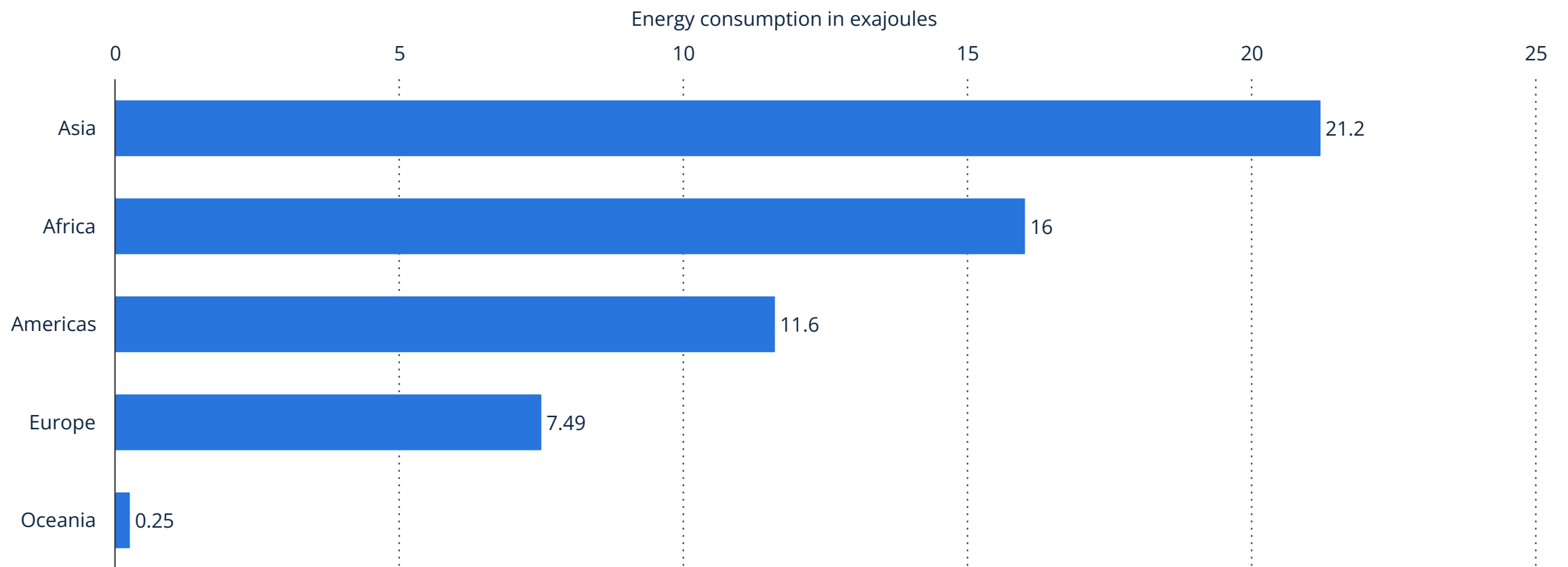
Domestic supply of primary energy from biomass worldwide in 2020, by fuel source (in exajoules)

