



IAEA

International Atomic Energy Agency

REFERENCE DATA SERIES

No. 1

Energy, Electricity and Nuclear Power Estimates for the Period up to 2060



2026 Edition

**ENERGY, ELECTRICITY AND
NUCLEAR POWER ESTIMATES
FOR THE PERIOD UP TO 2060**

REFERENCE DATA SERIES No. 1

**ENERGY, ELECTRICITY AND
NUCLEAR POWER ESTIMATES
FOR THE PERIOD UP TO 2060**

2026 Edition

INTERNATIONAL ATOMIC ENERGY AGENCY
VIENNA, 2026

ENERGY, ELECTRICITY AND
NUCLEAR POWER ESTIMATES
FOR THE PERIOD UP TO 2060

IAEA-RDS-1/46

ISBN 978-92-0-700055-6

ISSN 1011-2642

<https://doi.org/10.61092/iaea.kljp-x0sr>

Printed by the IAEA in Austria

September 2026

Cover photo credit:

JSC Atomstroyexport, Russian Federation, 2026

CONTENTS

INTRODUCTION	1
WORLD	6
Energy Overview 2025	7
Nuclear Power Development in 2025	9
Final Energy Consumption	14
Electricity Production	15
Energy and Electricity Projections	16
Nuclear Electrical Generating Capacity Projections	18
Reactor Retirements and Additions	20
Electricity and Nuclear Production Projections	22
NORTHERN AMERICA	26
Energy Overview 2025	27
Final Energy Consumption	28
Electricity Production	29
Energy and Electricity Projections	30
Nuclear Electrical Generating Capacity Projections	32
Reactor Retirements and Additions	34
Electricity and Nuclear Production Projections	36
LATIN AMERICA AND THE CARIBBEAN	38
Energy Overview 2025	39
Final Energy Consumption	40
Electricity Production	41
Energy and Electricity Projections	42
Nuclear Electrical Generating Capacity Projections	44
Reactor Retirements and Additions	46
Electricity and Nuclear Production Projections	48
NORTHERN, WESTERN AND SOUTHERN EUROPE	50
Energy Overview 2025	51
Final Energy Consumption	52
Electricity Production	53
Energy and Electricity Projections	54
Nuclear Electrical Generating Capacity Projections	56

Reactor Retirements and Additions	58
Electricity and Nuclear Production Projections	60
 EASTERN EUROPE	 62
Energy Overview 2025	63
Final Energy Consumption	64
Electricity Production	65
Energy and Electricity Projections	66
Nuclear Electrical Generating Capacity Projections	68
Reactor Retirements and Additions	70
Electricity and Nuclear Production Projections	72
 AFRICA	 74
Energy Overview 2025	75
Final Energy Consumption	76
Electricity Production	77
Energy and Electricity Projections	78
Per Capita Energy and Electricity	80
Nuclear Electrical Generating Capacity Projections	82
Electricity and Nuclear Production Projections	84
 WESTERN ASIA	 86
Energy Overview 2025	87
Final Energy Consumption	88
Electricity Production	89
Energy and Electricity Projections	90
Nuclear Electrical Generating Capacity Projections	92
Electricity and Nuclear Production Projections	94
 SOUTHERN ASIA	 96
Energy Overview 2025	97
Final Energy Consumption	98
Electricity Production	99
Energy and Electricity Projections	100
Nuclear Electrical Generating Capacity Projections	102
Reactor Retirements and Additions	104
Electricity and Nuclear Production Projections	106

CENTRAL AND EASTERN ASIA	108
Energy Overview 2025	109
Final Energy Consumption	110
Electricity Production	111
Energy and Electricity Projections	112
Nuclear Electrical Generating Capacity Projections	114
Reactor Retirements and Additions	116
Electricity and Nuclear Production Projections	118
SOUTH-EASTERN ASIA	120
Energy Overview 2025	121
Final Energy Consumption	122
Electricity Production	123
Energy and Electricity Projections	124
Nuclear Electrical Generating Capacity Projections	126
OCEANIA	128
Energy Overview 2025	129
Final Energy Consumption	130
Electricity Production	131
Energy and Electricity Projections	132
Nuclear Electrical Generating Capacity Projections	134
REFERENCES	137

Introduction

Reference Data Series No. 1 (RDS-1) is an annual publication — currently in its 46th edition — containing estimates of energy, electricity and nuclear power trends. Whereas projections in the editions from 2010 to 2025 were for the period up to 2050, starting with this edition, the projections cover the period to 2060. The estimates of RDS-1 consist of a low case projection and a high case projection.

By 2060, relative to a global nuclear operational capacity of 377 GW(e) at the end of 2025, the low case projects that capacity will nearly double to 696 GW(e), while the high case projects that it will more than triple to 1284 GW(e). The projections in this edition have been revised upward from those in the 45th edition (2025).

Small modular reactors (SMRs) account for a larger share of new installed capacity in the high case than in the low case. In the high case, of the 1017 GW(e) of new capacity added by 2060, SMRs account for 28%. In the low case, of the 521 GW(e) new capacity added, SMRs account for 23%.

SMR deployment varies significantly by region. In Northern America, SMRs are estimated to represent about 60% of new capacity in both cases. In Latin America and the Caribbean region, the share reaches about 40% in both cases. In Northern, Western and Southern Europe the share of SMRs in new capacity is estimated to be around 10% in the low case and 15% in the high case, while in Eastern Europe it is estimated to be around 5% in the low case and 15% in the high case. In Africa, SMRs represent 40% of the new capacity in the low case and around 30% in the high case. In Western Asia the share is estimated to be approximately 25% in both cases; in Southern Asia it is estimated to be 1% in the low case and 5% in the high case; in Central and Eastern Asia it is estimated to be around 10% in both cases; and in South-Eastern Asia it is estimated to represent around 40% in both cases. In Oceania, all projected capacity is in the high case and is estimated to consist entirely of SMRs.

The upward revision of the projections reflects growing recognition of the role that nuclear power can play in supporting energy security and long term economic growth. There has been renewed engagement with nuclear power by international financial institutions, such as the World Bank Group and the Asian Development Bank, signaling a broader shift that other international financial institutions

have begun to follow. Energy security and affordability concerns intensified following successive energy crises since 2022. Disruptions to oil and gas flows have major implications for both energy security and global energy markets [1]. In response, interest in diversified electricity generation has grown, including interest for nuclear power [1].

Within this context, SMRs continue to attract interest from both embarking and expanding countries. Progress is being made with SMR demonstration projects in operation, under construction or planned, demonstrating growing consensus that nuclear technology is a viable solution to global energy needs.

Currently, 67% of the nuclear power capacity has been in operation for 30 years or more, and 46% for 40 years or more. This highlights the need for significant new nuclear capacity to offset retirements in the long term. A lifetime extension for an existing reactor, if it is viable, is one of the most cost-effective baseload low emission electricity sources and is of particular importance for regions with ageing nuclear fleets. Initiatives supporting lifetime extensions are under way in several regions and countries with large nuclear fleets. An increasing number of ageing management programmes have been implemented for long term operation. New policy measures are also being implemented to support the competitiveness of existing reactors in deregulated electricity markets.

Worldwide, coal was, in 2025, the primary energy source for electricity production, accounting for about one third of the electricity produced. While coal's share in electricity production has changed little since 1980, that of natural gas — the world's second largest source of electricity — has almost doubled over the same period.

Nuclear contributed 8.4% of global electricity production in 2025. Over the period 2010–2025, wind and solar deployment increased substantially, with their combined share of electricity generation reaching 17% in 2025.

By 2060, relative to 2025 levels, global final energy consumption is projected to increase by about 20%. Electricity production is projected to more than double over the same period.

Data, Assumptions and Methods

The publication is organized into world and regional subsections and begins with a summary of the status of nuclear power in IAEA Member States as of the end of 2025 based on the latest statistical data collected by the IAEA's Power Reactor Information System (PRIS).

The publication provides global and regional energy and electricity demand projections through 2060. These projections are estimated using the IAEA's Model for Analysis of Energy Demand (MAED), an energy demand assessment tool developed by the IAEA and available cost-free to all IAEA Member States.

The projections are built using a bottom-up methodology: energy demand is assessed country by country and sector by sector, then aggregated by region. The projections reflect regional and national policies in effect as of 2025, account for emerging policy measures, and assume continuation of recent trends. The fundamental narrative underlying the energy and electricity projections considers the unique starting point of each region and the specific factors influencing the development of its energy sector. Both the high and the low cases assume the same economic and electricity demand growth outlook, as estimated using MAED.

The energy and electricity projections do not represent net-zero pathways. Nor do they align with scenarios that limit global warming to 1.5°C or 2°C above pre-industrial levels. Reference [2] is considered in the development of the projections. The energy, electricity and nuclear power projections presented in RDS-1 are for countries grouped according to the geographical regions, M49 standard, prepared by the Statistics Division of the United Nations Secretariat (see annex I to Ref. [3]).

The energy and electricity data for 2025 are estimated, as the latest data available from the United Nations Department of Economic and Social Affairs [4] and the International Energy Agency [5] are for 2023.

Population data are from World Population Prospects 2024 [6], published by the Population Division of the United Nations Department of Economic and Social Affairs.

Global and regional nuclear power projections are presented as low and high cases, encompassing the uncertainties inherent in projecting trends. The projections are based on three sources: the nuclear data collected by the IAEA's PRIS; the estimate of the

nuclear generating capacity established by a group of external experts participating in the IAEA's annual Consultancy Meeting on Nuclear Capacity Projections up to 2060; and national projections supplied by countries for the OECD Nuclear Energy Agency and IAEA publication on uranium resources, production and demand through 2050 [7].

The nuclear electrical generating capacity estimates presented in Table 5 on page 24 of the publication are derived using a country-by-country bottom-up approach. In deriving these estimates, the group of experts considered all operating reactors, possible licence renewals, planned shutdowns, power uprates and plausible construction projects foreseen for the next few decades. The experts built the estimates project by project by assessing the plausibility of each considering a low and high case.

The low and high estimates reflect contrasting underlying assumptions about the different driving factors that affect nuclear power deployment. These factors, and the way they might evolve, vary from country to country. The estimates provide a plausible range of nuclear capacity development by region and worldwide. They are not intended to be predictive, nor do they represent the whole range of possible futures from the lowest to the highest feasible.

The low case is designed to produce a conservative and plausible projection. The assumptions are that current market, technology and resource trends continue and there would be few additional changes in laws, policies and regulations affecting nuclear power. The low case does not assume that targets for nuclear power in a particular country will necessarily be achieved.

National intentions for expanding the use of nuclear power are considered in the high case, as are national policies on energy security and/ or climate change mitigation. The high case is more ambitious than the low case, while remaining plausible and technically feasible. It is possible that capacity could increase beyond that projected in the high case. However, various enabling factors related to national policies, construction and financing would be necessary to facilitate reaching — or exceeding — the high case. Each region and country faces different challenges that need to be overcome to increase nuclear power capacity, and different national contexts require different policies.

There is uncertainty related to the future growth in demand for electricity, for example from the potential for a substantial increase

in demand for secure, clean electricity to power the digital economy and the projected level of electrification in transport and industry. This uncertainty could impact the growth of nuclear capacity.

Geographical Regions

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the IAEA concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Explanatory Notes

The estimates of nuclear electricity production in 2025 are from the 2026 edition of Nuclear Power Reactors in the World, Reference Data Series No. 2 (RDS-2) [8]. The estimates for energy and electricity were made by the IAEA Secretariat on the basis of different international and national data sources available as of 31 July 2026.

In accordance with the International Recommendations for Energy Statistics [9], the estimates for the breakdown of historical electricity production by energy source are expressed in gross figures. Gross electricity production is the total electrical energy produced by all generating units and installations measured at the output terminals of the generators. Current data on nuclear electrical production and future estimates of nuclear and total electrical production are expressed in net values, as the data are adapted from the RDS-2 publication.

Owing to rounding, numbers presented throughout this publication might not add up precisely to the totals provided, and percentages might not precisely reflect the absolute figures.

Total final energy consumption refers to all fuel and energy delivered to end-users for their energy use.

Nuclear electrical generating capacity estimates consider the scheduled retirement of older units at the end of their lifetimes.

The global and regional nuclear electrical production data and the nuclear electrical generating capacity data cannot be used to calculate average annual capacity factors for nuclear power plants, as the nuclear electrical generating capacity data are year-end capacities.

World

8 197

million people



Energy Overview 2025



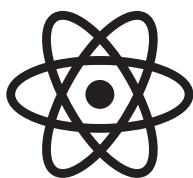
20.6%

of final energy consumed was electricity



32 055 TW·h

of electricity produced



8.4%

of electricity produced by nuclear

Nuclear Power Development in 2025

- At the end of 2025, 413 nuclear power reactors were operational, with a global nuclear operational capacity of 377.1 GW(e).
- In addition, 72 reactors with a total capacity of 77.2 GW(e) were under construction, and 23 reactors with a total capacity of 19.7 GW(e) were in suspended operation.
- Three new nuclear power reactors with a total capacity of 3.0 GW(e) were connected to the grid, and 7 reactors with a total capacity of 2.8 GW(e) were retired. Construction began on 12 new reactors that are expected to add a total capacity of 14.3 GW(e).
- Compared with 2024, total electricity production from all energy sources increased by about 2.7% and electricity production from nuclear power reactors increased by 1.1% to 2689.1 TW·h.
- Nuclear power accounted for 8.4% of total electricity production in 2025, a slight reduction compared with nuclear electricity production in 2024.

TABLE 1. NUCLEAR POWER REACTORS IN THE WORLD (end of 2025)

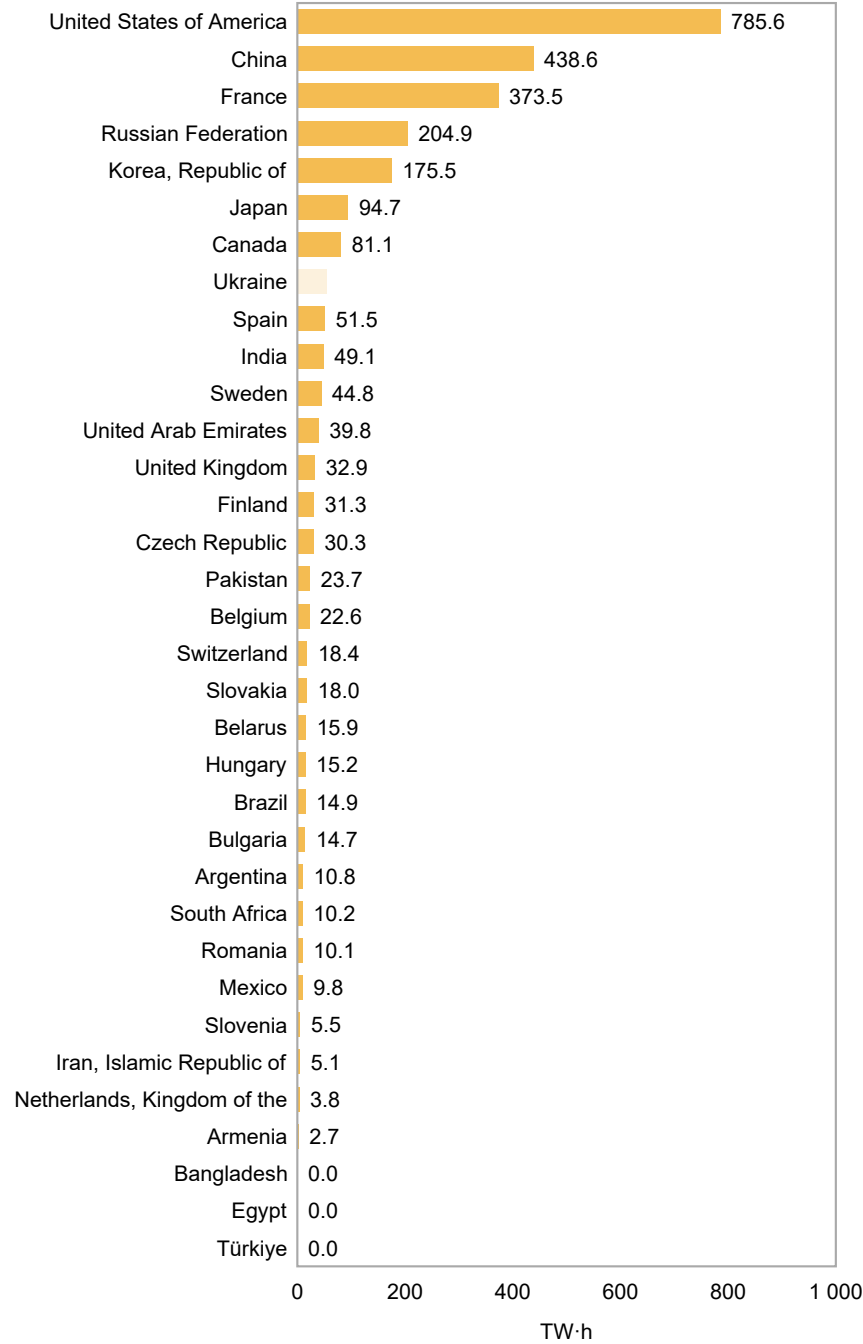
Country	Operational		Under Construction		Nuclear Electricity Production in 2025	
	Number of units	Net capacity (MW(e))	Number of units	Net capacity (MW(e))	TW·h	% of total
World Total ^a	413	377 076	72	77 216	2689.1	8.4
Argentina	3	1 631	1	25	10.8	7.1
Armenia	1	416	0	0	2.7	28.5
Bangladesh	0	0	2	2 160	0	0
Belarus	2	2 220	0	0	15.9	34.9
Belgium	2	2 056	0	0	22.6	31.1
Brazil	2	1 884	1	1 340	14.9	1.9
Bulgaria	2	2 006	0	0	14.7	37.8
Canada	17	12 714	0	0	81.1	12.7
China	58	56 488	36	39 193	438.6	4.1
Czech Republic	6	3 972	0	0	30.3	40.0
Egypt	0	0	4	4 400	0	0
Finland	5	4 369	0	0	31.3	37.9
France	57	63 000	0	0	373.5	64.4
Hungary	4	1 916	0	0	15.2	37.9
India	21	7 430	6	4 768	49.1	2.2
Iran, Islamic Republic of	1	915	1	974	5.1	1.2

Japan	14	12 631	2	2 653	94.7	9.3
Korea, Republic of	26	25 609	4	5 360	175.5	28.1
Mexico	2	1 552	0	0	9.8	2.5
Netherlands, Kingdom of the	1	482	0	0	3.8	2.8
Pakistan	6	3 262	1	1 117	23.7	19.5
Romania	2	1 300	0	0	10.1	19.4
Russian Federation	34	27 969	5	5 000	204.9	17.1
Slovakia	5	2 306	1	440	18.0	60.4
Slovenia	1	696	0	0	5.5	66.2
South Africa	2	1 854	0	0	10.2	4.5
Spain	7	7 123	0	0	51.5	16.8
Sweden	6	7 012	0	0	44.8	26.2
Switzerland	4	2 973	0	0	18.4	27.1
Türkiye	0	0	4	4 456	0	0
Ukraine ^b	15	13 107	2	2 070	—	—
United Arab Emirates	4	5 348	0	0	39.8	20.8
United Kingdom	9	5 883	2	3 260	32.9	11.0
United States of America	94	96 952	0	0	785.6	16.8

^a All missing data are internal estimates by the Secretariat.

^b Ukrainian operational data were not available for the year 2025 in the 2026 edition of Nuclear Power Reactors in the World [8].

FIGURE 1. WORLD NUCLEAR ELECTRICITY PRODUCTION IN 2025



**FIGURE 2. SHARE OF NUCLEAR IN TOTAL ELECTRICITY PRODUCTION
IN THE WORLD IN 2025**

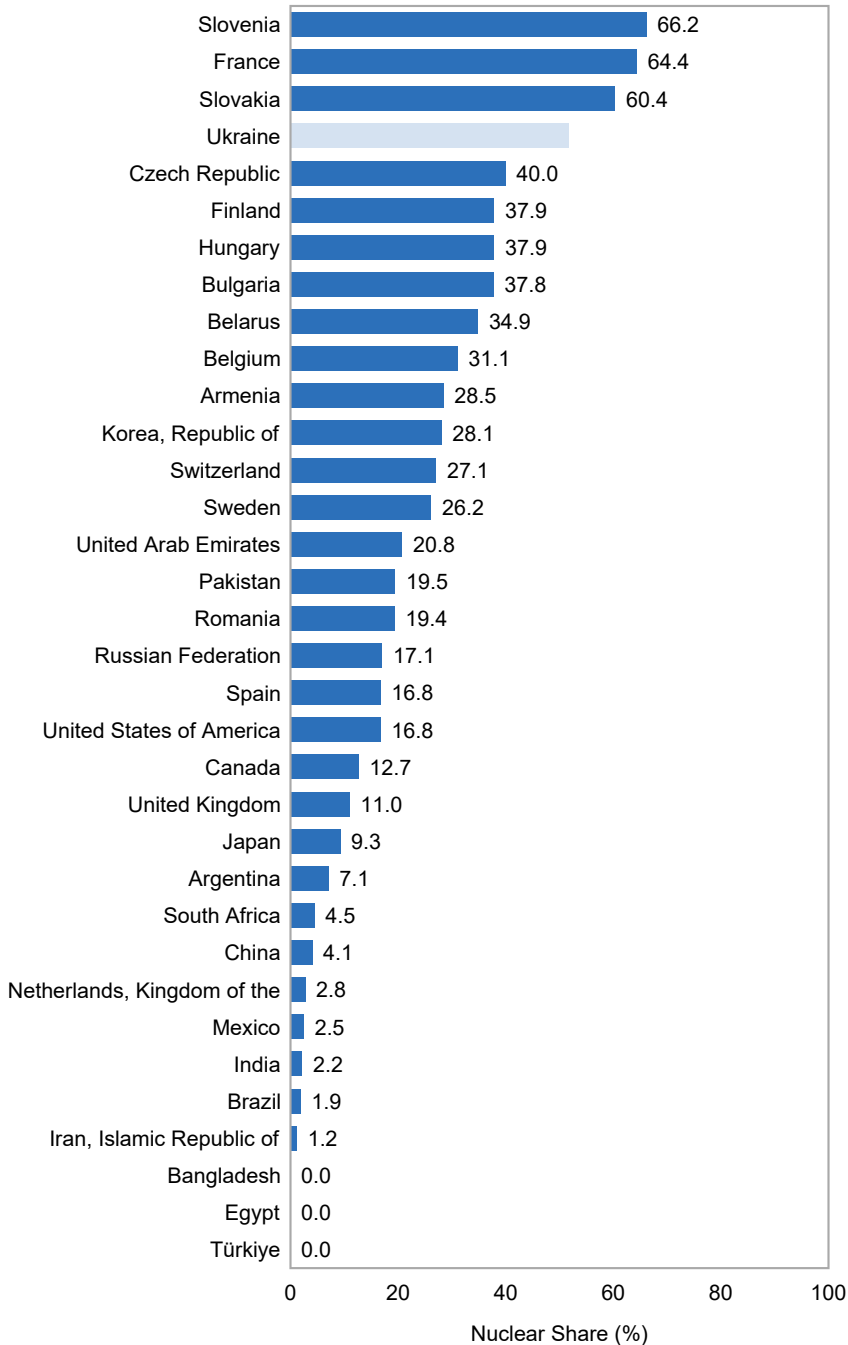
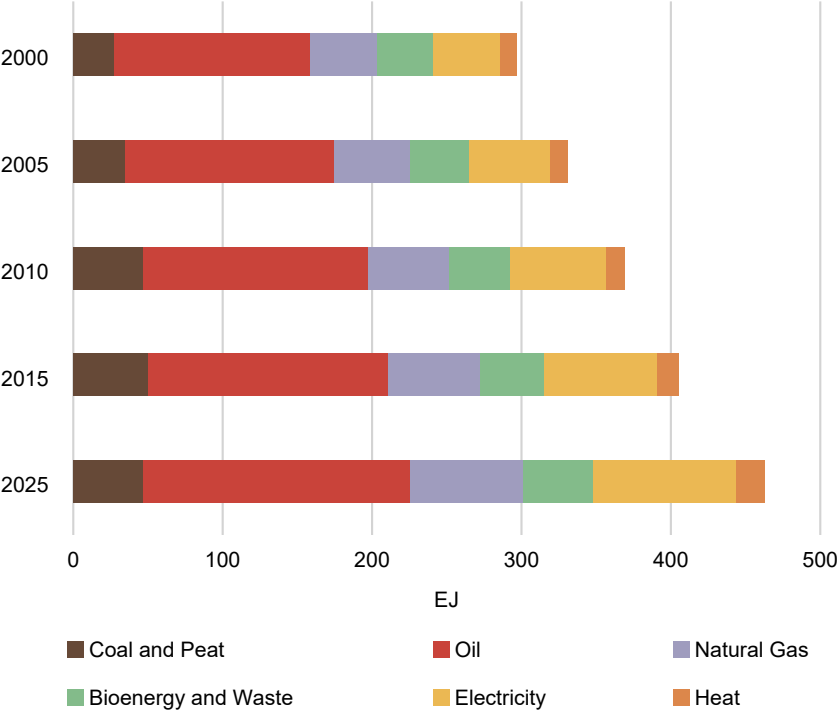


FIGURE 3. WORLD FINAL ENERGY CONSUMPTION BY ENERGY SOURCE



Final Energy Consumption

In 2025, final consumption of energy increased by more than 50% since 2000.