Global biomass primary energy supply 2020, by fuel type



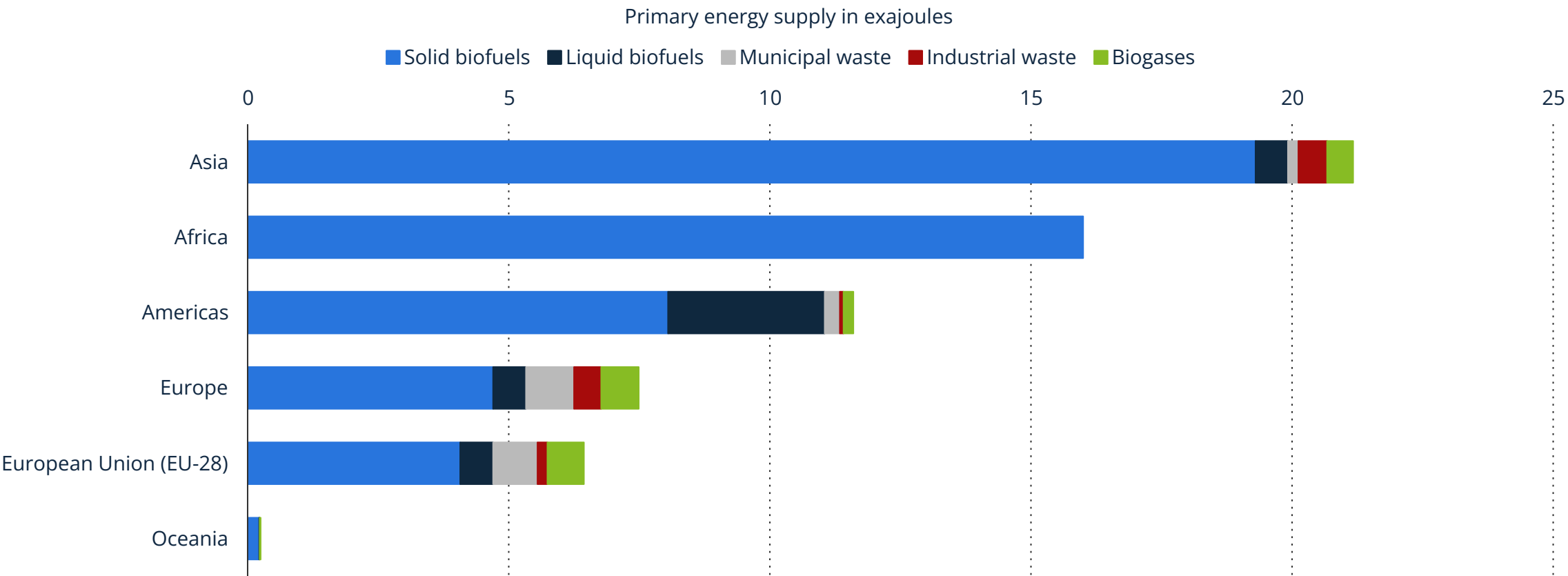
Domestic supply of biomass energy worldwide in 2019, by region (in exajoules)

Global domestic biomass energy consumption 2019, by region



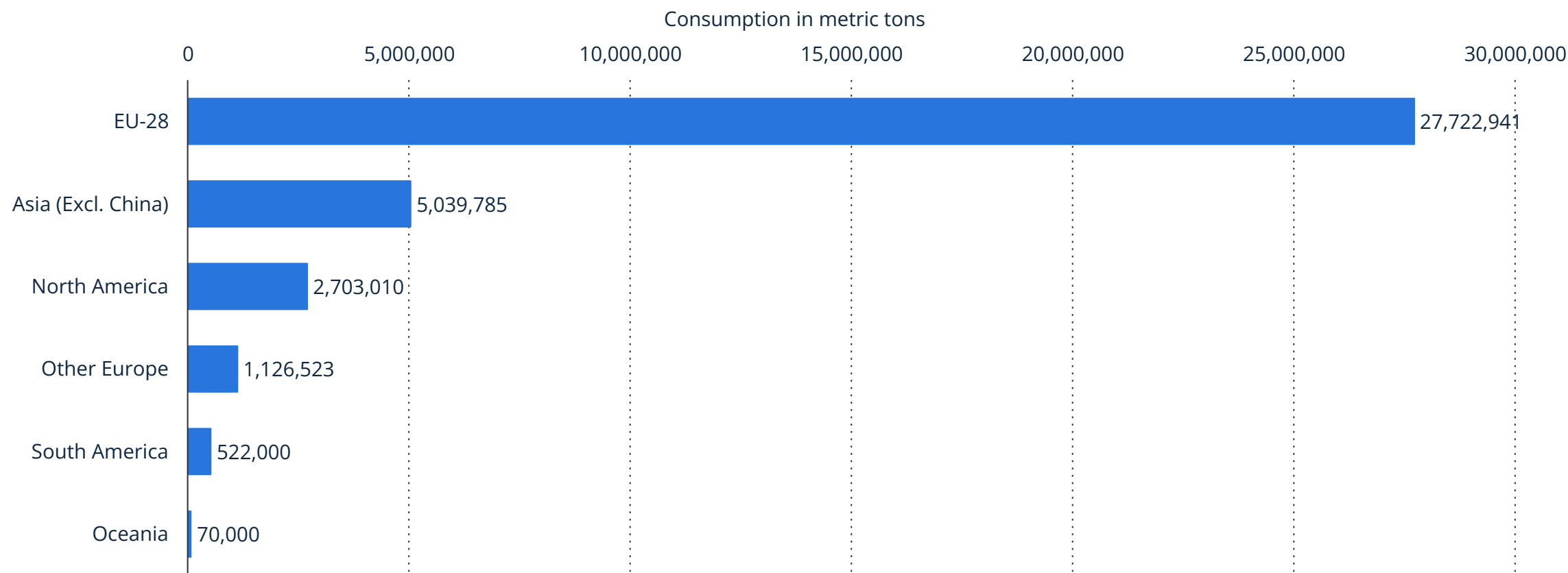
Sources of biomass supply of primary energy worldwide in 2019, by region (in exajoules)