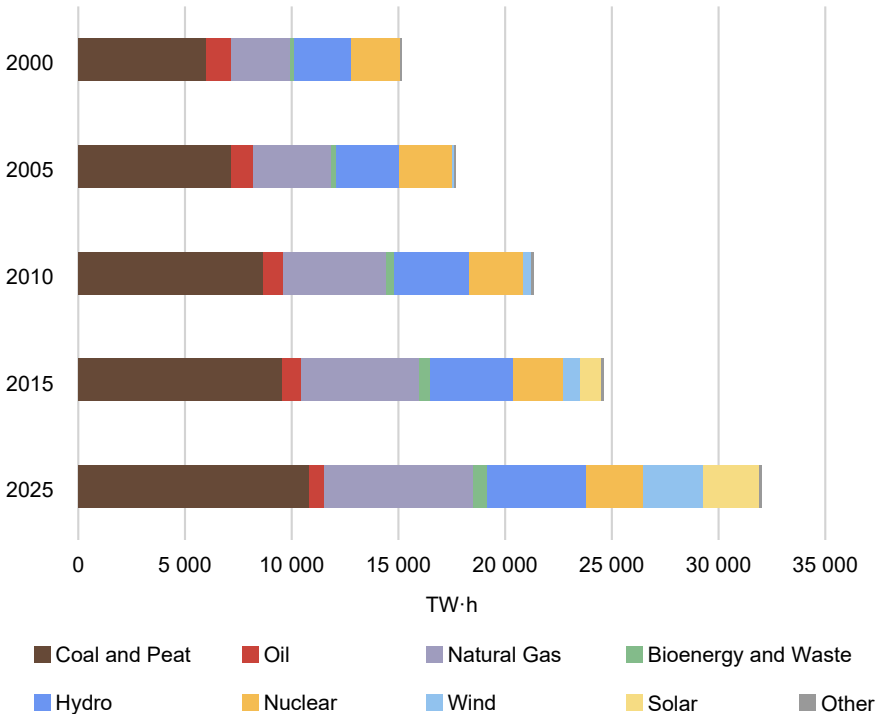
The share of electricity in world final energy consumption is estimated to have increased from 15% in 2000 to about 21% in 2025.

Fossil fuels continued to dominate final energy consumption, accounting for 65% in 2025. The combined share declined from 69% in 2000. Oil remains the largest fossil fuel source, accounting for about 39% of final energy consumption in 2025. Its share has declined by around 5 percentage points since 2000. The share of natural gas has remained about the same since 2000 at 16% in 2025. Coal's share was about 10% in 2025, having remained approximately the same since 2000.

The share of bioenergy and waste declined from 13% in 2000 to 10% in 2025.

Heat's share in final energy consumption was approximately 4% in 2025, with its share having remained stable since 2000.

**FIGURE 4. WORLD TOTAL ELECTRICITY PRODUCTION
BY ENERGY SOURCE**



Electricity Production

Electricity production more than doubled in 2025 compared with production in 2000. The share of nuclear electricity was about 8% in 2025 — approximately half of its share in 2000.

Fossil fuels remain the principal energy sources for electricity production, although their combined share has declined. In 2025, fossil fuels accounted for 58% of electricity production, a decline from 66% in 2000. Coal remains the largest fossil fuel source, accounting for 34% of electricity production in 2025, down from 40% in 2000. Natural gas's share increased, rising from 18% in 2000 to 22% in 2025. Oil's share declined from 8% in 2000 to 2% in 2025.

The share of hydro declined slightly from 18% in 2000 to 14% in 2025. Wind and solar combined accounted for around 17% of electricity production in 2025, up from negligible levels in 2000. Wind alone was about 9% and solar 8% in 2025.

Bioenergy and waste accounted for 2% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 20% from 2025 to 2060, reflecting continued growth in energy demand across all regions.
- Electricity consumption is projected to increase at an average annual rate of 2.2% from 2025 to 2060, more than doubling over that time period.
- By 2060, the share of electricity in final energy consumption is projected to almost double.

FIGURE 5. WORLD FINAL CONSUMPTION OF ENERGY AND ELECTRICITY

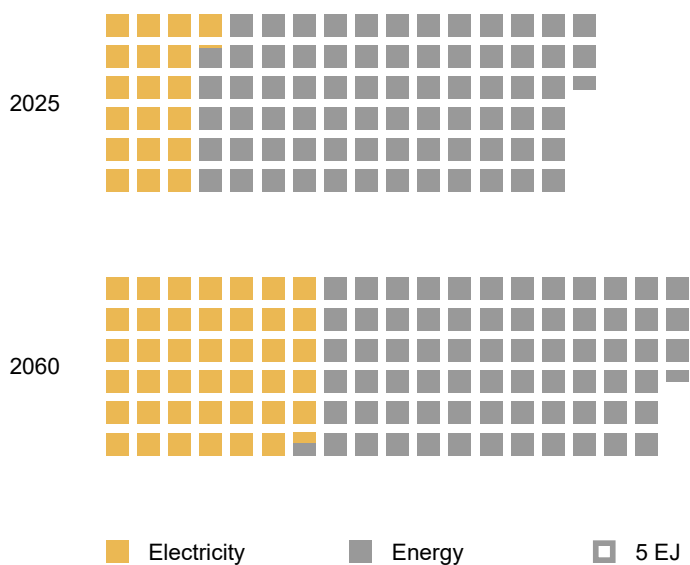


TABLE 2. WORLD FINAL CONSUMPTION OF ENERGY AND ELECTRICITY, EJ

Final Consumption	2025	2040	2050	2060
Energy	463.0	531.3	552.7	557.5
Electricity	95.5	154.9	184.1	207.3
<i>Electricity as % of Energy</i>	20.6%	29.2%	33.3%	37.2%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to more than double by 2050 and to almost triple by 2060.
- In the high case, nuclear electrical generating capacity is projected to increase by approximately 80% by 2040, almost triple by 2050, and more than triple by 2060 compared with 2025 capacity.
- In the low case, nuclear electrical generating capacity is projected to increase by approximately 40% by 2040, increase by 70% by 2050, and nearly double by 2060 compared with 2025 capacity.
- By 2060, the share of nuclear in total electrical generating capacity is projected to fall by 1 percentage point in the low case, while rising by about 1 percentage point in the high case.

FIGURE 6. WORLD NUCLEAR ELECTRICAL GENERATING CAPACITY

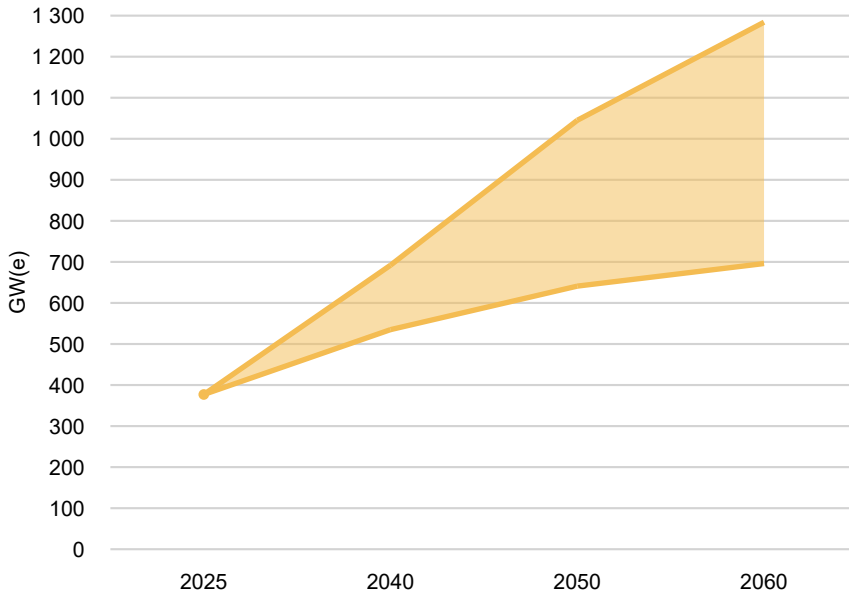


TABLE 3. WORLD TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY, GW(e)

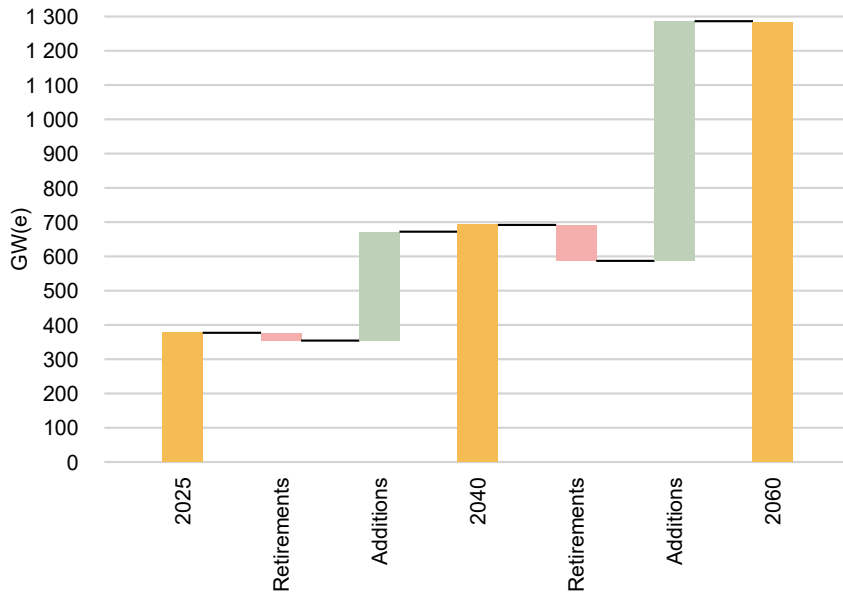
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	10 846	18 992	18 992	23 771	23 771	28 119	28 119
Nuclear	377	535	692	641	1045	696	1284
<i>Nuclear as % of Electrical Capacity</i>	3.5%	2.8%	3.6%	2.7%	4.4%	2.5%	4.6%

Reactor Retirements and Additions

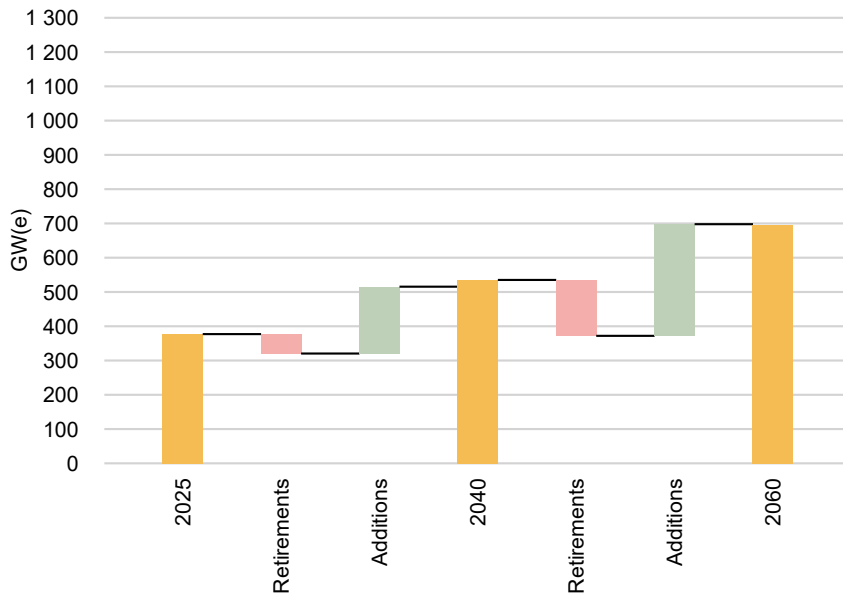
- Two out of every three nuclear power reactors have been in operation for 30 years or more, and 46% have been in operation for 40 years or more.
- The high case demonstrates the importance of substantial new nuclear capacity additions to maintain and grow the global nuclear fleet. In this case, approximately 128 GW(e) of nuclear capacity is projected to be retired by 2060. Approximately 1017 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition (newly installed less retired) of approximately 890 GW(e).
- In the low case, approximately 220 GW(e) of nuclear capacity is projected to be retired by 2060. Approximately 521 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 301 GW(e) by 2060.

FIGURE 7. WORLD NUCLEAR CAPACITY: ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by about 80% by 2040 and to increase 2.5 times the 2025 production by 2060.
- In the high case, nuclear electricity production is projected to nearly quadruple by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by approximately 5 percentage points.
- In the low case, nuclear electricity production is projected to more than double by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to decline by approximately 1 percentage point by 2060.

FIGURE 8. WORLD NUCLEAR ELECTRICITY PRODUCTION

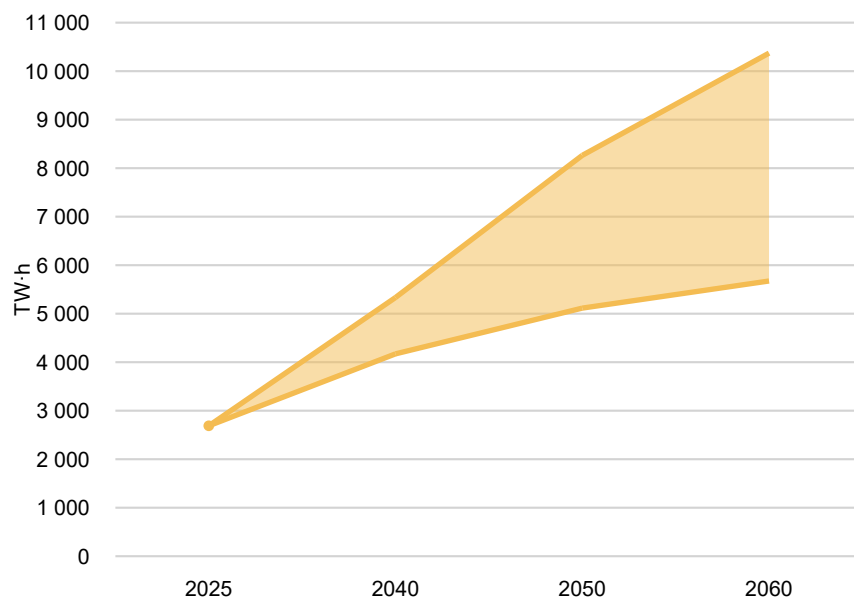


TABLE 4. WORLD TOTAL AND NUCLEAR ELECTRICITY PRODUCTION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	32 055	58 753	58 753	69 749	69 749	78 621	78 621
Nuclear	2 689	4 172	5 334	5 115	8 264	5 674	10 372
<i>Nuclear as % of Electricity Production</i>	8.4%	7.1%	9.1%	7.3%	11.8%	7.2%	13.2%

TABLE 5. WORLD NUCLEAR ELECTRICAL GENERATING CAPACITY, GW(e)

Region	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
World Total	377.1	535	692	641	1 045	696	1 284
Northern America	109.7	121	162	136	259	183	342
Latin America and the Caribbean	5.1	7	8	9	20	8	26
Northern, Western and Southern Europe	93.6	79	113	68	147	47	148
Eastern Europe	54.8	59	85	76	108	78	117
Africa	1.9	8	13	14	28	18	42
Western Asia	5.8	10	19	16	37	20	41
Southern Asia	12.2	24	46	48	91	54	124
Central and Eastern Asia	113.8	225	242	268	332	279	407
South-eastern Asia	0	2	3	6	22	8	32
Oceania	0	0	0	0	2	0	4

TABLE 6. WORLD NUCLEAR ELECTRICITY PRODUCTION, TW·h

Region	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
World Total	2 689.1	4 172	5 334	5 115	8 264	5 674	10 372
Northern America	866.7	955	1 275	1 098	2 084	1 508	2 819
Latin America and the Caribbean	35.5	52	65	67	154	67	204
Northern, Western and Southern Europe	584.3	592	788	517	1 068	374	1 102
Eastern Europe	363.2	464	671	607	862	632	943
Africa	10.2	64	104	113	224	140	336
Western Asia	42.5	80	148	127	294	161	330
Southern Asia	77.9	175	345	375	716	432	1 001
Central and Eastern Asia	708.8	1 772	1 910	2 159	2 674	2 295	3 355
South-eastern Asia	0	19	26	51	172	67	251
Oceania	0	0	0	0	16	0	32

Northern America

386

million people



Energy Overview 2025



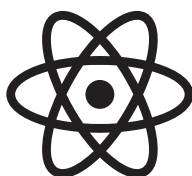
22.4%

of final energy consumed was electricity



5 313 TW·h

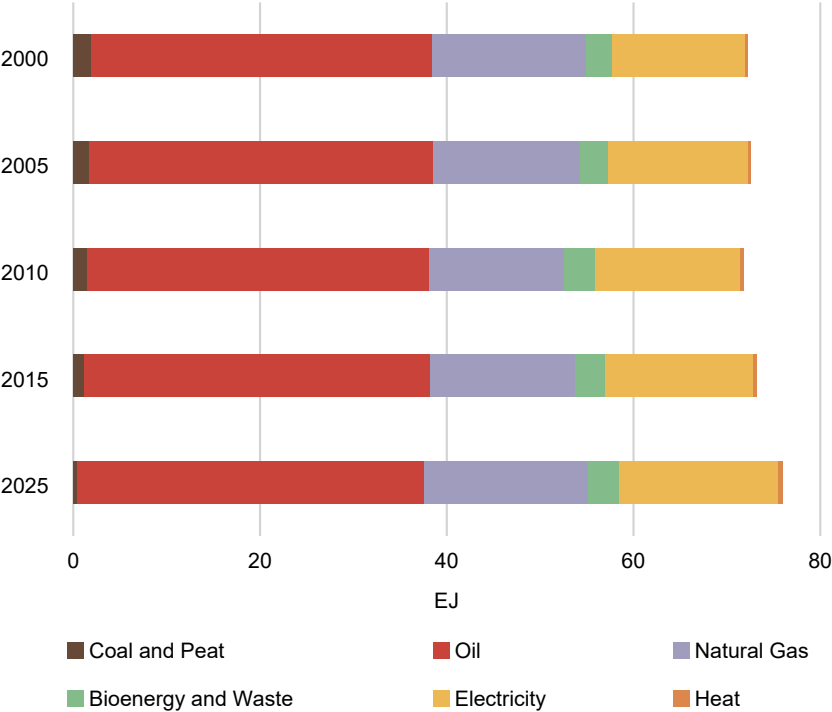
of electricity produced



16.3%

of electricity produced by nuclear

FIGURE 9. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE NORTHERN AMERICA REGION



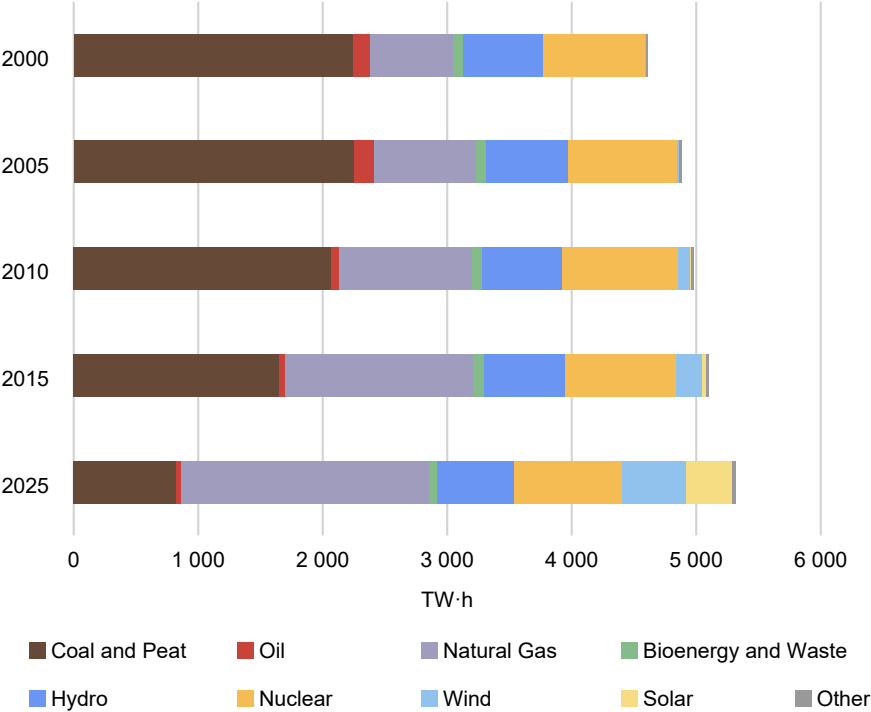
Final Energy Consumption

In 2025, electricity accounted for about 22% of final energy consumption, a slight increase from 20% in 2000.

The combined share of fossil fuels was 73% in 2025, a modest decline from 76% in 2000. Oil has the largest share among fossil fuels at around 50% in 2025, with its share having remained relatively stable since 2000. Natural gas accounted for 23% in 2025, having remained approximately stable since 2000. Coal’s share was less than 1% in 2025, declining slightly from around 3% in 2000.

Bioenergy and waste accounted for 5% in 2025, with its share remaining relatively stable since 2000. Heat’s share in final energy consumption remained negligible at less than 1% in 2025.

FIGURE 10. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE NORTHERN AMERICA REGION



Electricity Production

The share of nuclear electricity in 2025 was approximately 16%, a slight decline from 18% in 2000.

The combined share of fossil fuels accounted for 54% of electricity production in 2025, a decline from 66% in 2000. Coal's share declined substantially to about 15% in 2025 from 50% in 2000. Natural gas's share increased to 37% in 2025 from 14% in 2000. Oil's share declined to around 1% in 2025 from 3% in 2000.

Hydro accounted for 12% of electricity production in 2025, with its share remaining relatively stable since 2000.

Wind and solar combined accounted for approximately 17% of electricity production in 2025, with wind at 10% and solar at 7%. These sources were negligible in 2000.

Bioenergy and waste accounted for around 1% of electricity production in 2025, with its share remaining approximately stable since 2000.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 3% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 1.8% from 2025 to 2060. Electricity demand is projected to increase by almost 80% over this period.
- By 2060, electricity is projected to account for 38.6% of final energy consumption, up from 22.4% in 2025.

FIGURE 11. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE NORTHERN AMERICA REGION

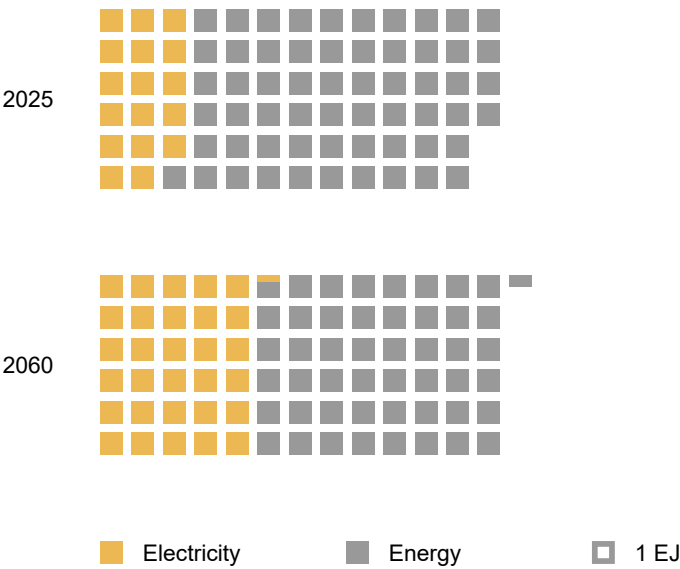


TABLE 7. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE NORTHERN AMERICA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	76.0	78.8	78.9	78.5
Electricity	17.0	25.6	28.3	30.3
<i>Electricity as % of Energy</i>	22.4%	32.5%	35.9%	38.6%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to almost double by 2060 compared with the 2025 level.
- In the high case, nuclear electrical generating capacity is projected to increase by almost 50% by 2040, more than double by 2050, and more than triple by 2060 compared with 2025 capacity. The share of nuclear in total electrical generating capacity is projected to increase by more than 4 percentage points by 2060.
- In the low case, nuclear electrical generating capacity is projected to increase by approximately 10% by 2040, increase by about 25% by 2050, and increase by 66% by 2060 compared with 2025 capacity. The share of nuclear in total electrical generating capacity is projected to decrease by 1 percentage point by 2060.

FIGURE 12. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE NORTHERN AMERICA REGION

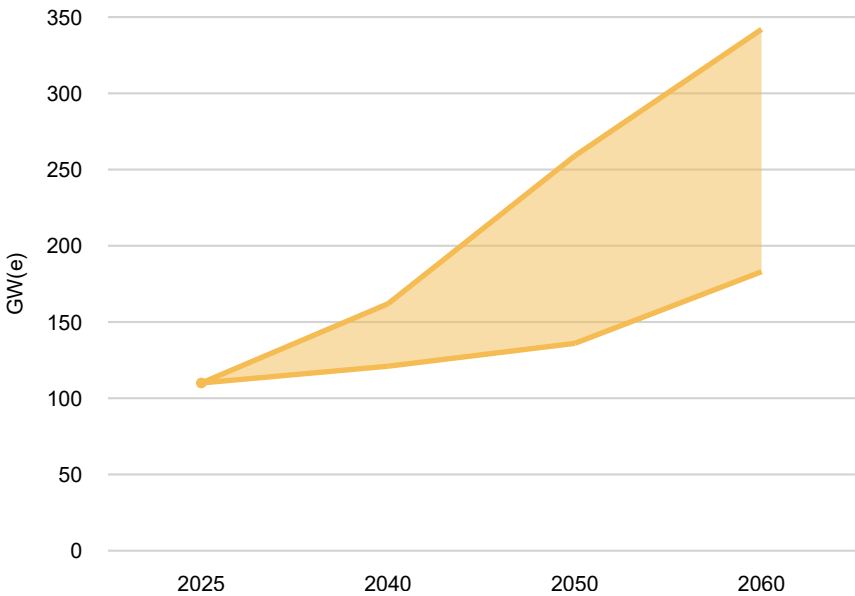


TABLE 8. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE NORTHERN AMERICA REGION, GW(e)

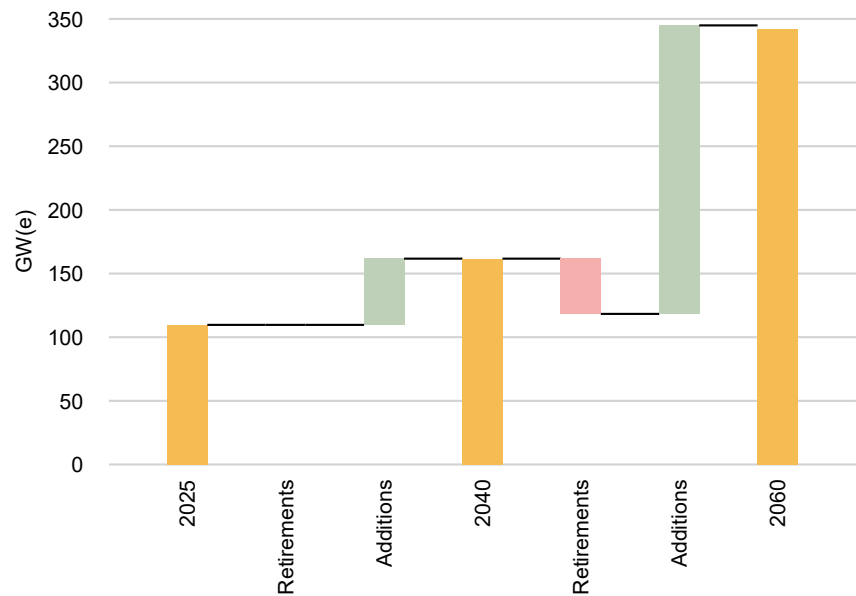
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 548	2 455	2 455	2 788	2 788	3 024	3 024
Nuclear	110	121	162	136	259	183	342
Nuclear as % of Electrical Capacity	7.1%	4.9%	6.6%	4.9%	9.3%	6.1%	11.3%

Reactor Retirements and Additions

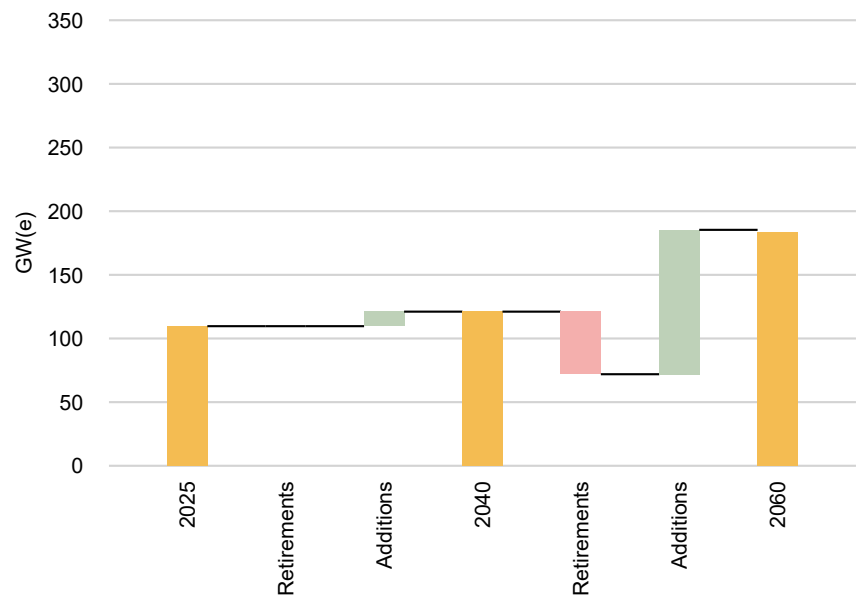
- The high case shows the importance of both operating lifetime extensions and new builds for this region. In this case, approximately 43 GW(e) of nuclear capacity is projected to be retired by 2060. Around 279 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of about 235 GW(e).
- In the low case, almost 50 GW(e) of nuclear capacity is projected to be retired by 2060. Approximately 125 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of around 75 GW(e) by 2060.

FIGURE 13. NUCLEAR CAPACITY IN THE NORTHERN AMERICA REGION:
ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by approximately 50% by 2040 and to almost 80% by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to more than triple by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to almost double.
- In the low case, nuclear electricity production is projected to increase by more than 70% by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to decrease by 0.4 percentage points by 2060.

FIGURE 14. NUCLEAR ELECTRICITY PRODUCTION
IN THE NORTHERN AMERICA REGION

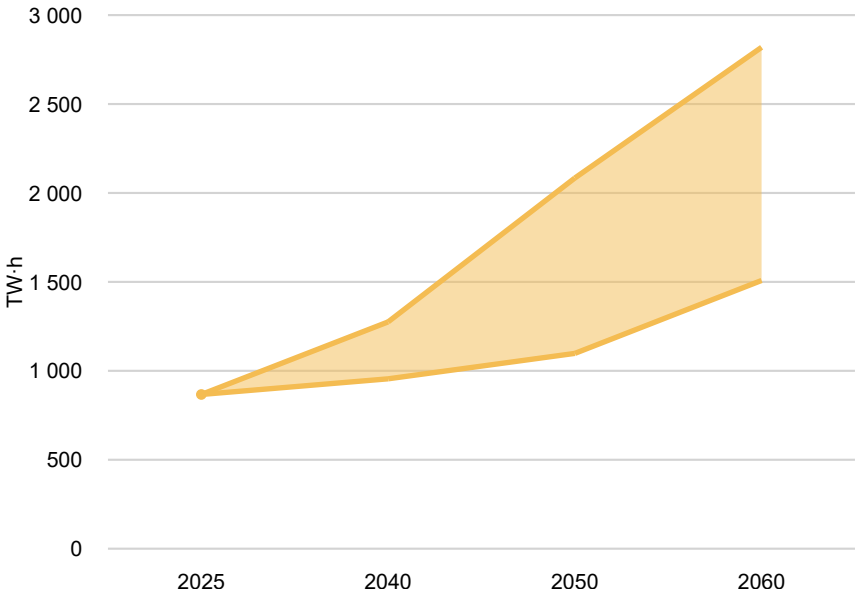


TABLE 9. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE NORTHERN AMERICA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	5 313	8 001	8 001	8 845	8 845	9 470	9 470
Nuclear	867	955	1 275	1 098	2 084	1 508	2 819
Nuclear as % of Electricity Production	16.3%	11.9%	15.9%	12.4%	23.6%	15.9%	29.8%

Latin America and the Caribbean

666

million people



Energy Overview 2025



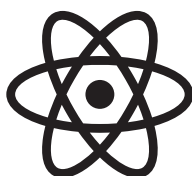
21.0%

of final energy consumed was electricity



1 966 TW·h

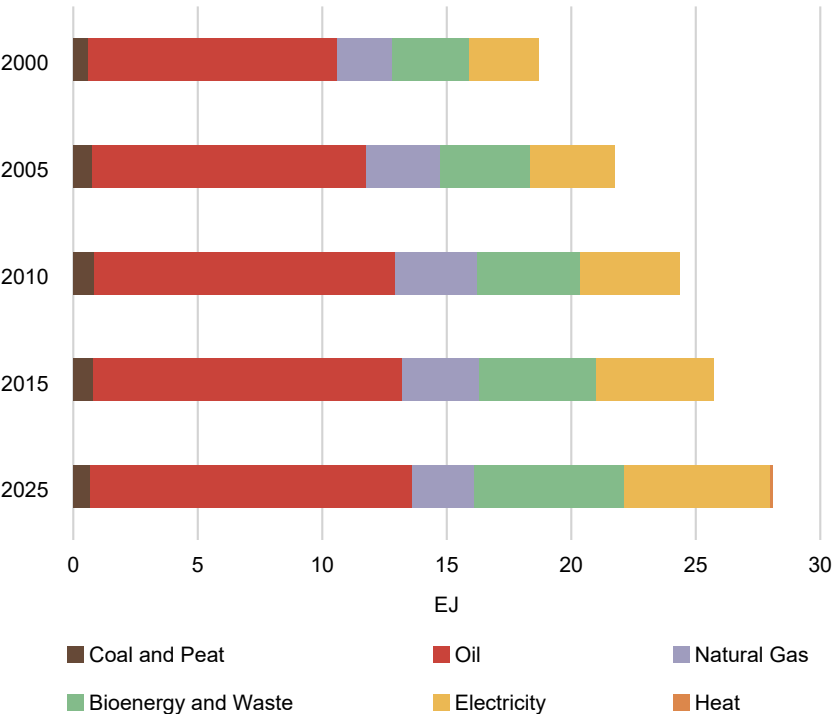
of electricity produced



1.8%

of electricity produced by nuclear

FIGURE 15. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE LATIN AMERICA AND THE CARIBBEAN REGION



Final Energy Consumption

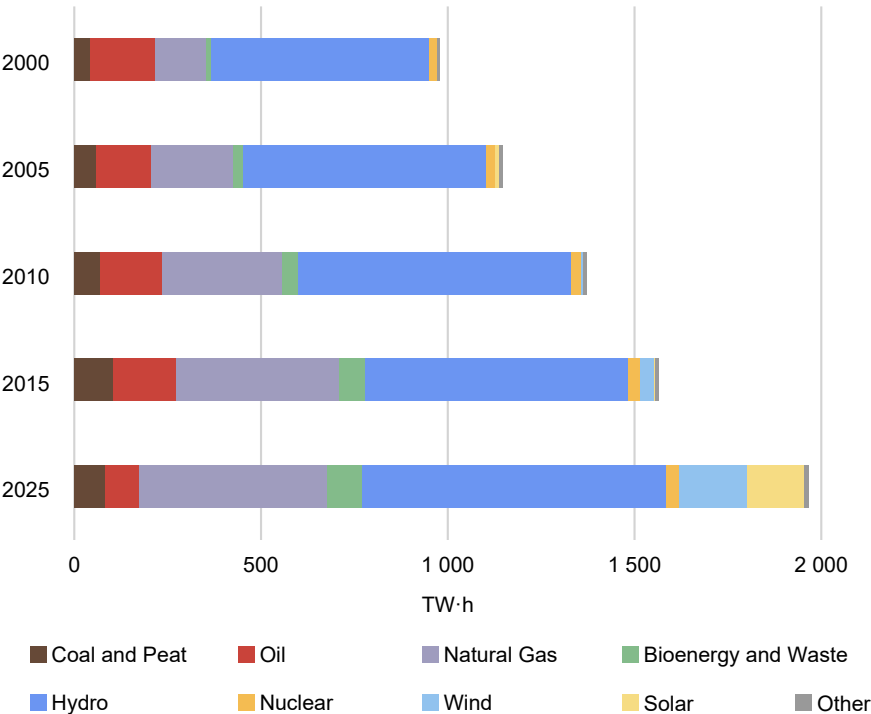
Electricity’s share in final energy consumption increased from around 15% in 2000 to 21% in 2025.

The combined share of fossil fuels in final energy consumption was 57% in 2025, a reduction of almost 10 percentage points since 2000. Oil had the largest share among fossil fuels, accounting for about 46% in 2025, down from 55% in 2000. Natural gas’s share was 9% in 2025, declining from 12% in 2000. Coal’s share declined slightly to around 2.5% in 2025 from 3% in 2000.

Bioenergy and waste accounted for 21% in 2025, an increase from 17% in 2000.

Heat’s share in final energy consumption remained minimal at less than 1% in 2025.

FIGURE 16. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE LATIN AMERICA AND THE CARIBBEAN REGION



Electricity Production

The share of nuclear electricity was approximately 2% in 2025, remaining relatively stable since 2000.

Fossil fuels accounted for 34% of electricity production in 2025, declining from 36% in 2000. Coal’s share has remained relatively small and stable at about 4% since 2000. Natural gas’s share increased to approximately 25% in 2025 from 14% in 2000. Oil’s share declined substantially from around 18% in 2000 to 5% in 2025.

Hydro is the dominant electricity source in the region, accounting for about 40% of electricity production in 2025, down from 60% in 2000. Wind and solar combined accounted for 17% of electricity production in 2025, with wind at 9% and solar at 8%. These sources were negligible in 2000.

Bioenergy and waste accounted for approximately 5% of electricity production in 2025, an increase from 1% in 2000.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 1% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 2.2% from 2025 to 2060. Electricity demand is projected to double over this period.
- By 2060, the share of electricity in final energy consumption is projected to more than double compared with its 2025 share.

FIGURE 17. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE LATIN AMERICA AND THE CARIBBEAN REGION

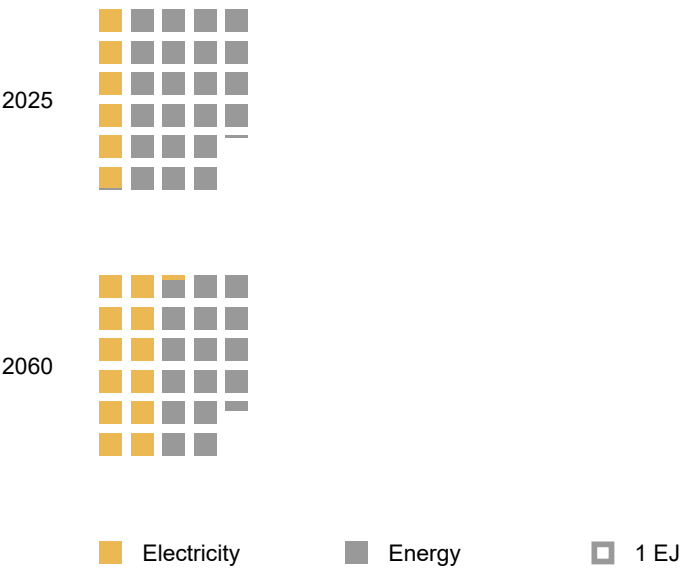


TABLE 10. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE LATIN AMERICA AND THE CARIBBEAN REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	28.1	29.9	30.1	28.4
Electricity	5.9	9.5	11.0	12.2
<i>Electricity as % of Energy</i>	21.0%	31.8%	36.5%	43.0%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to more than double by 2050 and to increase approximately 2.5-fold by 2060.
- In the high case, nuclear electrical generating capacity is projected to increase by almost 60% by 2040, nearly quadruple by 2050, and increase to approximately 5 times the 2025 capacity by 2060. The share of nuclear in total electrical generating capacity is projected to increase by 1 percentage point by 2060.
- In the low case, nuclear electrical generating capacity is projected to increase by almost 40% by 2040 and to increase almost 60% the 2025 capacity by 2060. The share of nuclear in total electrical generating capacity is projected to decrease by 0.3 percentage points by 2060.

FIGURE 18. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE LATIN AMERICA AND THE CARIBBEAN REGION

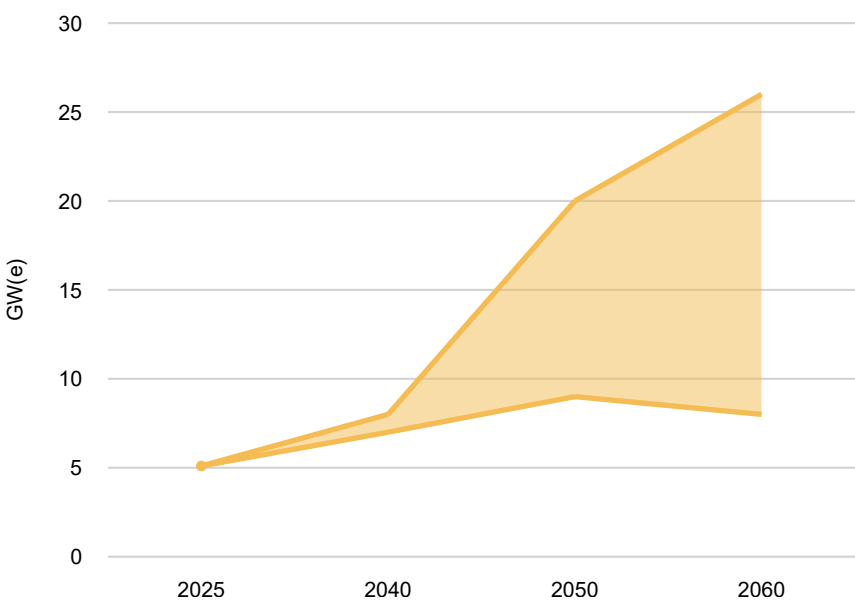


TABLE 11. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE LATIN AMERICA AND THE CARIBBEAN REGION, GW(e)

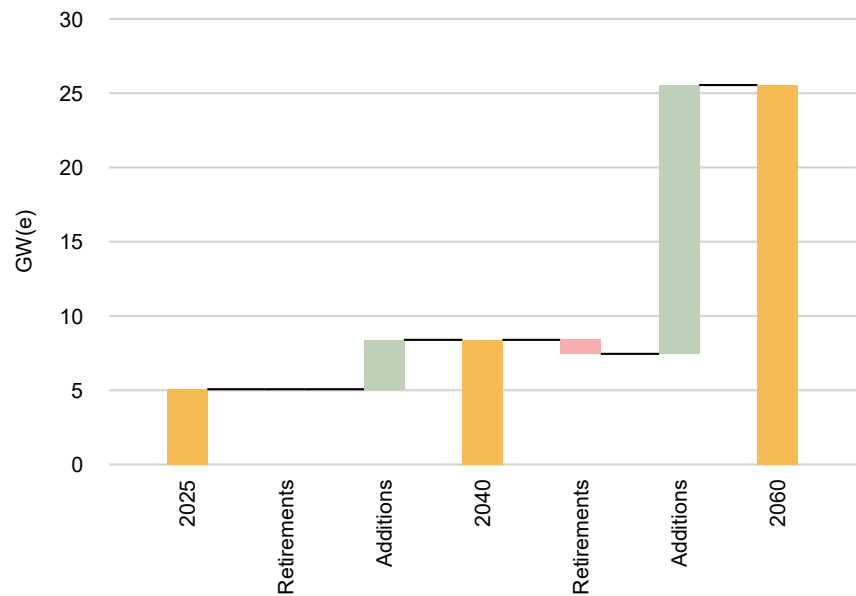
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	580	948	948	1 176	1 176	1 392	1 392
Nuclear	5.1	7	8	9	20	8	26
<i>Nuclear as % of Electrical Capacity</i>	0.9%	0.7%	0.8%	0.8%	1.7%	0.6%	1.9%

Reactor Retirements and Additions

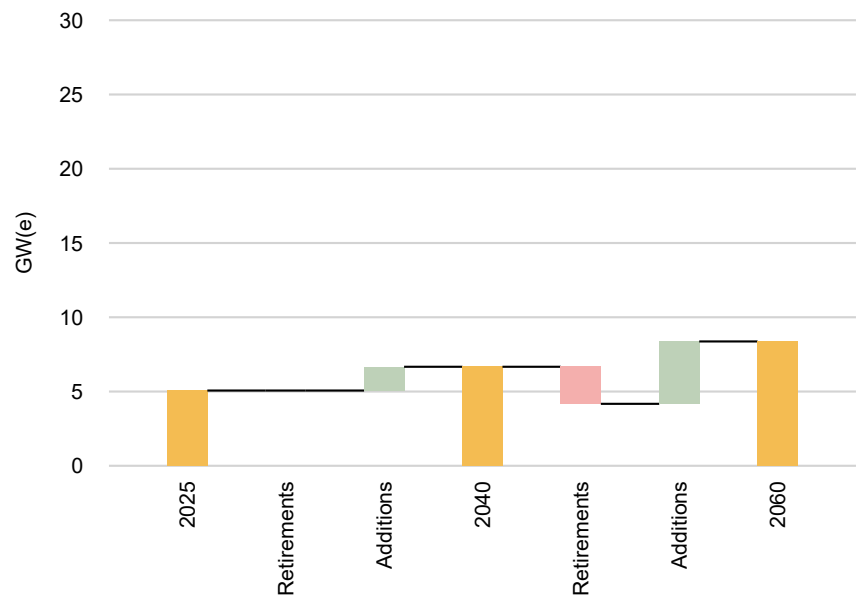
- The high case reflects significant growth in nuclear capacity in the region even with modest retirements. In this case, less than 1 GW(e) of nuclear capacity is projected to be retired by 2060. A little over 21 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of almost 21 GW(e).
- In the low case, around 3 GW(e) of nuclear capacity is projected to be retired by 2060. About 6 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 3 GW(e) by 2060.

FIGURE 19. NUCLEAR CAPACITY IN THE LATIN AMERICA AND THE CARIBBEAN REGION: ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by around 60% by 2040 and to more than double by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase almost sixfold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by approximately 3 percentage points.
- In the low case, nuclear electricity production is projected to nearly double by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to decline by approximately 0.2 percentage points by 2060.