Regional primary energy biomass supply 2019, by source



Consumption of wood pellets worldwide in 2019, by select region (in metric tons)

Global wood pellet consumption by major region 2019

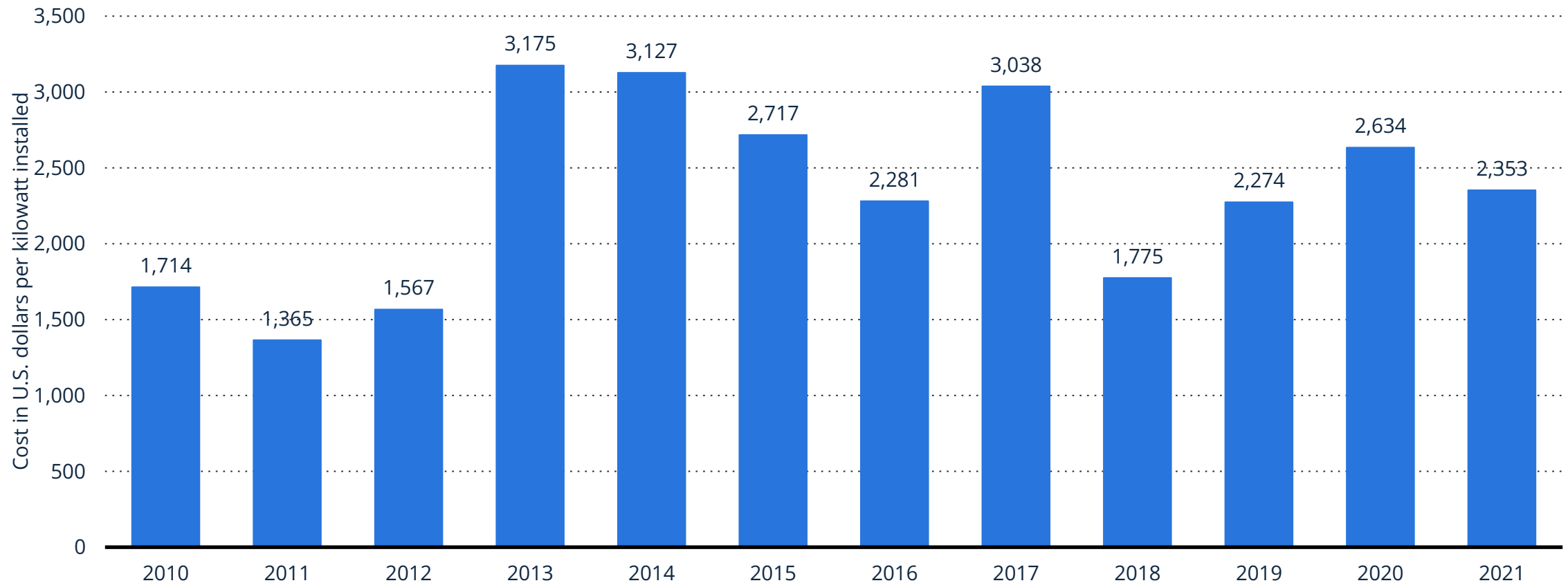


CHAPTER 06

Industry

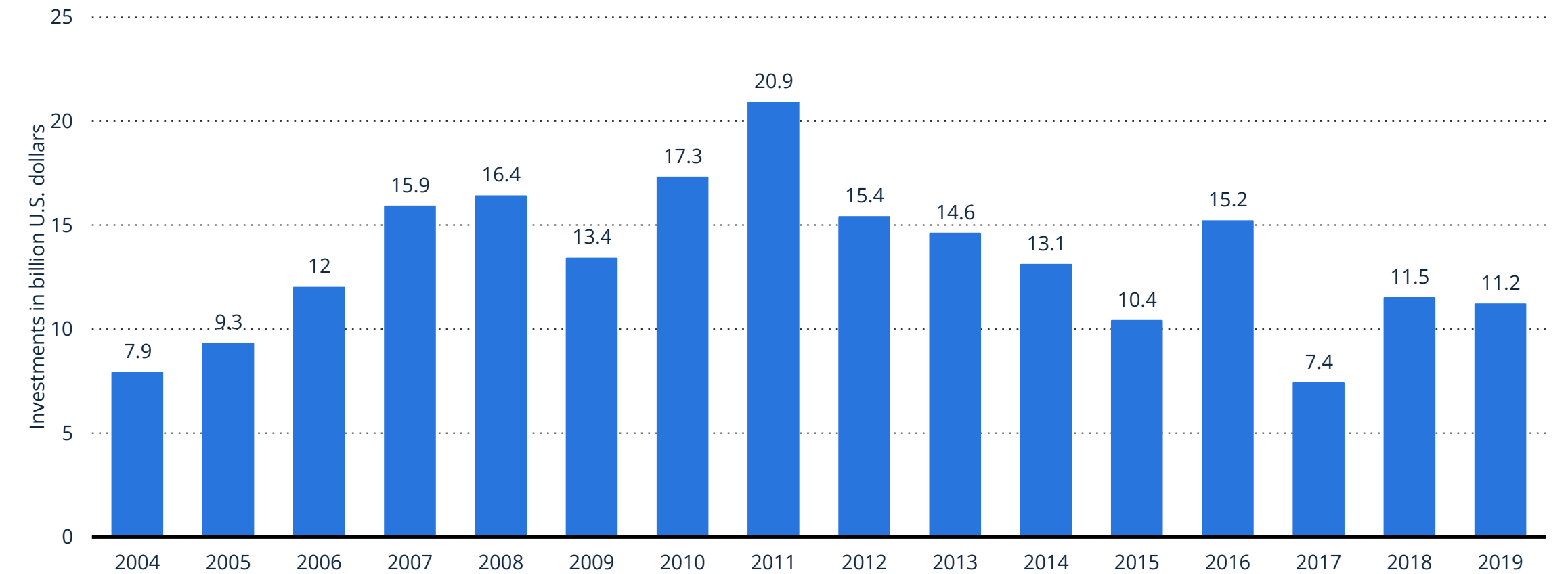
Average installation cost for bioenergy plants worldwide from 2010 to 2021 (in U.S. dollars per kilowatt)*

Global average bioenergy installed cost 2010-2021



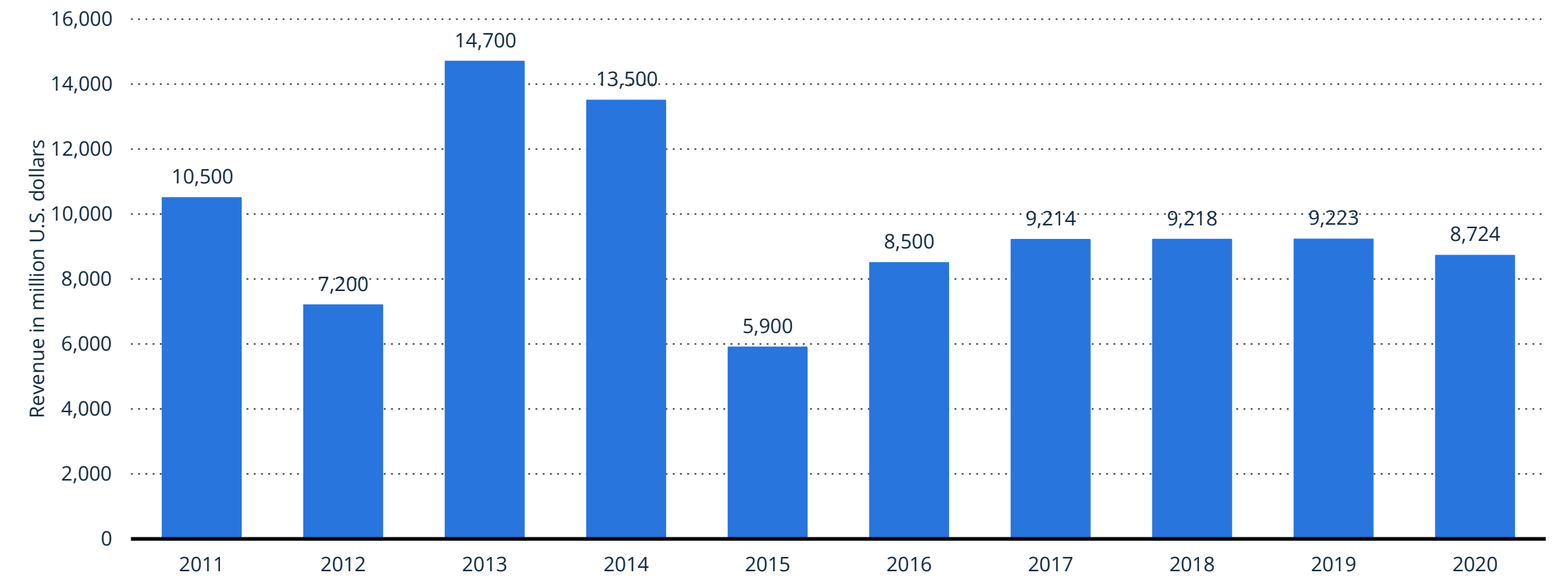
Investments in biomass and waste energy technologies worldwide from 2004 to 2019 (in billion U.S. dollars)

Global biomass and waste energy investments 2004-2019



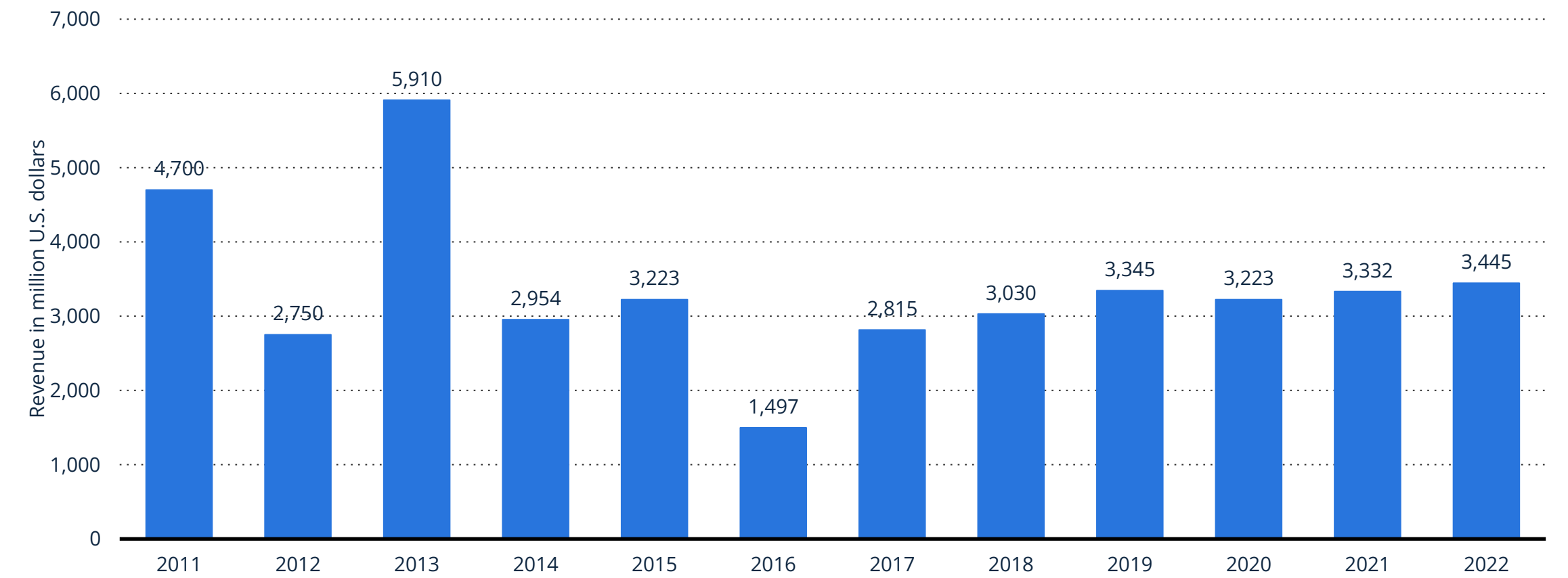
Global revenue from biomass electricity generation from 2011 to 2020 (in million U.S. dollars)