FIGURE 20. NUCLEAR ELECTRICITY PRODUCTION
IN THE LATIN AMERICA AND THE CARIBBEAN REGION

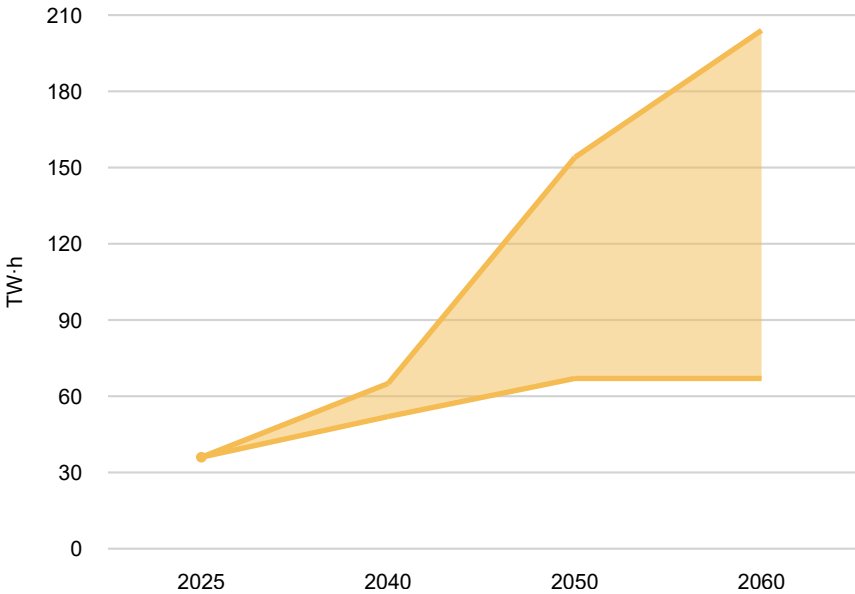


TABLE 12. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE LATIN AMERICA AND THE CARIBBEAN REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 966	3 166	3 166	3 665	3 665	4 065	4 065
Nuclear	36	52	65	67	154	67	204
Nuclear as % of Electricity Production	1.8%	1.6%	2.1%	1.8%	4.2%	1.6%	5.0%

Northern, Western and Southern Europe

460

million people



Energy Overview 2025



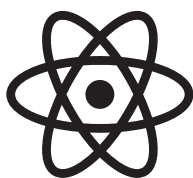
23.7%

of final energy consumed was electricity



3 016 TW·h

of electricity produced

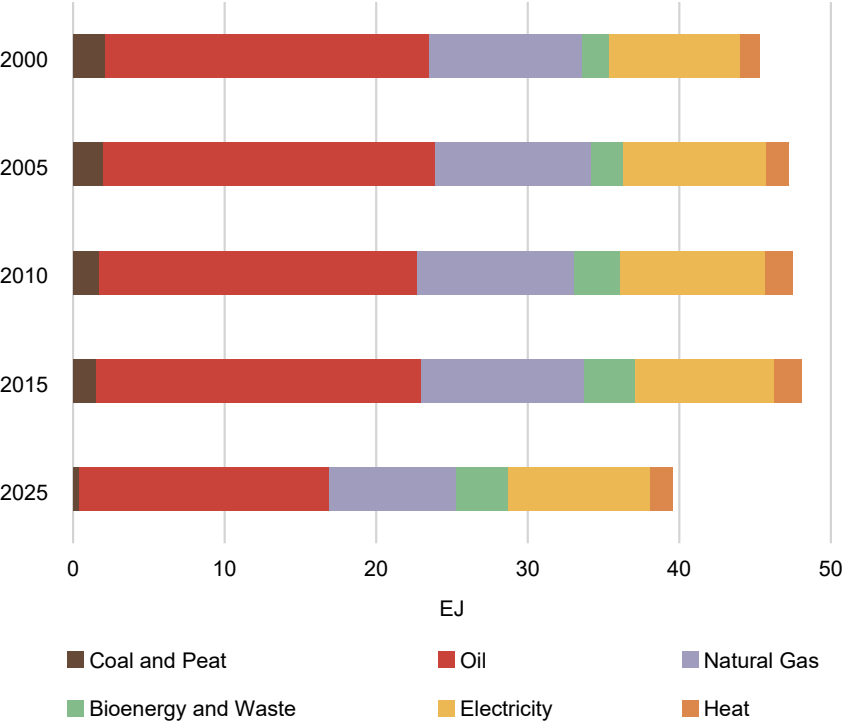


19.4%

of electricity produced by nuclear

Northern, Western and Southern Europe

FIGURE 21. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE



Final Energy Consumption

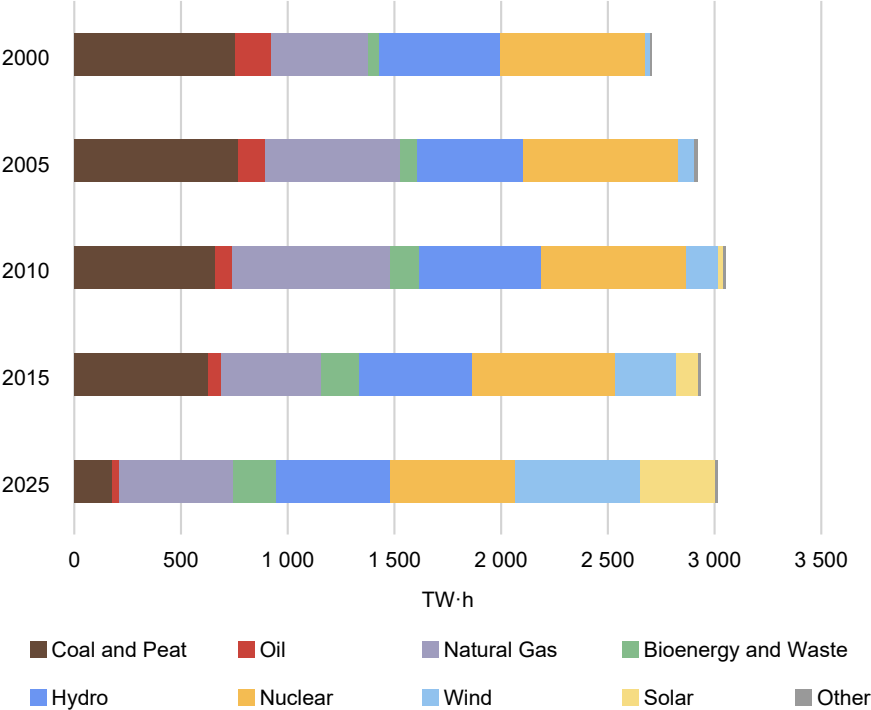
In 2025, electricity accounted for approximately 24% of final energy consumption, an increase from 19% in 2000.

Fossil fuels accounted for 64% of final energy consumption in 2025, a decline from 74% in 2000. Oil had the largest share among fossil fuels at 42% in 2025, declining from 47% in 2000. Natural gas's share has remained relatively stable since 2000 at 21% in 2025. Coal's share declined to around 1% in 2025 from 5% in 2000.

Bioenergy and waste accounted for 9% in 2025, more than doubling from 4% in 2000.

Heat's share in final energy consumption was around 4% in 2025, almost unchanged from 3% in 2000.

FIGURE 22. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE



Electricity Production

The share of nuclear electricity has declined to approximately 19% in 2025 from 25% in 2000.

Fossil fuels declined substantially to around 25% of electricity production in 2025 from 50% in 2000. Coal’s share declined to 6% in 2025 from 28% in 2000. Natural gas’s share remained approximately the same at 18% in 2025 compared with 17% in 2000. Oil’s share declined to about 1% in 2025 from 6% in 2000.

Hydro accounted for 18% of electricity production in 2025, with its share having remained relatively stable since 2000.

Wind and solar combined accounted for about 30% of electricity production in 2025, a substantial increase from 1% in 2000. Wind alone was around 19% and solar 11% in 2025.

Bioenergy and waste accounted for 7% of electricity production in 2025, an increase from 2% in 2000.

Energy and Electricity Projections

- Final energy consumption is projected to decrease by 4% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 2.1% from 2025 to 2060, almost doubling despite the overall decline in final energy consumption.
- By 2060, the share of electricity in final energy consumption is projected to almost double compared with its 2025 share.

FIGURE 23. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE

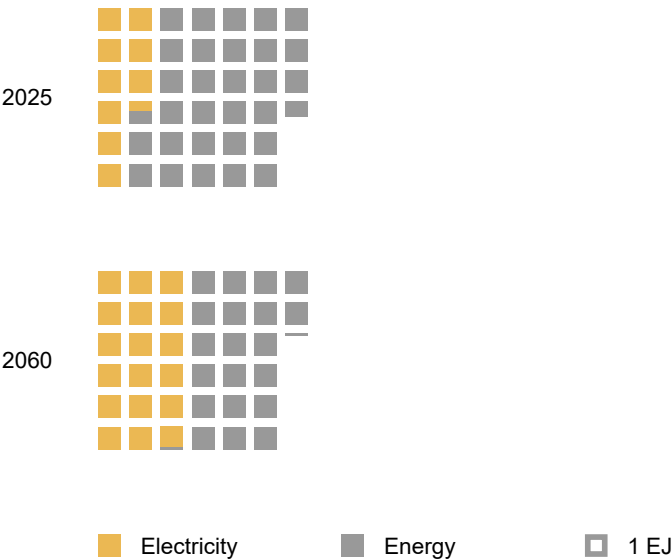


TABLE 13. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE, EJ

Final Consumption	2025	2040	2050	2060
Energy	39.7	39.0	38.5	38.1
Electricity	9.4	14.6	16.5	17.9
Electricity as % of Energy	23.7%	37.4%	42.9%	47.0%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to nearly double by 2060 compared with 2025 capacity.
- In the high case, nuclear electrical generating capacity is projected to increase by approximately 20% by 2040 and increase by almost 60% by 2060 compared with 2025 capacity. The share of nuclear in total electrical generating capacity is projected to decrease by 1.5 percentage points by 2060.
- In the low case, nuclear electrical generating capacity is projected to decrease by around 15% by 2040, by about 30% by 2050, and by approximately 50% by 2060 compared with 2025 capacity. The share of nuclear in total electrical generating capacity is projected to decrease by almost 6 percentage points by 2060.

FIGURE 24. NUCLEAR ELECTRICAL GENERATING CAPACITY IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE

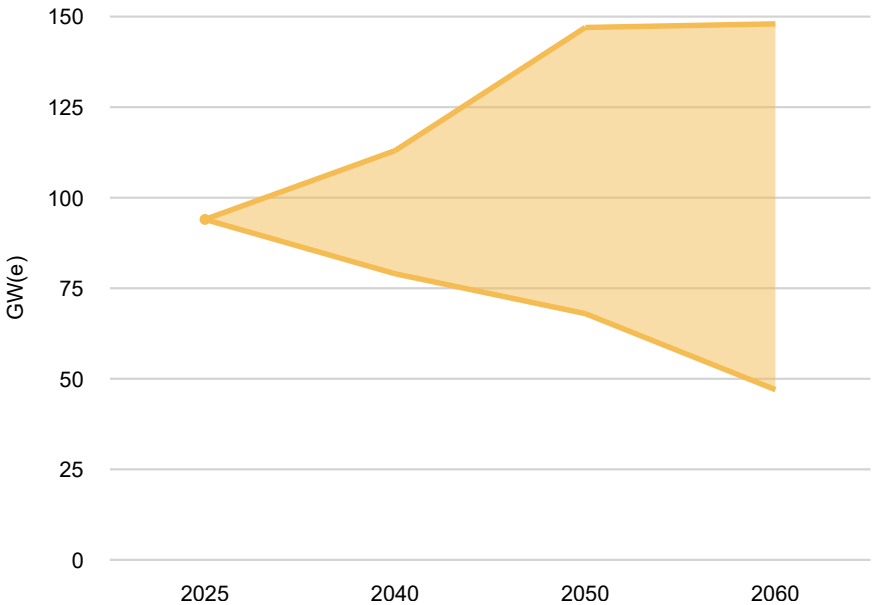


TABLE 14. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE, GW(e)

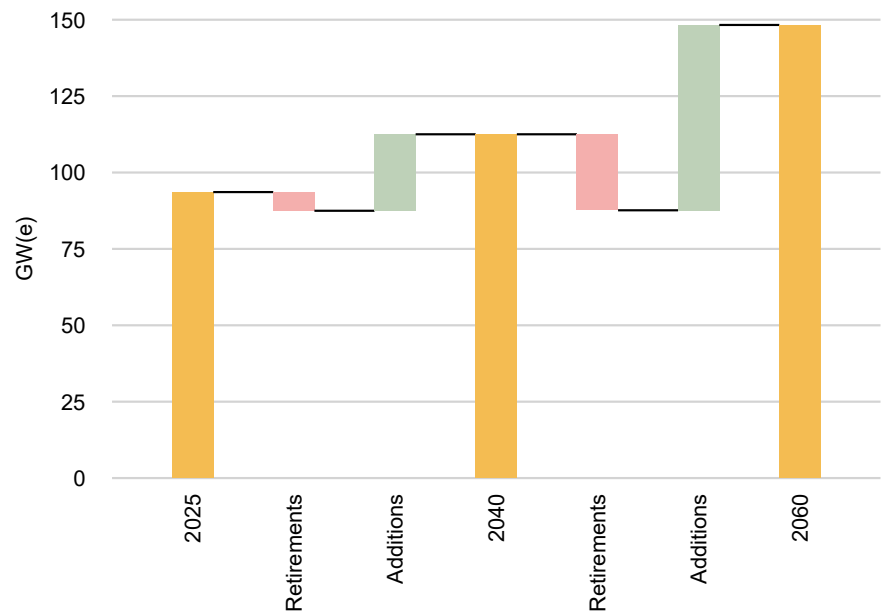
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 213	1 767	1 767	2 083	2 083	2 370	2 370
Nuclear	94	79	113	68	147	47	148
<i>Nuclear as % of Electrical Capacity</i>	7.7%	4.5%	6.4%	3.3%	7.1%	2.0%	6.2%

Reactor Retirements and Additions

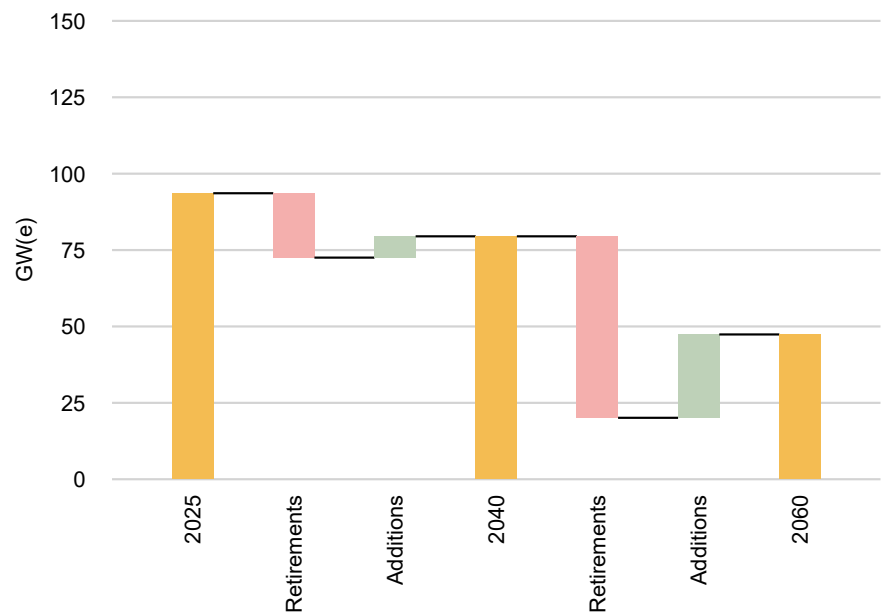
- The high case indicates a transition toward new capacity additions to offset retirements. In this case, around 31 GW(e) of nuclear capacity is projected to be retired by 2060. About 86 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 55 GW(e).
- In the low case, substantial retirements are projected without equivalent replacement. About 81 GW(e) of nuclear capacity is projected to be retired by 2060. Around 34 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity reduction of approximately 47 GW(e) by 2060.

FIGURE 25. NUCLEAR CAPACITY IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE: ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by 55% by 2040 and to increase by 90% by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase by around 90% by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to slightly reduce by 0.2 percentage points 2060.
- In the low case, nuclear electricity production is projected to decline by about 35% by 2060 relative to the 2025 level. The share of nuclear in total electricity production is projected to fall to approximately one-third of its 2025 level by 2060.

FIGURE 26. NUCLEAR ELECTRICITY PRODUCTION IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE

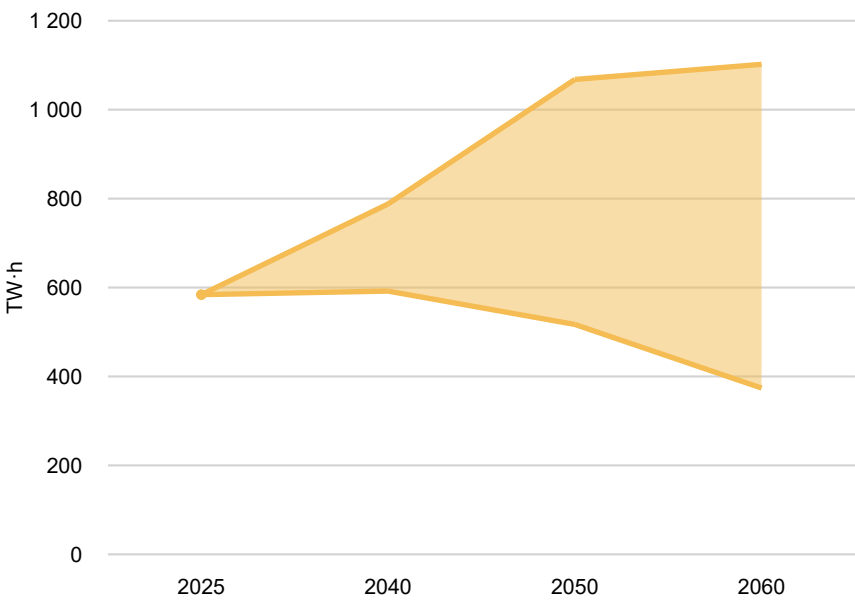


TABLE 15. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION IN THE COMBINED REGIONS OF NORTHERN, WESTERN AND SOUTHERN EUROPE, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	3 016	4 684	4 684	5 294	5 294	5 743	5 743
Nuclear	584	592	788	517	1 068	374	1 102
Nuclear as % of Electricity Production	19.4%	12.6%	16.8%	9.8%	20.2%	6.5%	19.2%

Eastern Europe

285
million people



Energy Overview 2025



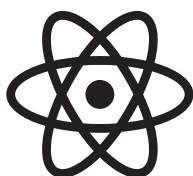
15.6%

of final energy consumed was electricity



1 767 TW·h

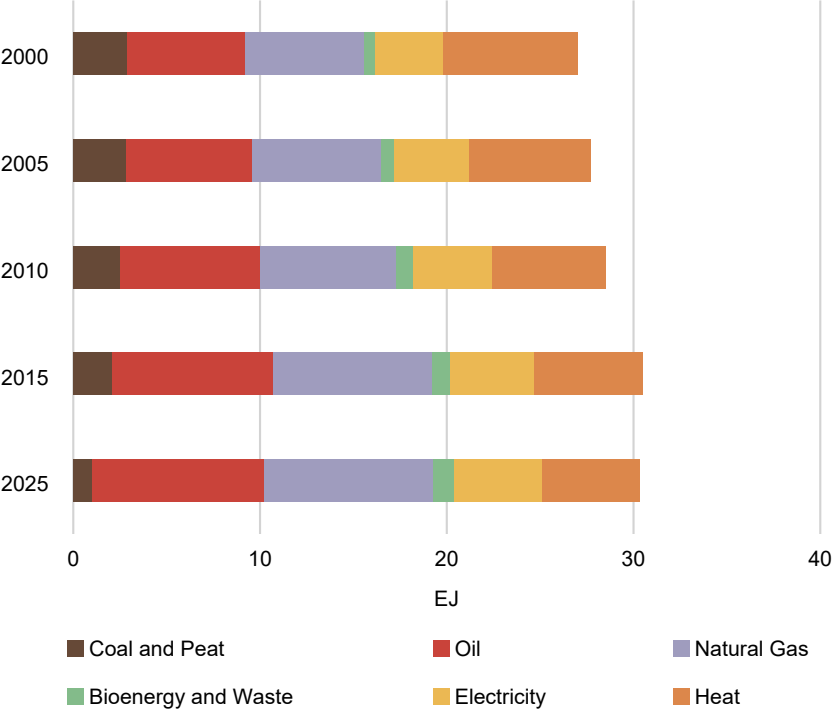
of electricity produced



20.5%

of electricity produced by nuclear

FIGURE 27. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE
IN THE EASTERN EUROPE REGION



Final Energy Consumption

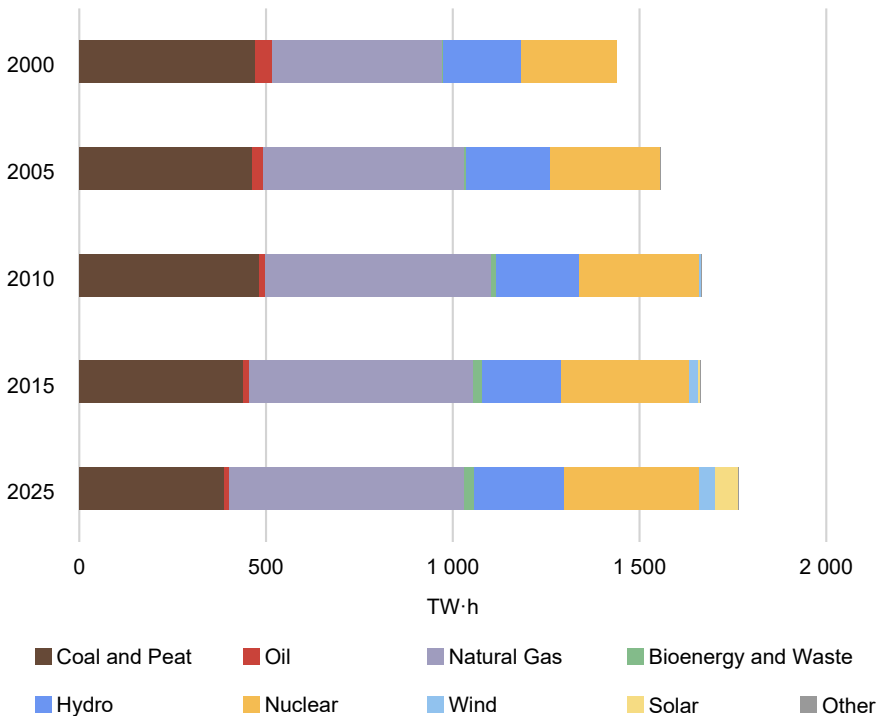
The share of electricity in final energy consumption was approximately 16% in 2025, an increase from 13% in 2000.

Fossil fuels accounted for 64% of final energy consumption in 2025, an increase from 58% in 2000. Oil accounted for 30% in 2025, up from 23% in 2000. Natural gas's share was approximately 30% in 2025, an increase from 24% in 2000. Coal's share declined to 3% in 2025 from 11% in 2000.

Heat's share in final energy consumption was 17% in 2025, down from 27% in 2000.

Bioenergy and waste accounted for around 4% in 2025, an increase from 2% in 2000.

**FIGURE 28. ELECTRICITY PRODUCTION BY ENERGY SOURCE
IN THE EASTERN EUROPE REGION**



Electricity Production

The share of nuclear electricity increased to about 21% in 2025 from 18% in 2000.