Biomass electricity generation revenues worldwide 2011-2020



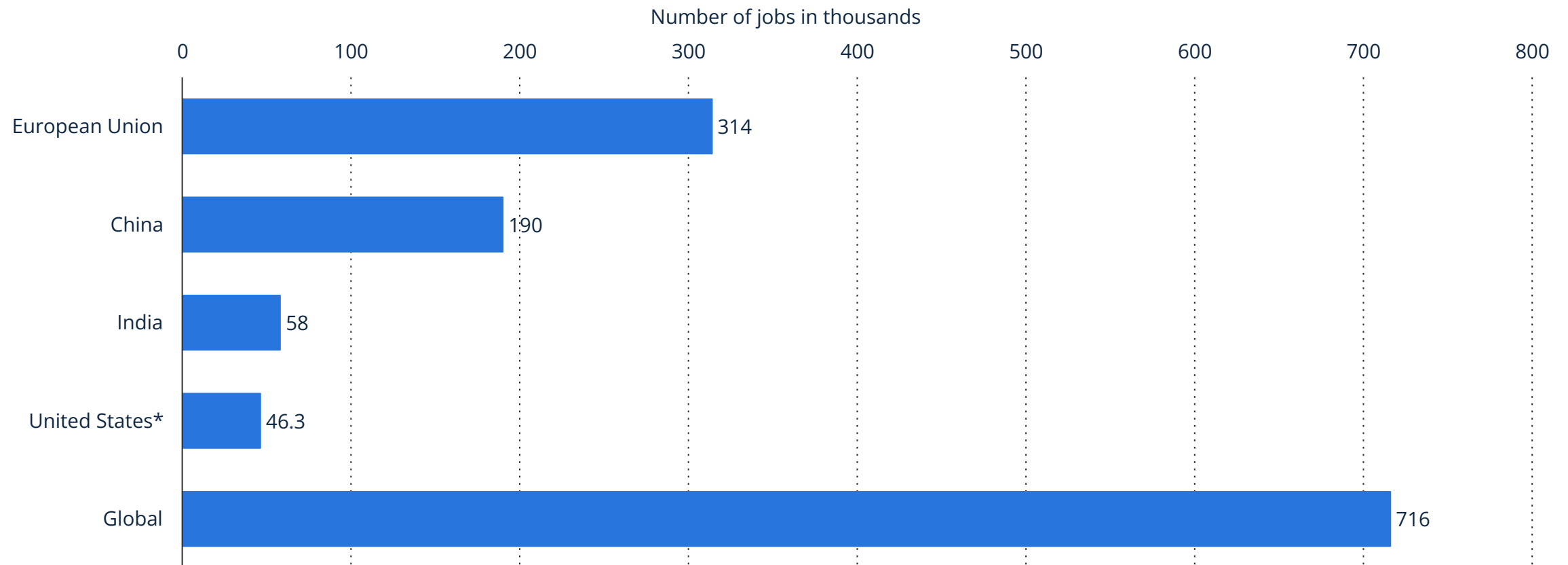
Revenue from waste electricity generation worldwide from 2011 to 2022 (in million U.S. dollars)

Global waste electricity generation revenue 2011-2022



Estimated number of direct and indirect solid biomass energy-related jobs worldwide in 2020/2021, by region (in 1,000s)

Biomass energy industry: jobs worldwide 2021, by region



Sources

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Ember
Energy Institute
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Guidehouse
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OWID

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