Fossil fuels accounted for approximately 60% of electricity production in 2025, a decline from 70% in 2000. Coal's share declined to around 22% in 2025 from 33% in 2000. Natural gas's share increased slightly to about 36% in 2025 from 32% in 2000. Oil's share declined to 1% in 2025 from 3% in 2000.

Hydro accounted for 14% of electricity production in 2025, with its share having remained relatively stable since 2000.

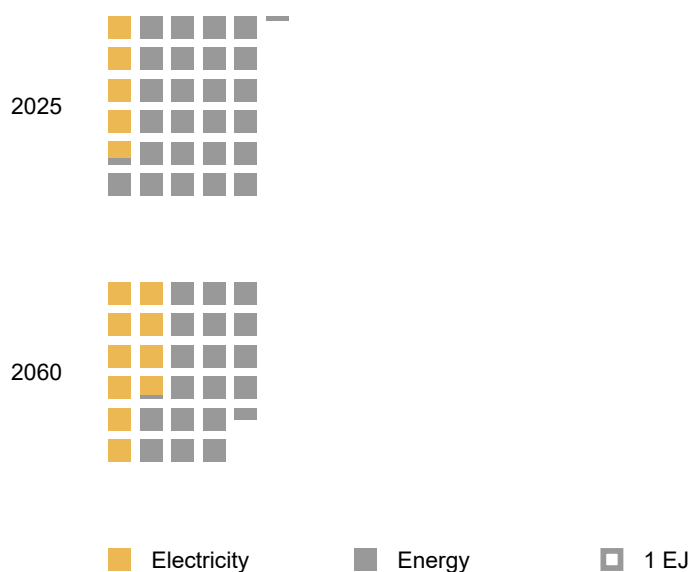
Wind and solar combined accounted for about 6% of electricity production in 2025, with wind at 2% and solar at 4%. These sources were negligible in 2000.

Bioenergy accounted for 2% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to decrease by 6% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 2.1% from 2025 to 2060, more than doubling over this period.
- By 2060, the share of electricity in final energy consumption is projected to increase from 15.6% in 2025 to 34.4% by 2060.

**FIGURE 29. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE EASTERN EUROPE REGION**



**TABLE 16. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE EASTERN EUROPE REGION, EJ**

Final Consumption	2025	2040	2050	2060
Energy	30.2	30.3	29.6	28.5
Electricity	4.7	8.2	9.1	9.8
<i>Electricity as % of Energy</i>	15.6%	27.1%	30.7%	34.4%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to more than double by 2060 compared with 2025 capacity.
- In the high case, nuclear electrical generating capacity is projected to increase by approximately 55% by 2040, to nearly double by 2050, and to more than double by 2060 compared with 2025 capacity. The share of nuclear in total electrical capacity is projected to slightly reduce relative to the 2025 level by 2060.
- In the low case, nuclear electrical generating capacity is projected to increase by approximately 7% by 2040 and to increase by around 40% by 2060 compared with 2025 capacity. The share of nuclear in total electrical capacity is projected to decline by almost 4 percentage points by 2060.

FIGURE 30. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE EASTERN EUROPE REGION

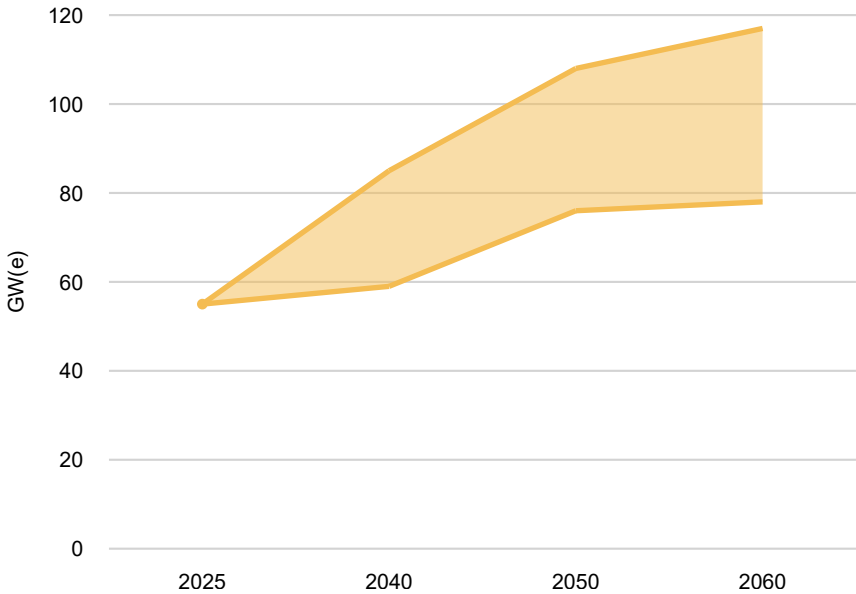


TABLE 17. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE EASTERN EUROPE REGION, GW(e)

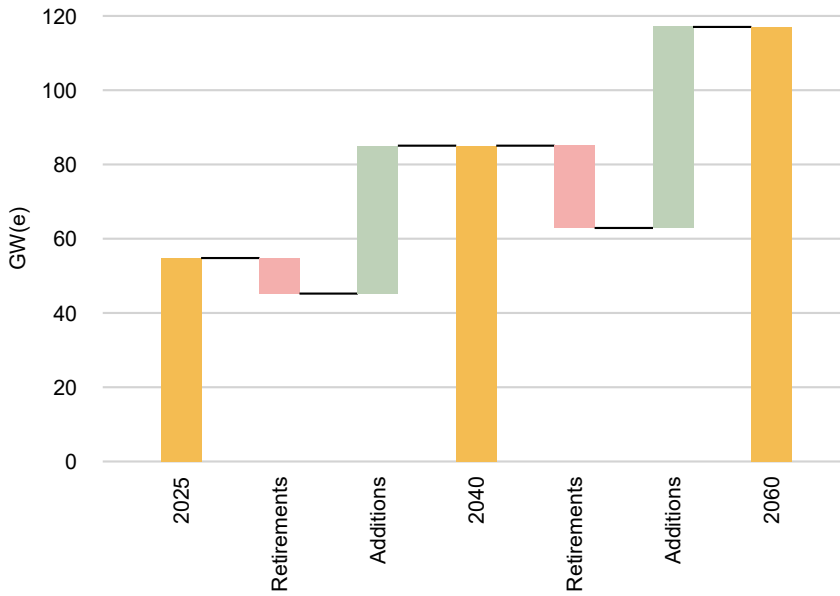
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	514	929	929	1 035	1 035	1 153	1 153
Nuclear	55	59	85	76	108	78	117
<i>Nuclear as % of Electrical Capacity</i>	10.7%	6.4%	9.1%	7.3%	10.4%	6.8%	10.1%

Reactor Retirements and Additions

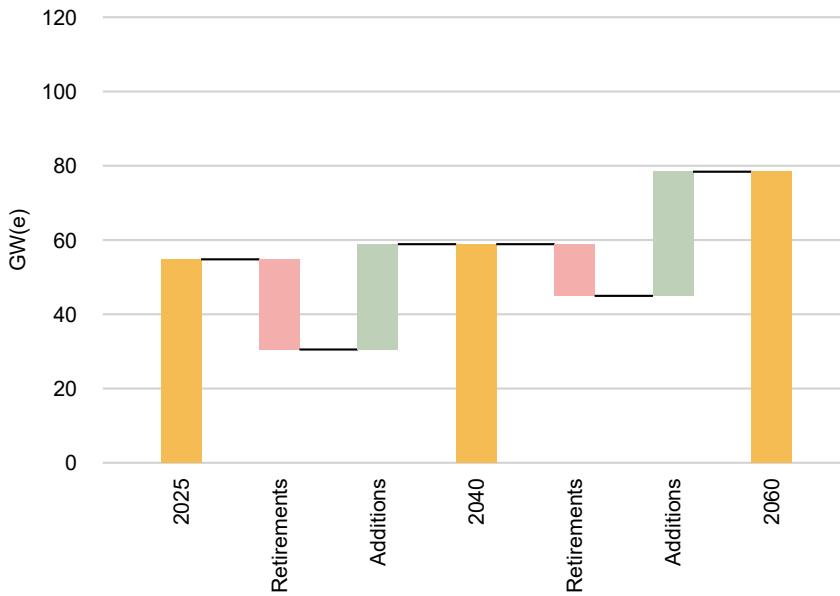
- The high case demonstrates net growth in nuclear capacity through new builds exceeding retirements. In this case, about 32 GW(e) of nuclear capacity is projected to be retired by 2060. Around 94 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 62 GW(e).
- In the low case, modest retirements are projected with additions exceeding retirements. Around 38 GW(e) of nuclear capacity is projected to be retired by 2060. About 62 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 24 GW(e) by 2060.

**FIGURE 31. NUCLEAR CAPACITY IN THE EASTERN EUROPE REGION:
ACTUAL, RETIREMENTS AND ADDITIONS**

HIGH CASE



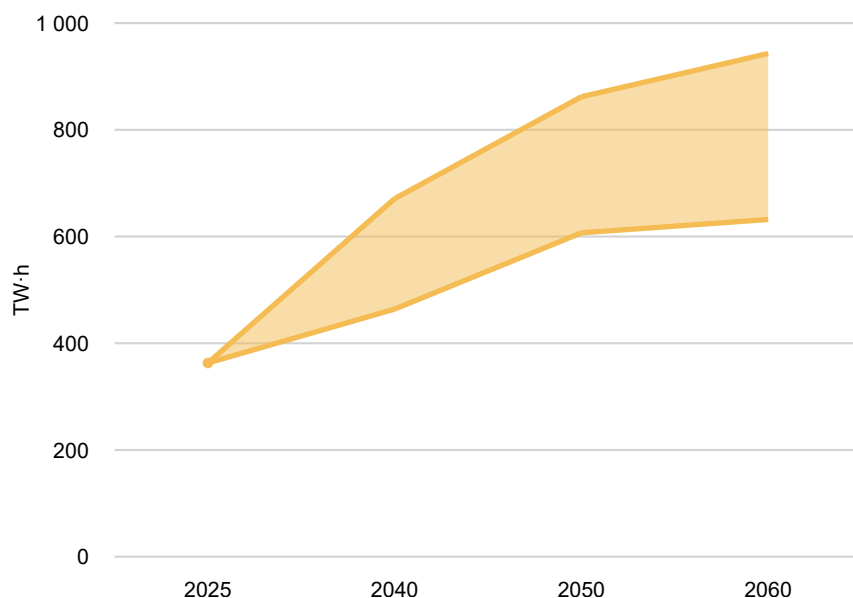
LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by 74% by 2040 and to more than double by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase about 2.5-fold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by more than 5 percentage points.
- In the low case, nuclear electricity production is projected to increase by almost 75% by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to decline by more than 3 percentage points by 2060.

**FIGURE 32. NUCLEAR ELECTRICITY PRODUCTION
IN THE EASTERN EUROPE REGION**



**TABLE 18. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE EASTERN EUROPE REGION, TW·h**

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 767	3 083	3 083	3 421	3 421	3 684	3 684
Nuclear	363	464	671	607	862	632	943
<i>Nuclear as % of Electricity Production</i>	20.5%	15.1%	21.8%	17.7%	25.2%	17.2%	25.6%

Africa

1 532

million people



Energy Overview 2025



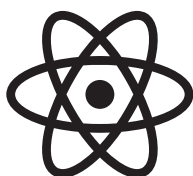
10.7%

of final energy consumed was electricity



1004 TW·h

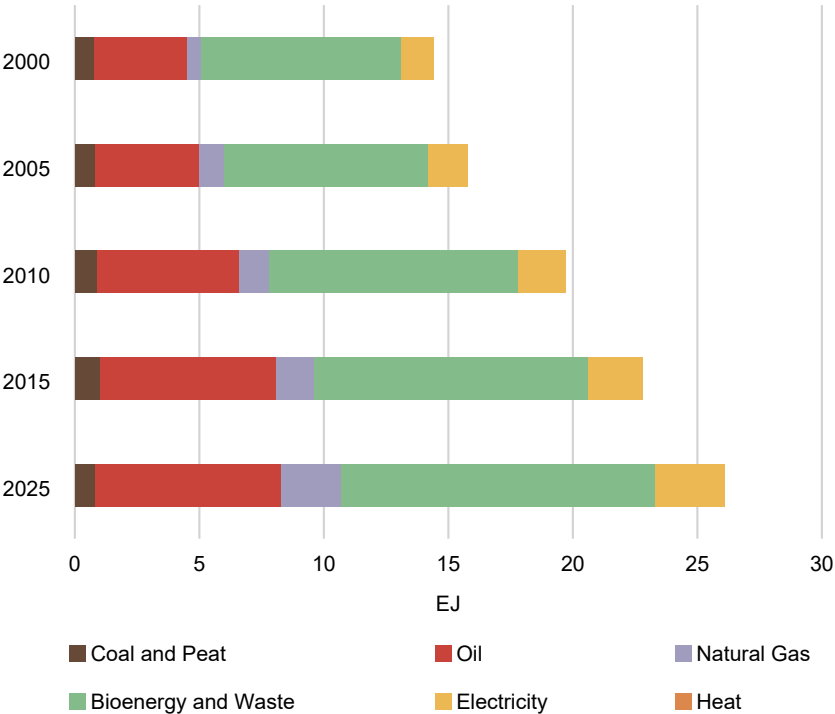
of electricity produced



1.0%

of electricity produced by nuclear

FIGURE 33. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE AFRICA REGION



Final Energy Consumption

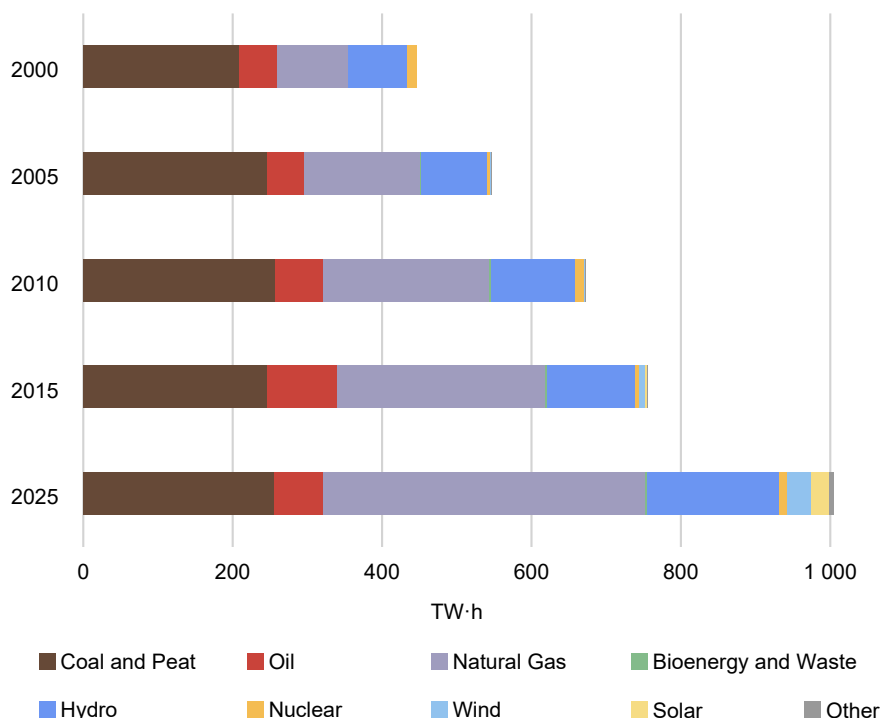
The share of electricity in final energy consumption has remained stable since 2000 and was approximately 11% in 2025.

Bioenergy and waste continues to be the largest energy source in the region, accounting for 48% in 2025. Its share has declined by 8 percentage points since 2000.

The combined share of fossil fuels was 41% in 2025, an increase from 36% in 2000. Oil accounted for about 29% in 2025, an increase of 3 percentage points since 2000. Natural gas's share increased to 9% in 2025 from 4% in 2000. Coal's share declined slightly from 6% in 2000 to 3% in 2025.

Heat's share in final energy consumption remained negligible in 2025.

FIGURE 34. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE AFRICA REGION



Electricity Production

The share of nuclear electricity was 1% in 2025, a decline from 3% in 2000.

Fossil fuels accounted for about 75% of electricity production in 2025, a decline from 80% in 2000. Coal's share declined to 26% in 2025 from 47% in 2000. Natural gas's share increased to 43% in 2025 from 21% in 2000. Oil's share fell to 6% in 2025 from 12% in 2000.

Hydro accounted for 18% of electricity production in 2025, with its share having remained relatively stable since 2000.

Wind and solar combined accounted for almost 6% of electricity production in 2025, with wind at 3.2% and solar at 2.5%. These sources were negligible in 2000.

Energy and Electricity Projections

- Final energy consumption is projected to more than double from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 6.5% from 2025 to 2060, with a nearly tenfold increase from its 2025 level by 2060.
- By 2060, the share of electricity in final energy consumption is projected to more than quadruple relative to its 2025 share.

FIGURE 35. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY IN THE AFRICA REGION

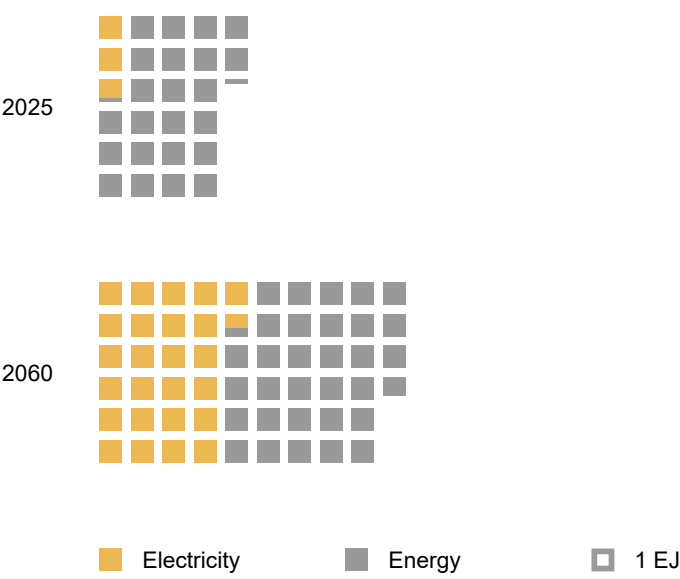


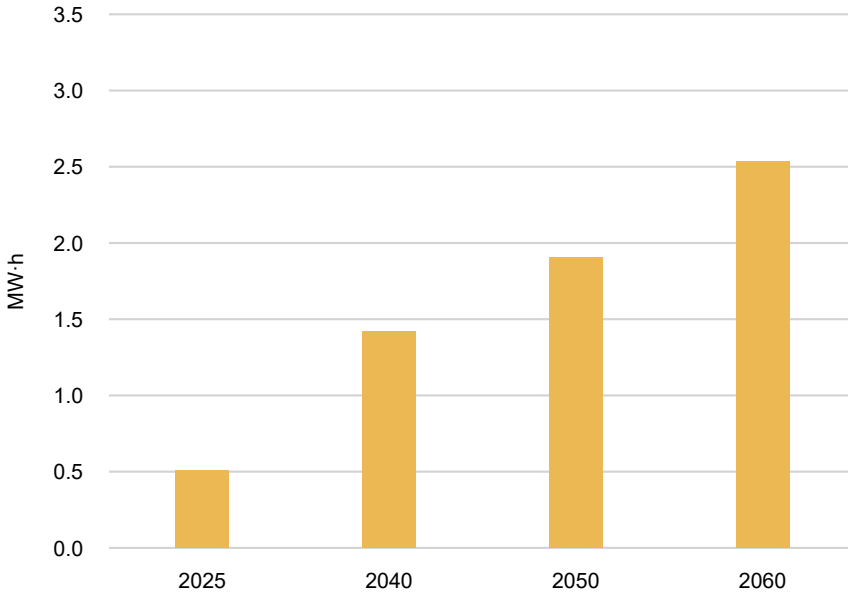
TABLE 19. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY IN THE AFRICA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	26.2	37.6	46.0	57.8
Electricity	2.8	10.6	16.8	25.6
Electricity as % of Energy	10.7%	28.2%	36.5%	44.3%

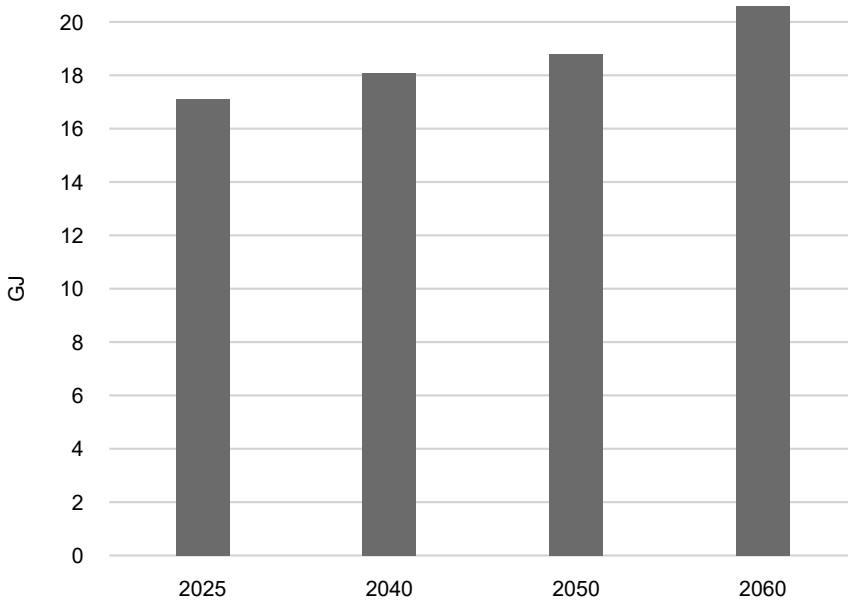
Per Capita Energy and Electricity

- Electricity consumption on a per capita basis is projected to increase fivefold from about 0.5 MW·h per person in 2025 to about 2.5 MW·h per person in 2060.
- By 2060 per capita final energy consumption in the Africa region is projected to increase slightly from about 17 GJ per person to more than 20 GJ per person.

**FIGURE 36. PER CAPITA ELECTRICITY CONSUMPTION
IN THE AFRICA REGION**



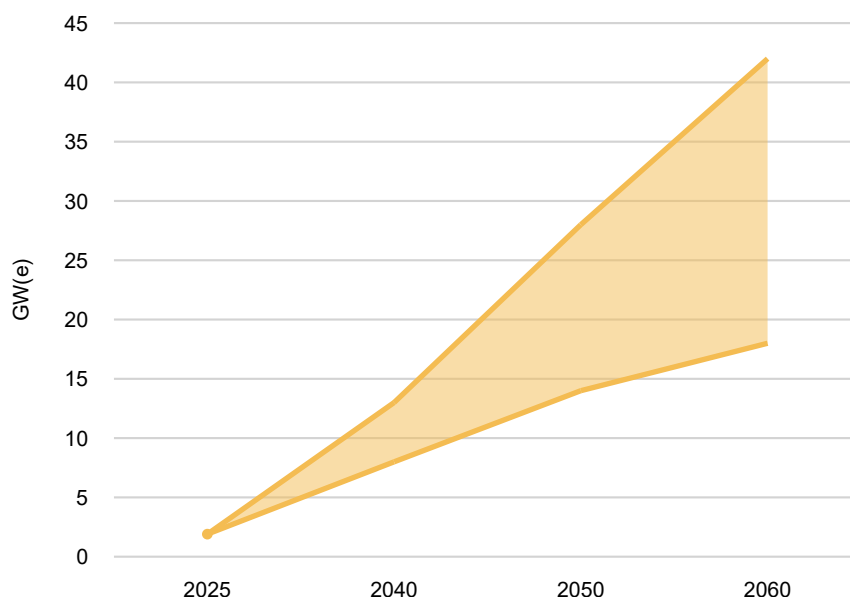
**FIGURE 37. PER CAPITA FINAL ENERGY CONSUMPTION
IN THE AFRICA REGION**



Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to almost quadruple by 2040 and increase approximately tenfold by 2060 relative to 2025 capacity.
- In the high case, nuclear electrical generating capacity is projected to grow almost sevenfold by 2040, and to increase 22 times the 2025 capacity by 2060. The share of nuclear in total electrical generating capacity is projected to almost double by 2060.
- In the low case, nuclear electrical generating capacity is projected to more than quadruple by 2040, to increase about sevenfold by 2050, and to increase by almost tenfold by 2060 compared with 2025 capacity. The share of nuclear in total electrical generating capacity is projected to remain approximately stable through to 2060.

**FIGURE 38. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE AFRICA REGION**



**TABLE 20. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE AFRICA REGION, GW(e)**

Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	288	1 118	1 118	1 932	1 932	3 160	3 160
Nuclear	1.9	8	13	14	28	18	42
<i>Nuclear as % of Electrical Capacity</i>	0.7%	0.7%	1.2%	0.7%	1.4%	0.6%	1.3%

Electricity and Nuclear Production Projections

- Total electricity production is projected to almost quadruple by 2040 and increase ninefold by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase 34-fold by 2060 relative to the 2025 level. The share of nuclear in total electricity production is projected to increase by almost 3 percentage points.
- In the low case, nuclear electricity production is projected to increase 14-fold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by 0.5 percentage points by 2060.

FIGURE 39. NUCLEAR ELECTRICITY PRODUCTION IN THE AFRICA REGION

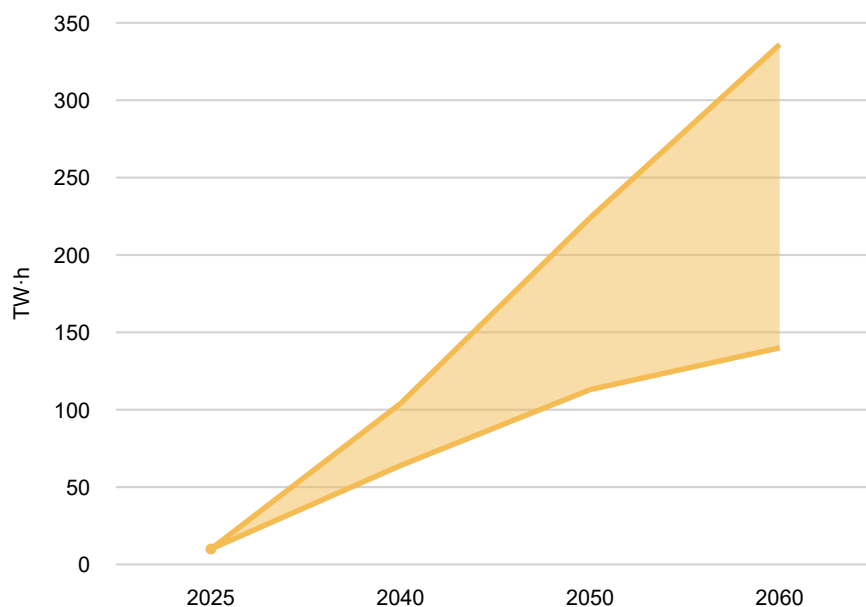


TABLE 21. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION IN THE AFRICA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 004	3 801	3 801	6 024	6 024	9 179	9 179
Nuclear	10	64	104	113	224	140	336
<i>Nuclear as % of Electricity Production</i>	<i>1.0%</i>	<i>1.7%</i>	<i>2.7%</i>	<i>1.9%</i>	<i>3.7%</i>	<i>1.5%</i>	<i>3.7%</i>

Western Asia

312

million people



Energy Overview 2025



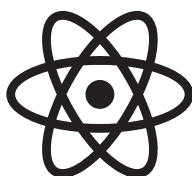
19.3%

of final energy consumed was electricity



1 659 TW·h

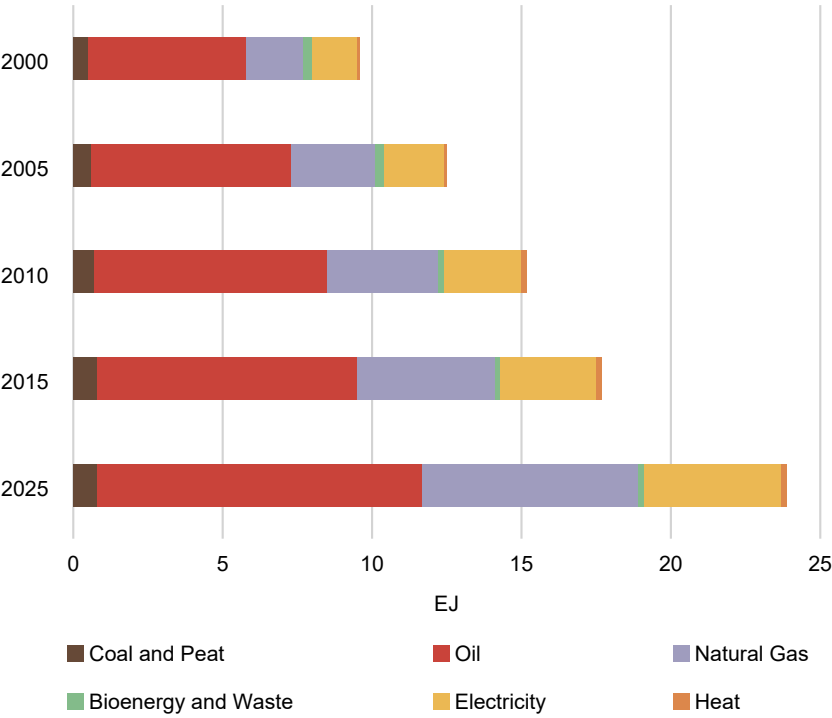
of electricity produced



2.5%

of electricity produced by nuclear

FIGURE 40. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE
IN THE WESTERN ASIA REGION



Final Energy Consumption

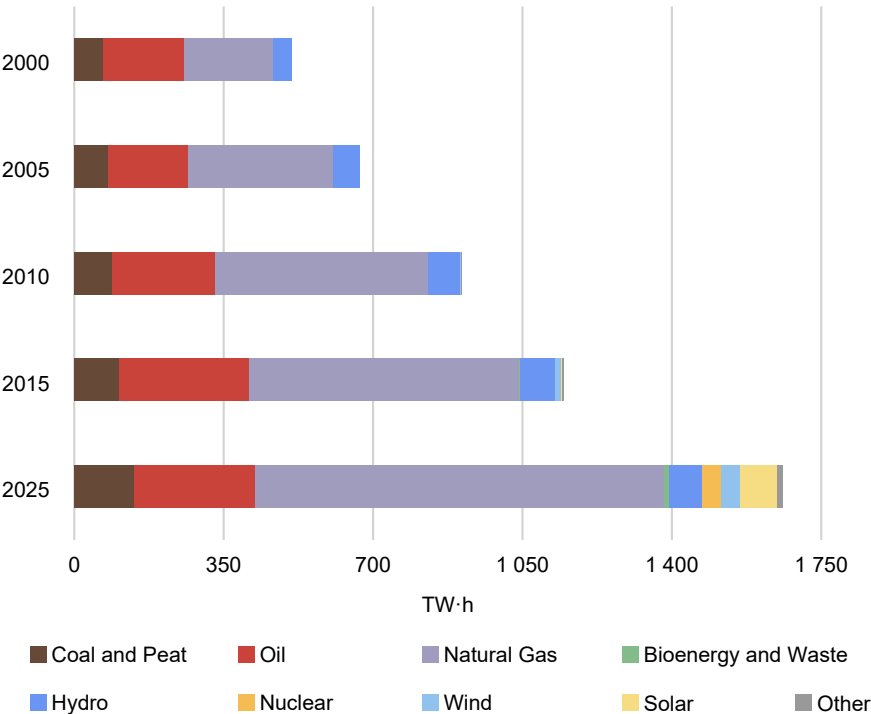
The share of electricity in final energy consumption was about 19% in 2025, a slight increase since 2000, when it was 16%.

Fossil fuels have continued to dominate final energy consumption, accounting for almost 80% in 2025, with their share remaining relatively stable since 2000. Oil accounted for 46% in 2025, declining from 55% in 2000. Natural gas’s share increased to approximately 30% in 2025 from 20% in 2000. Coal’s share was about 3% in 2025, a decrease from 5% in 2000.

Bioenergy and waste accounted for less than 1% in 2025, declining from 3% in 2000.

Heat’s share in final energy consumption remained at about 1% in 2025.

FIGURE 41. ELECTRICITY PRODUCTION BY ENERGY SOURCE
IN THE WESTERN ASIA REGION



Electricity Production

The share of nuclear electricity was almost 3% in 2025. Nuclear was not a source of electricity in 2000.

Fossil fuels continued to dominate electricity production, accounting for around 80% in 2025, a slight decline from 90% in 2000. Oil remains an important fuel for electricity production in the region, accounting for 17% in 2025, a decline from 37% in 2000. Natural gas's share increased to around 60% in 2025 from 40% in 2000, making it the dominant fossil fuel for electricity generation. Coal's share declined to 8% in 2025 from 13% in 2000.

Hydro accounted for around 5% of electricity production in 2025, a decline from 9% in 2000.

Wind and solar combined accounted for 8% of electricity production in 2025, with wind at 3% and solar at 5%. These sources were negligible in 2000.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 37% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 3.2% from 2025 to 2060, almost tripling over this period.
- By 2060, the share of electricity in final energy consumption is projected to more than double relative to its 2025 share.

FIGURE 42. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE WESTERN ASIA REGION

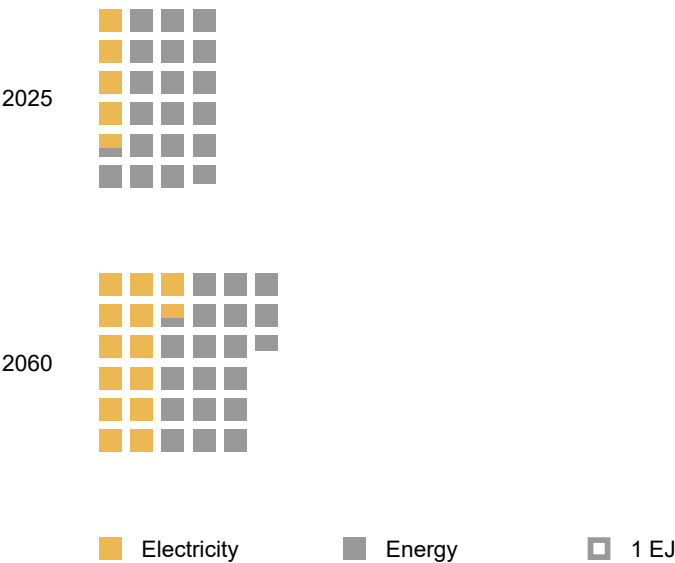


TABLE 22. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE WESTERN ASIA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	23.8	31.1	32.9	32.7
Electricity	4.6	9.8	11.9	13.6
<i>Electricity as % of Energy</i>	19.3%	31.5%	36.2%	41.6%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to more than triple by 2050 and to almost quadruple by 2060 compared with 2025 capacity.
- In the high case, nuclear electrical generating capacity is projected to more than triple by 2040, to increase by more than sixfold by 2050, and to increase to approximately seven times the 2025 capacity by 2060. The share of nuclear in total electrical generating capacity is projected to increase by more than 1 percentage point by 2060.
- In the low case, nuclear electrical generating capacity is projected to increase by approximately 70% by 2040, to almost triple by 2050 and to more than triple by 2060. The share of nuclear in total electrical generating capacity is projected to decline slightly by 2060 relative to the 2025 share.

FIGURE 43. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE WESTERN ASIA REGION

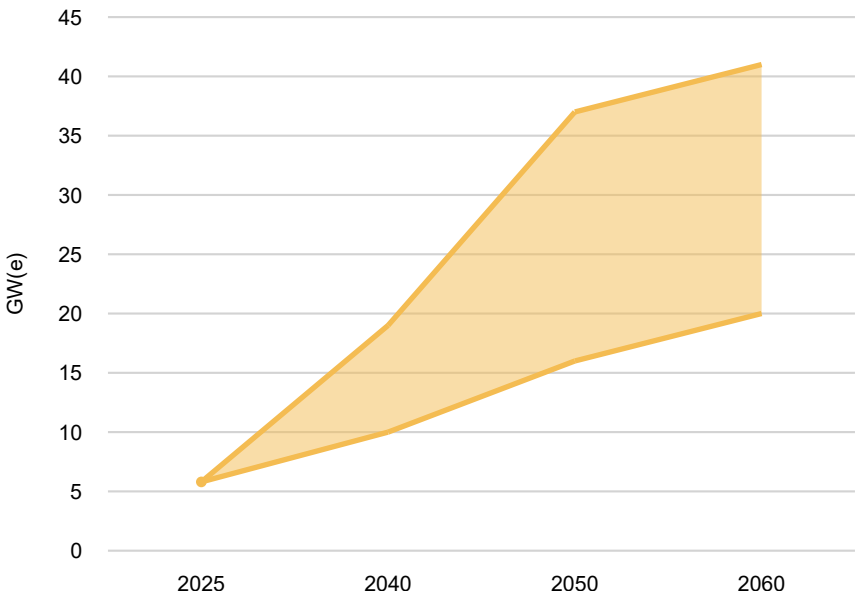


TABLE 23. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE WESTERN ASIA REGION, GW(e)

Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	423	1 077	1 077	1 374	1 374	1 663	1 663
Nuclear	5.8	10	19	16	37	20	41
<i>Nuclear as % of Electrical Capacity</i>	1.4%	0.9%	1.8%	1.2%	2.7%	1.2%	2.5%

Electricity and Nuclear Production Projections

- Total electricity production is projected to more than double by 2040 and to almost triple by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase almost eightfold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by more than 4 percentage points.
- In the low case, nuclear electricity production is projected to almost quadruple by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by 0.8 percentage points by 2060.

FIGURE 44. NUCLEAR ELECTRICITY PRODUCTION
IN THE WESTERN ASIA REGION

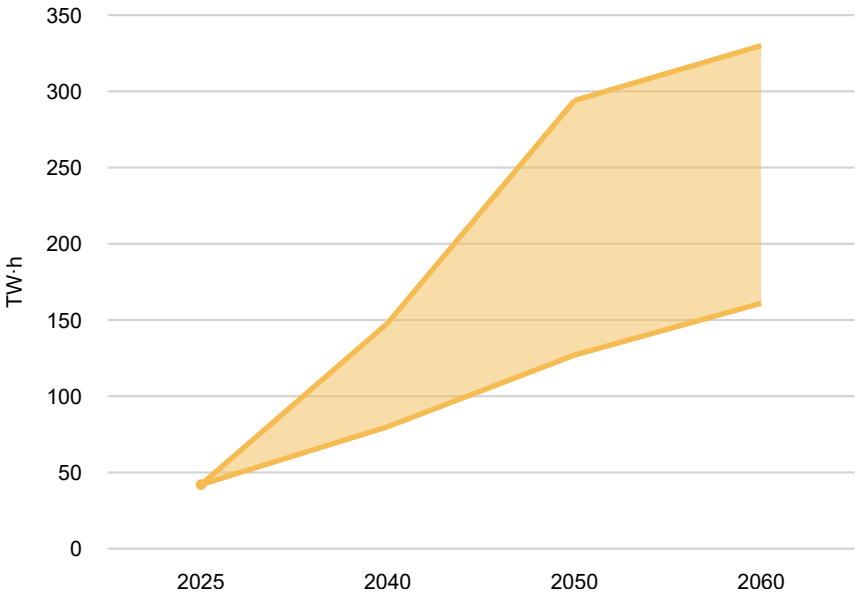


TABLE 24. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE WESTERN ASIA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 659	3 534	3 534	4 292	4 292	4 905	4 905
Nuclear	42	80	148	127	294	161	330
Nuclear as % of Electricity Production	2.5%	2.3%	4.2%	3.0%	6.8%	3.3%	6.7%

Southern Asia

2 075

million people



Energy Overview 2025



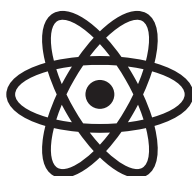
14.8%

of final energy consumed was electricity



2 872 TW·h

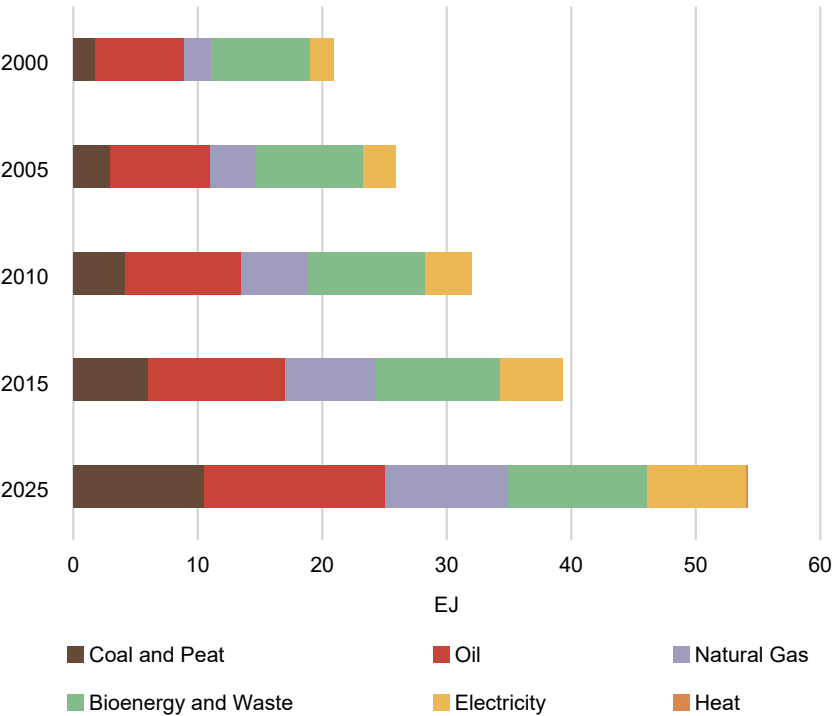
of electricity produced



2.7%

of electricity produced by nuclear

FIGURE 45. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE SOUTHERN ASIA REGION



Final Energy Consumption

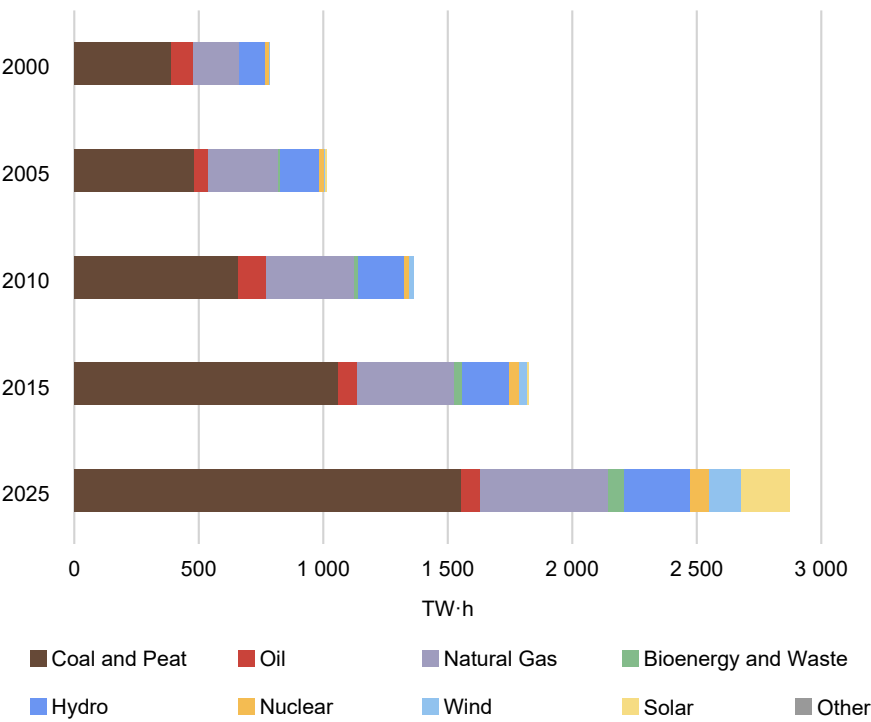
In 2025, electricity is estimated to have accounted for almost 15% of final energy consumption, an increase from 9% in 2000.

The combined share of fossil fuels increased to around 65% in 2025 from 53% in 2000. Coal's share increased to about 20% in 2025 from 9% in 2000. Oil accounted for 27% in 2025, with its share having remained relatively stable in recent years. Natural gas's share was 18% in 2025, an increase from 11% in 2000.

Bioenergy and waste accounted for around 20% in 2025, a decline of 18 percentage points since 2000.

Heat's share in final energy consumption remained negligible in 2025.

FIGURE 46. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE SOUTHERN ASIA REGION



Electricity Production

The share of nuclear electricity was almost 3% in 2025, a slight increase from 2% in 2000.

Fossil fuels accounted for approximately 75% of electricity production in 2025, a decline from 85% in 2000. Coal is the dominant fossil fuel, accounting for 54% of electricity production in 2025, a slight increase from 50% in 2000. Natural gas’s share declined to 18% in 2025 from 23% in 2000. Oil’s share declined to 3% in 2025 from 11% in 2000.

Hydro accounted for 9% of electricity production in 2025, a decline from 13% in 2000.

Wind and solar combined accounted for around 11% of electricity production in 2025, with wind at 4% and solar at 7%. These sources were negligible in 2000.

Bioenergy accounted for about 2% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 42% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 3.8% from 2025 to 2060, almost quadrupling by 2060.
- By 2060, the share of electricity in final energy consumption is projected to increase 2.7 times its 2025 share.

FIGURE 47. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE SOUTHERN ASIA REGION

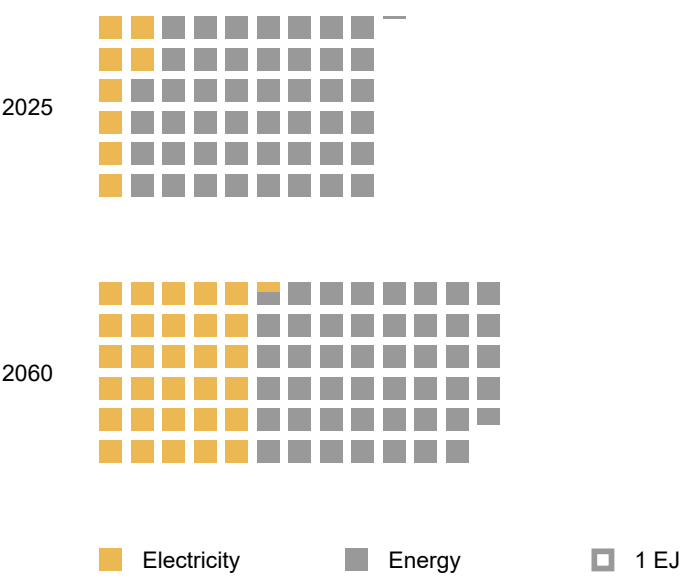


TABLE 25. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE SOUTHERN ASIA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	54.1	72.4	77.4	76.7
Electricity	8.0	20.4	26.4	30.4
<i>Electricity as % of Energy</i>	<i>14.8%</i>	<i>28.2%</i>	<i>34.1%</i>	<i>39.6%</i>

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to almost quadruple by 2050 and increase almost fivefold by 2060 compared with 2025 capacity.
- In the high case, nuclear electrical generating capacity is projected to almost quadruple by 2040, to increase more than sevenfold by 2050 and to increase to approximately 10 times the 2025 capacity by 2060. The share of nuclear in total electrical generating capacity is projected to more than double by 2060.
- In the low case, nuclear electrical generating capacity is projected to double by 2040 and to more than quadruple by 2060 compared with the 2025 capacity. The share of nuclear in total electrical generating capacity is projected to remain approximately stable to 2060.

FIGURE 48. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE SOUTHERN ASIA REGION

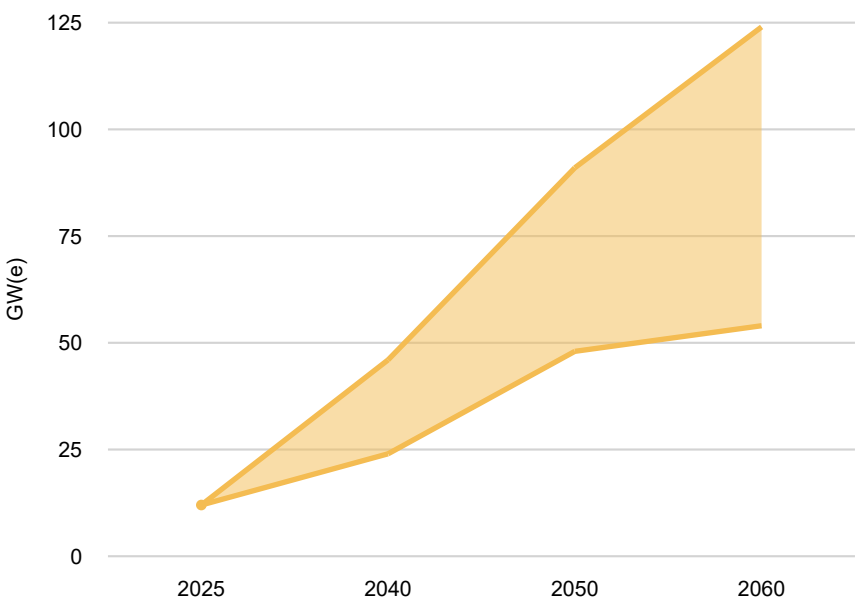


TABLE 26. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE SOUTHERN ASIA REGION, GW(e)

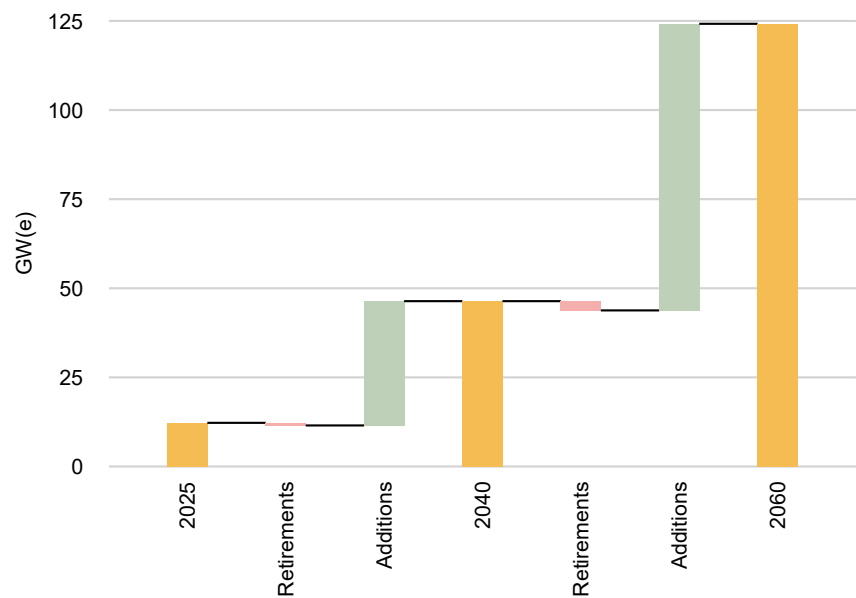
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	767	2 212	2 212	2 980	2 980	3 649	3 649
Nuclear	12	24	46	48	91	54	124
<i>Nuclear as % of Electrical Capacity</i>	1.6%	1.1%	2.1%	1.6%	3.1%	1.5%	3.4%

Reactor Retirements and Additions

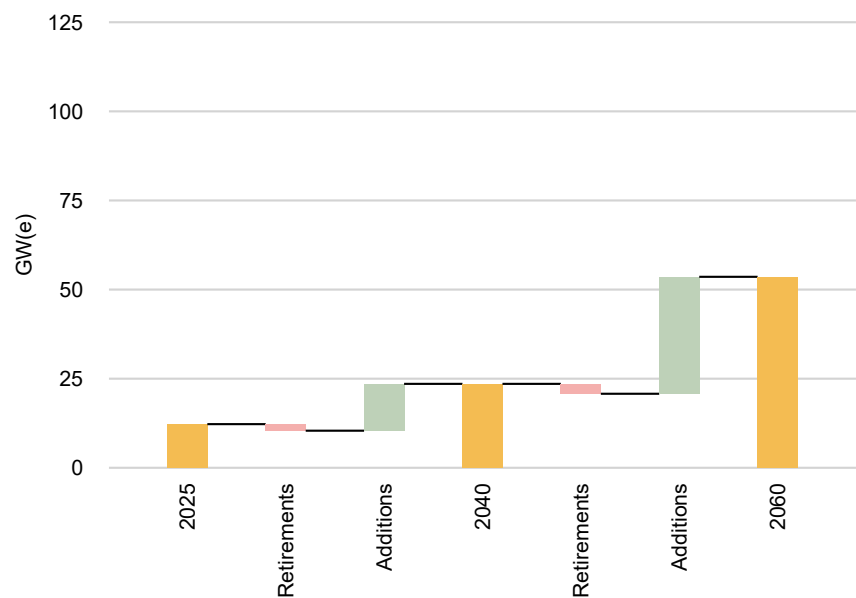
- The high case demonstrates the region's large scale expansion of nuclear capacity. In this case, around 3 GW(e) of nuclear capacity is projected to be retired by 2060. About 115 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 112 GW(e).
- In the low case, significant nuclear capacity growth is still projected. About 5 GW(e) of nuclear capacity is projected to be retired by 2060. Around 46 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 41 GW(e) by 2060.

FIGURE 49. NUCLEAR CAPACITY IN THE SOUTHERN ASIA REGION:
ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase more than 2.5-fold by 2040 and to almost quadruple by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase more than twelvefold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by 6.5 percentage points.
- In the low case, nuclear electricity production is projected to increase more than fivefold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by more than 1 percentage point by 2060.

FIGURE 50. NUCLEAR ELECTRICITY PRODUCTION
IN THE SOUTHERN ASIA REGION

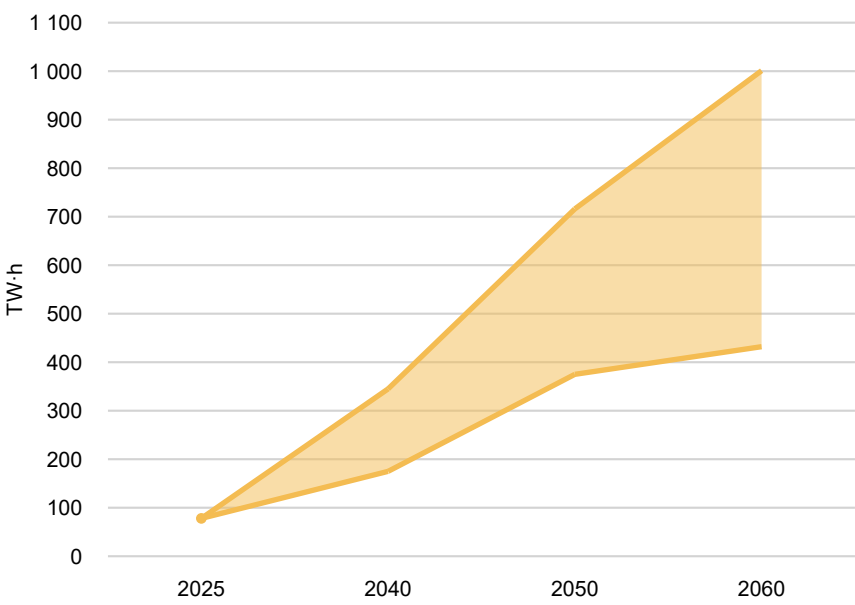


TABLE 27. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE SOUTHERN ASIA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	2 872	7 324	7 324	9 478	9 478	10 914	10 914
Nuclear	78	175	345	375	716	432	1 001
Nuclear as % of Electricity Production	2.7%	2.4%	4.7%	4.0%	7.6%	4.0%	9.2%

Central and Eastern Asia

1 737

million people



Energy Overview 2025



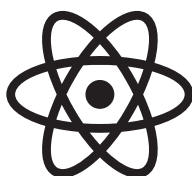
27.2%

of final energy consumed was electricity



12 641 TW·h

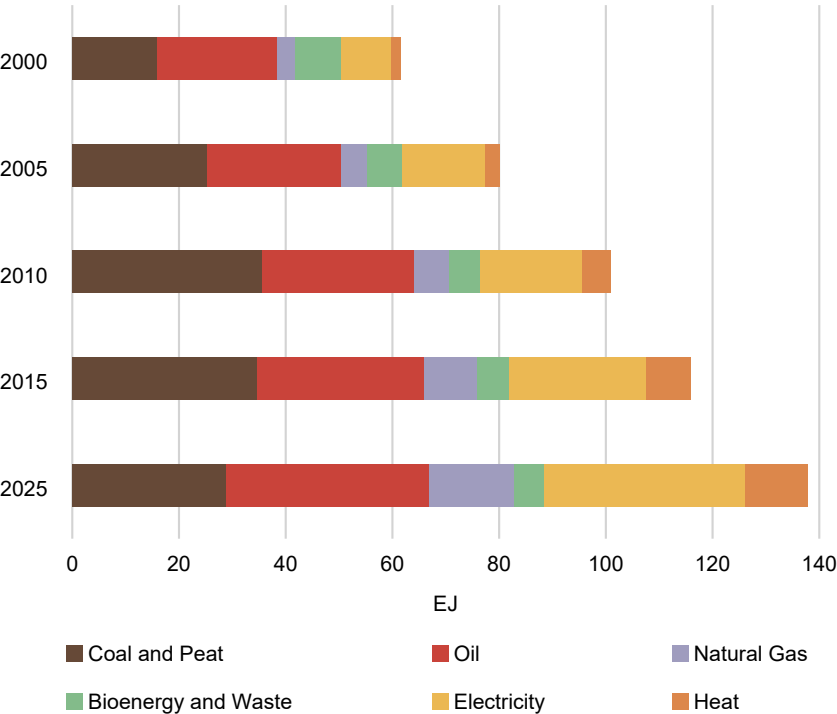
of electricity produced



5.6%

of electricity produced by nuclear

FIGURE 51. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA



Final Energy Consumption

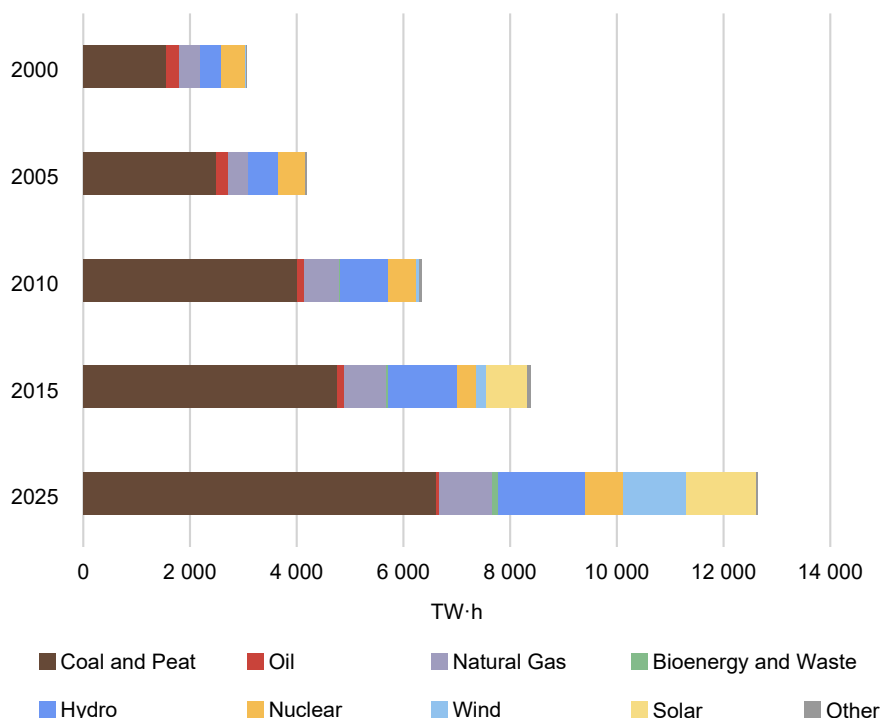
In 2025, electricity accounted for about 27% of final energy consumption, its share having almost doubled from 15% in 2000.

Fossil fuels accounted for 60% of final energy consumption in 2025, a decline from 68% in 2000. Coal's share declined to 21% in 2025 from 26% in 2000. Oil accounted for almost 28% in 2025, with its share having remained relatively stable in recent years. Natural gas's share increased to 11% in 2025 from 6% in 2000.

Bioenergy and waste accounted for about 4% in 2025, a decline from 14% in 2000.

Heat's share in final energy consumption was estimated as 9% in 2025, an increase from 3% in 2000.

**FIGURE 52. ELECTRICITY PRODUCTION BY ENERGY SOURCE
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA**



Electricity Production

The share of nuclear electricity was about 6% in 2025, a decline from 15% in 2000.

Fossil fuels accounted for approximately 60% of electricity production in 2025, a decline from about 70% in 2000.

Coal remains the largest fossil fuel source, accounting for around 50% of electricity production in 2025, having remained relatively stable since 2000. Natural gas's share decreased to 8% in 2025 from 12% in 2000. Oil's share declined to about 0.4% in 2025 from 8% in 2000.

Hydro accounted for 13% of electricity production in 2025, having remained approximately stable since 2000.

Wind and solar combined accounted for around 20% of electricity production in 2025, a substantial increase from negligible levels in 2000. Wind was about 9% and solar 11% in 2025.

Bioenergy accounted for 1% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 11% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 2.1% from 2025 to 2060. Electricity demand is projected to approximately double by 2060.
- By 2060, the share of electricity in final energy consumption is projected to almost double relative to its 2025 share.

FIGURE 53. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA

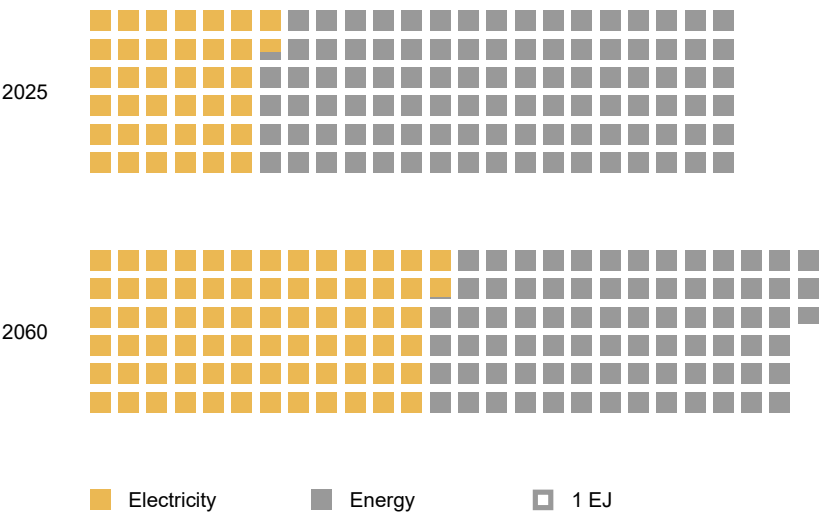


TABLE 28. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA, EJ

Final Consumption	2025	2040	2050	2060
Energy	138.0	153.6	156.0	152.8
Electricity	37.6	62.9	70.4	73.9
<i>Electricity as % of Energy</i>	27.2%	41.0%	45.1%	48.4%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to more than double by 2060.
- In the high case, nuclear electrical generating capacity is projected to more than double by 2040 and to more than triple by 2060. The share of nuclear in total electrical generating capacity is projected to increase 1.7 percentage points by 2060.
- In the low case, nuclear electrical generating capacity is projected to nearly double by 2040 and to more than double by 2060 compared with the 2025 capacity. The share of nuclear in total electrical generating capacity is projected to increase by 0.4 percentage points by 2060.

FIGURE 54. NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA

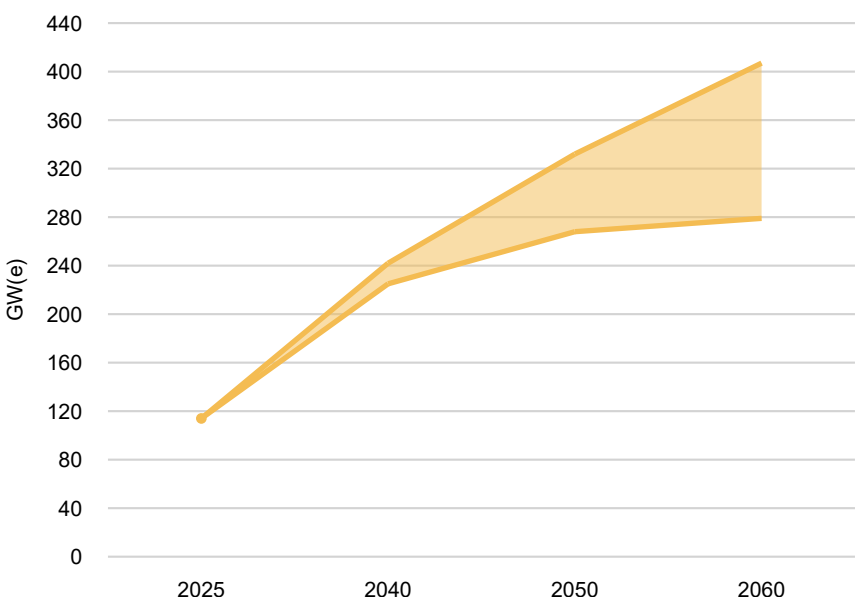


TABLE 29. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA, GW(e)

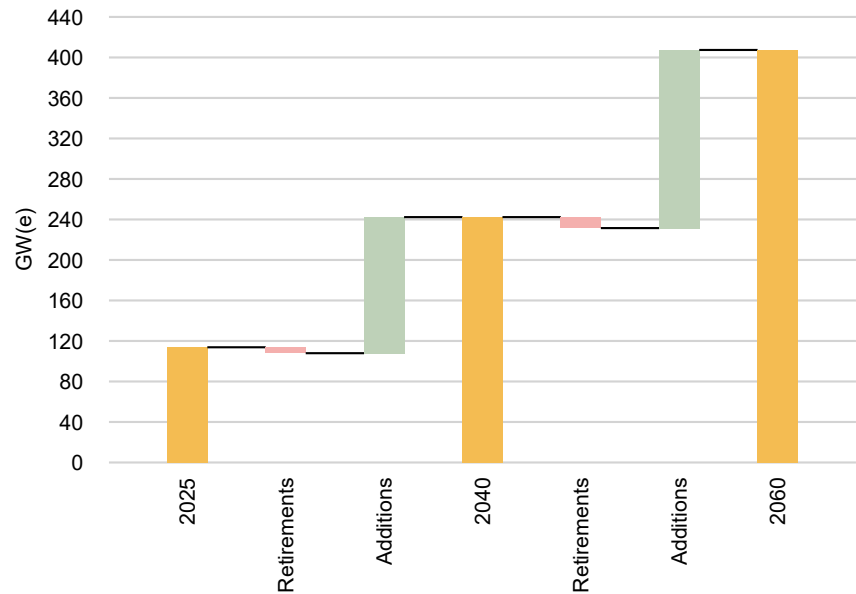
Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	4 508	7 251	7 251	8 743	8 743	9 696	9 696
Nuclear	114	225	242	268	332	279	407
<i>Nuclear as % of Electrical Capacity</i>	2.5%	3.1%	3.3%	3.1%	3.8%	2.9%	4.2%

Reactor Retirements and Additions

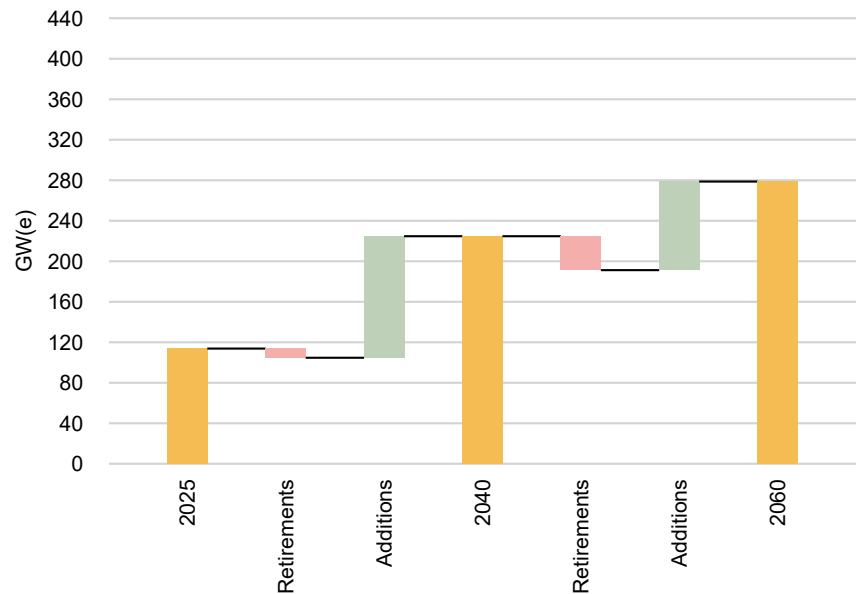
- The high case shows the region leading in new nuclear capacity additions. In this case, around 17 GW(e) of nuclear capacity is projected to be retired by 2060. About 310 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 293 GW(e).
- In the low case, substantial net growth in nuclear capacity is still projected. About 43 GW(e) of nuclear capacity is projected to be retired by 2060. Around 208 GW(e) of nuclear capacity is projected to be added by 2060, resulting in a net capacity addition of approximately 165 GW(e) by 2060.

FIGURE 55. NUCLEAR CAPACITY IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA: ACTUAL, RETIREMENTS AND ADDITIONS

HIGH CASE



LOW CASE



Electricity and Nuclear Production Projections

- Total electricity production is projected to increase by almost 70% by 2040 and to approximately double by 2060 compared with 2025 production.
- In the high case, nuclear electricity production is projected to increase almost fivefold by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to more than double by 2060.
- In the low case, nuclear electricity production is projected to more than triple by 2060 compared with the 2025 level. The share of nuclear in total electricity production is projected to increase by 3.6 percentage points by 2060.

FIGURE 56. NUCLEAR ELECTRICITY PRODUCTION
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA

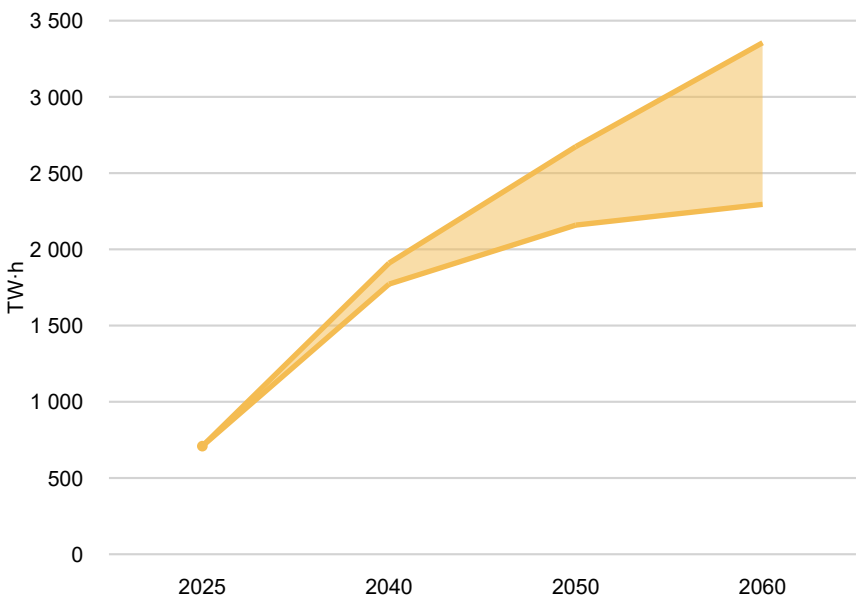


TABLE 30. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE COMBINED REGIONS OF CENTRAL AND EASTERN ASIA, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	12 641	21 147	21 147	23 668	23 668	24 845	24 845
Nuclear	709	1 772	1 910	2 159	2 674	2 295	3 355
Nuclear as % of Electricity Production	5.6%	8.4%	9.0%	9.1%	11.3%	9.2%	13.5%

South-eastern Asia

698

million people



Energy Overview 2025



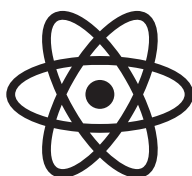
19.4%

of final energy consumed was electricity



1 486 TW·h

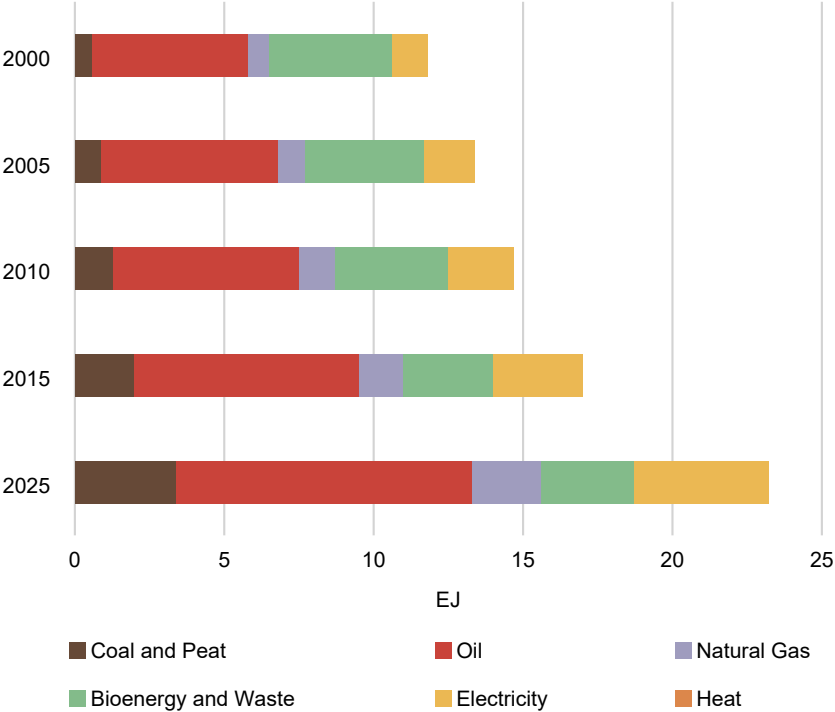
of electricity produced



0%

of electricity produced by nuclear

FIGURE 57. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE SOUTH-EASTERN ASIA REGION



Final Energy Consumption

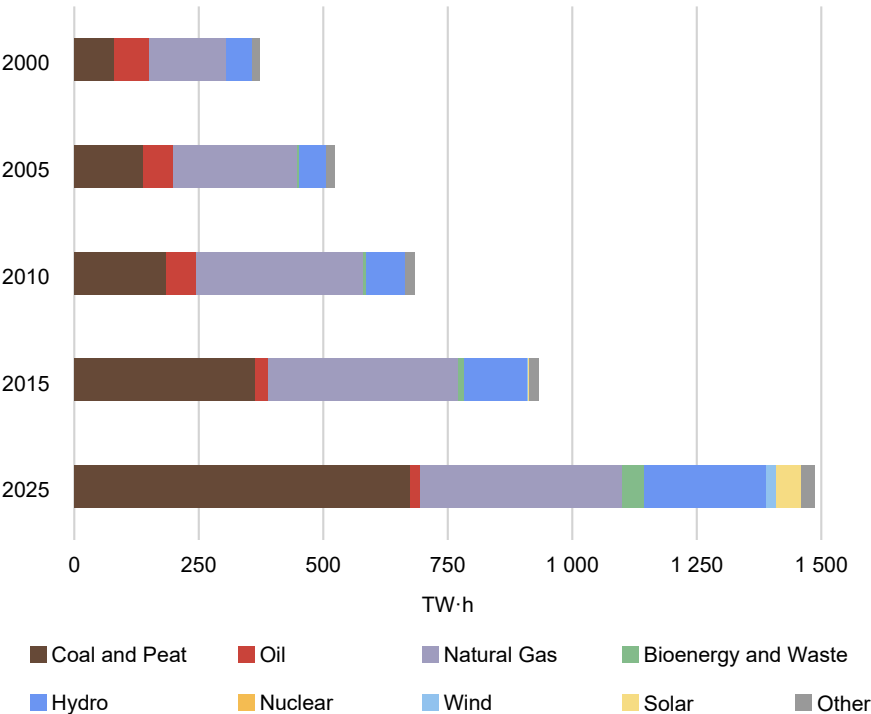
At approximately 19% in 2025, electricity’s share in final energy consumption has nearly doubled since 2000 when it was around 10%.

The combined share of fossil fuels increased substantially, accounting for around 67% in 2025 compared with around 55% in 2000. Oil has the largest share among fossil fuels at 43% in 2025, having remained relatively stable since 2000. Coal’s share increased to 15% in 2025 from 5% in 2000. Natural gas accounted for about 10% in 2025, an increase from 5% in 2000.

Bioenergy and waste accounted for around 13% in 2025, a decline from 35% in 2000.

Heat’s share in final energy consumption remained negligible in 2025.

FIGURE 58. ELECTRICITY PRODUCTION BY ENERGY SOURCE
IN THE SOUTH-EASTERN ASIA REGION



Electricity Production

Nuclear does not currently contribute to electricity production in this region.

Fossil fuels accounted for approximately 74% of electricity production in 2025, a decline from 82% in 2000.

Coal's share increased to 45% in 2025 from about 20% in 2000. Natural gas's share declined to 27% in 2025 from 40% in 2000. Oil's share declined to approximately 1% in 2025 from 20% in 2000.

Hydro accounted for 17% of electricity production in 2025, with its share increased by a few percentage points since 2000.

Wind and solar combined accounted for almost 5% of electricity production in 2025, with wind at 1.3% and solar at 3.4%. These sources were negligible in 2000.

Bioenergy accounted for about 3% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to increase by about 44% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of 3.6% from 2025 to 2060, more than tripling over this period.
- By 2060, the share of electricity in final energy consumption is projected to more than double from its 2025 share.

FIGURE 59. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE SOUTH-EASTERN ASIA REGION

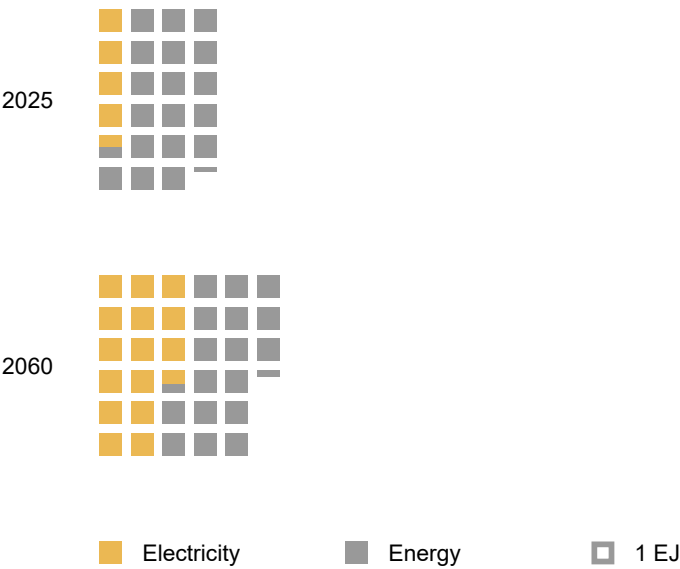


TABLE 31. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE SOUTH-EASTERN ASIA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	23.2	31.1	33.2	33.3
Electricity	4.5	10.6	13.5	15.6
Electricity as % of Energy	19.4%	34.1%	40.7%	46.8%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to quadruple by 2050 and increase almost fivefold by 2060 compared with the 2025 capacity.
- Total electricity production is projected to triple by 2050 and to increase about 3.5 times 2025 production levels by 2060. In the high case, the share of nuclear in total electricity production is projected to reach almost 5%. In the low case, the share of nuclear in total electricity production is projected to reach 1.3%.
- In the high case, nuclear reactors are projected to be operational by 2036, and by 2060 nuclear electrical generating capacity is projected to be about 32 GW(e). The share of nuclear in total electrical generating capacity is projected to be 1.8% by 2060.
- In the low case, nuclear reactors are projected to be operational by 2038, and by 2060 nuclear electrical generating capacity is projected to be about 8 GW(e). The share of nuclear in total electrical generating capacity is projected to be 0.5% by 2060.

TABLE 32. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY IN THE SOUTH-EASTERN ASIA REGION, GW(e)

Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	355	1 047	1 047	1 425	1 425	1 745	1 745
Nuclear	0.0	2	3	6	22	8	32
<i>Nuclear as % of Electrical Capacity</i>	<i>0.0%</i>	<i>0.2%</i>	<i>0.3%</i>	<i>0.4%</i>	<i>1.5%</i>	<i>0.5%</i>	<i>1.8%</i>

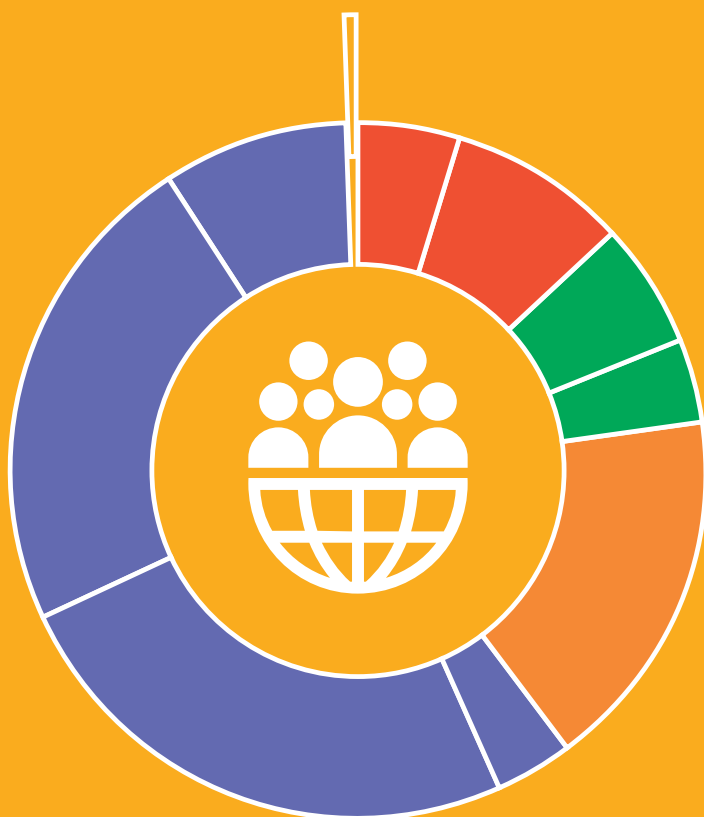
TABLE 33. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION IN THE SOUTH-EASTERN ASIA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	1 486	3 500	3 500	4 458	4 458	5 151	5 151
Nuclear	0	19	26	51	172	67	251
<i>Nuclear as % of Electricity Production</i>	<i>0.0%</i>	<i>0.5%</i>	<i>0.7%</i>	<i>1.1%</i>	<i>3.9%</i>	<i>1.3%</i>	<i>4.9%</i>

Oceania

46

million people



Energy Overview 2025



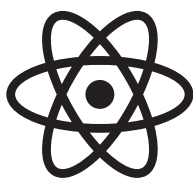
24.4%

of final energy consumed was electricity



332 TW·h

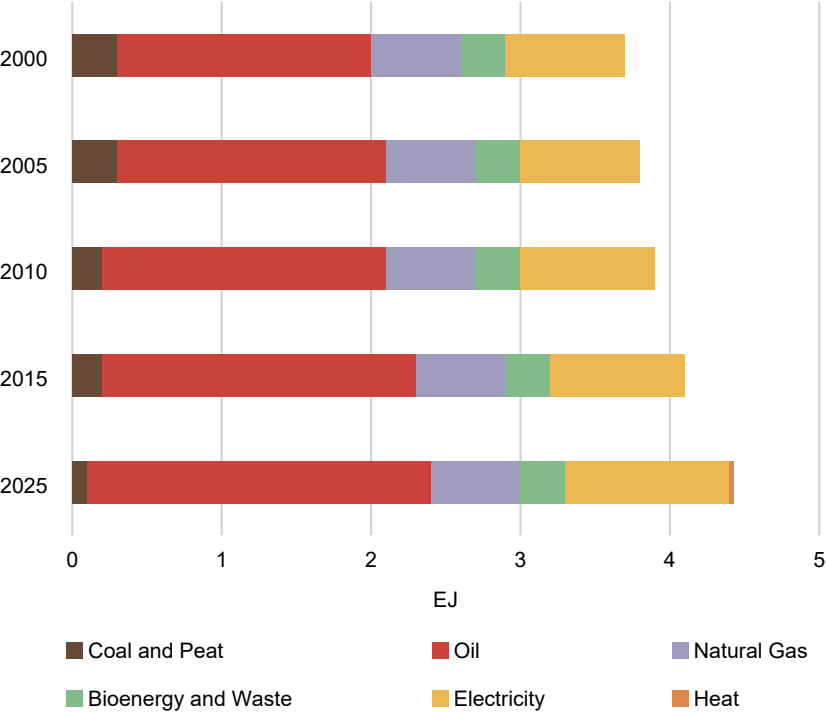
of electricity produced



0%

of electricity produced by nuclear

FIGURE 60. FINAL ENERGY CONSUMPTION BY ENERGY SOURCE IN THE OCEANIA REGION



Final Energy Consumption

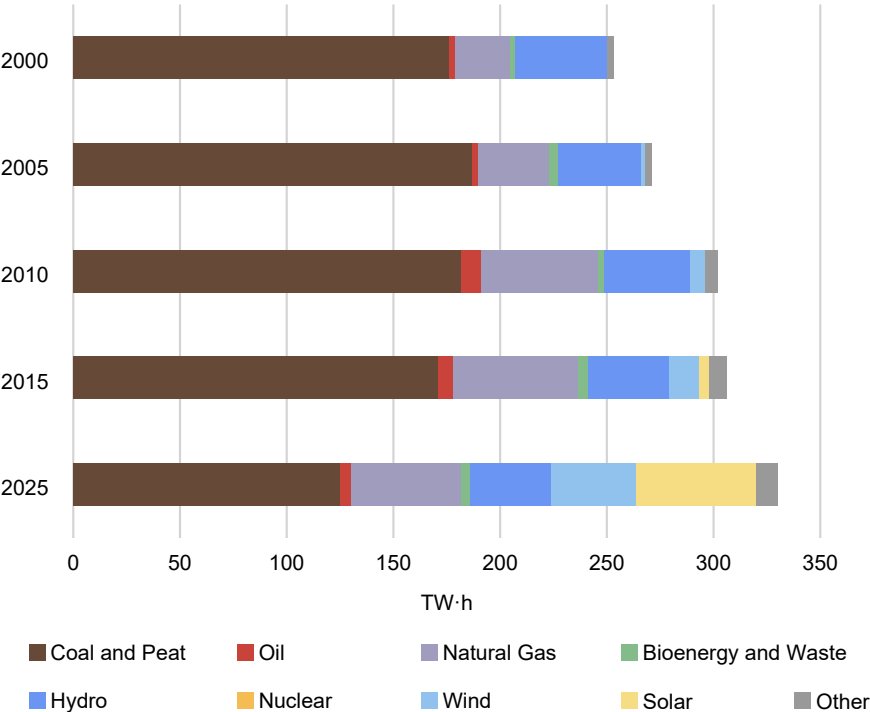
In 2025, electricity accounted for 24% of final energy consumption, an increase of a few percentage points since 2000.

Fossil fuels continued to dominate final energy consumption, accounting for 68% in 2025, a slight decline from 72% in 2000. Oil has the largest share among fossil fuels at about 51% in 2025, with its share having increased by 4 percentage points since 2000. Natural gas accounted for almost 14% in 2025, having declined from 17% in 2000. Coal’s share was around 3% in 2025, declining from 8% in 2000.

Bioenergy and waste accounted for about 8% in 2025, with its share having remained relatively stable since 2000.

Heat’s share in final energy consumption remained negligible in 2025 at less than 1%.

FIGURE 61. ELECTRICITY PRODUCTION BY ENERGY SOURCE IN THE OCEANIA REGION



Electricity Production

Nuclear does not currently contribute to electricity production in this region.

Fossil fuels accounted for around 55% of electricity production in 2025, a decline from 80% in 2000. Coal’s share declined to 38% in 2025 from 70% in 2000. Natural gas’s share increased to 16% in 2025 from 10% in 2000. Oil’s share increased to around 2% in 2025 from 1% in 2000.

Hydro accounted for 12% of electricity production in 2025, a decline from 17% in 2000.

Wind and solar combined accounted for around 30% of electricity production in 2025, a substantial increase from negligible levels in 2000. Wind was about 12% and solar 17% in 2025.

Bioenergy and waste accounted for approximately 1% of electricity production in 2025. Other energy sources (e.g. geothermal) accounted for about 3% of electricity production in 2025.

Energy and Electricity Projections

- Final energy consumption is projected to increase by 9% from 2025 to 2060.
- Electricity consumption is projected to increase at an average annual rate of about 2.0% from 2025 to 2060, doubling by 2060.
- By 2060, the share of electricity in final energy consumption is projected to almost double its 2025 share.

FIGURE 62. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE OCEANIA REGION

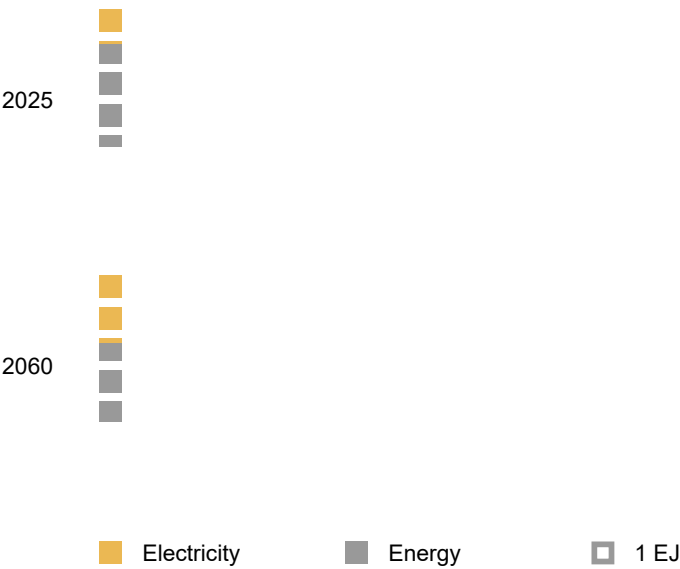


TABLE 34. FINAL CONSUMPTION OF ENERGY AND ELECTRICITY
IN THE OCEANIA REGION, EJ

Final Consumption	2025	2040	2050	2060
Energy	4.5	4.9	5.0	4.9
Electricity	1.1	1.7	2.0	2.2
Electricity as % of Energy	24.4%	34.7%	40.0%	44.9%

Nuclear Electrical Generating Capacity Projections

- Total electrical generating capacity is projected to almost double by 2060 compared with the 2025 level.
- Total electricity production is projected to increase by 82% by 2050 and to double by 2060 compared with 2025 production levels.
- In the high case, nuclear power is projected to produce electricity by 2045. Its share in total electricity production is projected to be 4.8% by 2060. The share of nuclear in total electrical generating capacity is projected to be 1.5% by 2060.
- In the low case, nuclear power is not projected to be introduced into the electricity generation system.

TABLE 35. TOTAL AND NUCLEAR ELECTRICAL GENERATING CAPACITY
IN THE OCEANIA REGION, GW(e)

Electrical Capacity	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	138	189	189	235	235	268	268
Nuclear	0.0	0	0	0	2	0	4
<i>Nuclear as % of Electrical Capacity</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.9%</i>	<i>0.0%</i>	<i>1.5%</i>

TABLE 36. TOTAL AND NUCLEAR ELECTRICITY PRODUCTION
IN THE OCEANIA REGION, TW·h

Electricity Production	2025	2040		2050		2060	
		Low	High	Low	High	Low	High
Total	332	513	513	604	604	664	664
Nuclear	0	0	0	0	16	0	32
<i>Nuclear as % of Electricity Production</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>0.0%</i>	<i>2.6%</i>	<i>0.0%</i>	<i>4.8%</i>

REFERENCES

- [1] INTERNATIONAL ENERGY AGENCY, The Middle East and Global Energy Markets (2026), www.iea.org/topics/the-middle-east-and-global-energy-markets
- [2] INTERNATIONAL ENERGY AGENCY, World Energy Outlook 2025, IEA, Paris (2025), <https://www.iea.org/reports/world-energy-outlook-2025>
- [3] UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, Statistical Yearbook, United Nations, New York (2025), <https://desapublications.un.org/publications/statistical-yearbook-2025>
- [4] UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, 2023 Energy Balances, United Nations, New York (2025), <https://unstats.un.org/unsd/energystats/pubs/balance/2023/01.pdf>
- [5] INTERNATIONAL ENERGY AGENCY, World Energy Balances (dataset), IEA, Paris, <https://www.iea.org/data-and-statistics/data-product/world-energy-balances>.
- [6] UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, World Population Prospects 2024 (dataset), United Nations, New York (2024).
- [7] OECD NUCLEAR ENERGY AGENCY, INTERNATIONAL ATOMIC ENERGY AGENCY, Uranium 2024: Resources, Production and Demand, OECD Publishing, Paris (2025).
- [8] INTERNATIONAL ATOMIC ENERGY AGENCY, Nuclear Power Reactors in the World, Reference Data Series No. 2, IAEA, Vienna (2026), <https://doi.org/10.61092/iaea.5ggj-0zfi>
- [9] UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, International Recommendations for Energy Statistics (IRES), Series M No. 93, United Nations, New York (2018).



IAEA

International Atomic Energy Agency

No. 28

Feedback on IAEA publications may be given via the on-line form available at:
www.iaea.org/publications/feedback

The form may also be used to report safety issues or submit environmental queries concerning IAEA publications.

Alternatively, contact IAEA Publishing directly:

Publishing Section, Dissemination Unit
International Atomic Energy Agency
Vienna International Centre, PO Box 100, 1400 Vienna, Austria
Telephone: +43 1 2600 22529 or 22530
Email: sales.publications@iaea.org
www.iaea.org/publications

ORDERING LOCALLY

To purchase priced IAEA publications, please contact either your preferred local supplier or the IAEA's lead distributor:

Mare Nostrum Group

39 East Parade
Harrogate
North Yorkshire
HG1 5LQ
United Kingdom
Email: enquiries@mare-nostrum.co.uk
www.mngbookshop.co.uk

Trade Orders and Enquiries:

Telephone: +44 1243 843 291
Email: trade@wiley.com

Individual Orders and Enquiries:

Email: mng.csd@wiley.com

Priced and unpriced IAEA publications may also be ordered directly from the IAEA by contacting IAEA Publishing. The recipient is responsible for shipping costs and any customs and duties.

This edition of Reference Data Series No. 1 contains estimates of energy, electricity and nuclear power trends up to the year 2060. The nuclear capacity projections consider all operating reactors, possible licence renewals, planned shutdowns, power uprates and plausible construction projects foreseen for the next few decades. RDS-1 is organized into world and regional subsections, with global and regional nuclear power projections presented as low and high cases. The low case assumes the continuation of current market, technology and resource trends, with existing laws, policies and regulations remaining largely unchanged. The low case projects an almost doubling of global nuclear capacity to 696 GW(e) by 2060, relative to a global operational capacity of 377 GW(e) in 2025. The high case is more ambitious, projecting global operational capacity will more than triple to 1284 GW(e) by 2060.