



ISRAEL COP 30



המשרד להגנת הסביבה



الوزارة لحماية البيئة
Israel Ministry of Environmental Protection



STATE OF ISRAEL

MITIGATION

ADAPTATION

INNOVATION

MITIGATION

 **2030** targets

27%

reduction in GHG emissions
by **2030** (relative to 2015)

 **2050** targets

Net-zero emissions target
declared at COP26

100%

reduction in GHG emissions

NDC – Nationally Determined Contribution submitted to UNFCCC (July 2021)

2030 targets for implementation include GHG emissions reductions (relative to 2015 emissions)

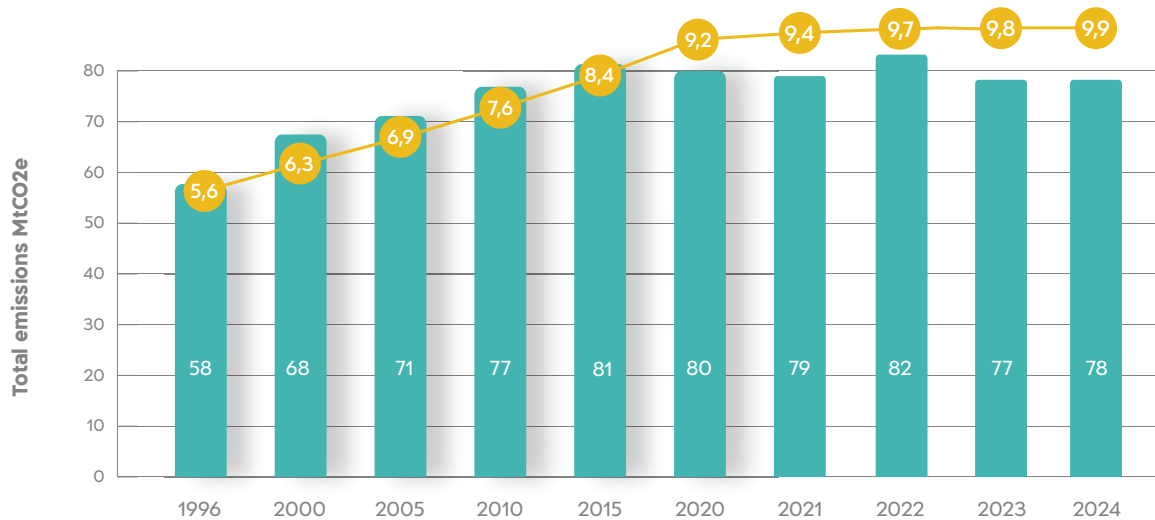
30%
in electricity production

47%
in solid waste

30%
in industry sector

95%
reduction in average GHG emissions of new registered cars

Greenhouse Gas Emissions – current status



Data: Israeli Ministry of Environmental Protection & Central Bureau of Statistics

● Population in millions

■ GHG Emissions

CO₂ is the main greenhouse gas emitted, accounting for over **79%** of all emissions (2024)

- Per capita emissions 2024 - 8tCO₂e

Emissions by sector



Electricity production

Current status

77.4 TWh
electricity
production
(2023)

54.9 TWh (71%) from fossil gas

13.1 TWh (17%) from coal

9.1 TWh (12%) from renewable energy

Targets

- 30% renewable energy for electricity generation by 2030
- End of coal use by 2026
- Reduction of energy intensity to 122 MWh per NIS 1 million GDP

Implementation

- Development of grid, storage, dual land use
- Shutting down of one coal power plant and conversion of the remaining ones to natural gas
- Provide energy efficiency grants for industry and local authorities
- Promotion of agreed-upon measures for energy storage
- National Plan for dual land use for PV renewable energy
- Government approval of a mechanism for taxation of greenhouse gas emissions and local pollutants
- National program for solar roofing on sports fields approved by government

Government decisions

- * 171 – Transition to a Low Carbon Economy, 2021
- * 208 – Transition to Green Energy, 2021
- * 465 – Promotion of Renewable Energy in Electricity Sector, 2022
- * 1855 - Steps to strengthen the government's ability to meet the renewable energy goals, 2022
- * 1261 - Pricing emissions of local pollutants and greenhouse gases (carbon tax), 2024



Transportation



Current status

Gasoline and diesel vehicles – main source of GHG emissions

Diesel vehicles – main source of air pollutants

Density per kilometer (congestion) is 3.5 times higher than OECD average



Target

- 95% reduction of GHG emissions from private new cars by 2030, relative to 2020
- 20% reduction in private car mileage relative to BAU
- 50% of new heavy vehicles (trucks, buses) will be zero emissions from 2035; 100% by 2050



Implementation

- Grants for purchase of zero emission buses
- Development of mass transport infrastructure
- Distribution of charging infrastructure
- Electrification of passenger train
- Procurement of 20 zero-emission garbage trucks to be deployed in 2026



Government decision

- * 542 – Promotion of Clean Low-Carbon Transport, 2021
- * 208 – Transition to Green Energy, 2021
- * 181 – Transition to Electric or Alternative Fuels-based Transportation, 2023



Industry



Current status

Main emissions sources:

Fossil fuel consumption, industrial production processes, Fgas



Target

- Transition to green refrigerants
- Reduction of fossil fuel consumption
- Circular economy and reduction of resource consumption



Implementation

- Regulations for air conditioner and cooling system installers and services
- Investments in energy efficiency and transitioning to clean energy sources
- Support program for reuse of waste as raw material (industrial symbiosis)
- Regulations in line with Kigali Amendment to Montreal Protocol (in force 2022)



Government decision

- * 541 - Update of National Plan for Energy Efficiency and Reduction of GHG Emissions, 2022



Waste (2023)



Current status (2023)

74% landfilling	11% stabilized organic waste	13% recycling	2% RDF
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Main emissions sources:
Landfilling of Municipal Solid Waste



Target

- Zero landfilling of municipal solid waste by 2050



Implementation

- Ban on landfilling untreated solid waste and untreated organic waste
- Establishing guidelines for the collection and treatment of landfill gas
- Mandatory standards for the use of treated waste
- More than NIS 6 billion (~\$1.8 billion) has been allocated for the establishment of waste treatment facilities and for measures to reduce landfilling



Government decision

- * 1282 – National Plan for the Prevention and Reduction of Air Pollution and Greenhouse Gas Emissions – implementation plan, 2022



Cities and Buildings



Target

- Mandatory construction of solar installations in new buildings
- Urban renewal – 30% of designated housing units by 2030



Implementation

- Apply mandatory green building standard for all new buildings, from 2022
- Define mandatory zero-emission energy structure and apply in all new buildings
- Prepare policy documents and approve national masterplans

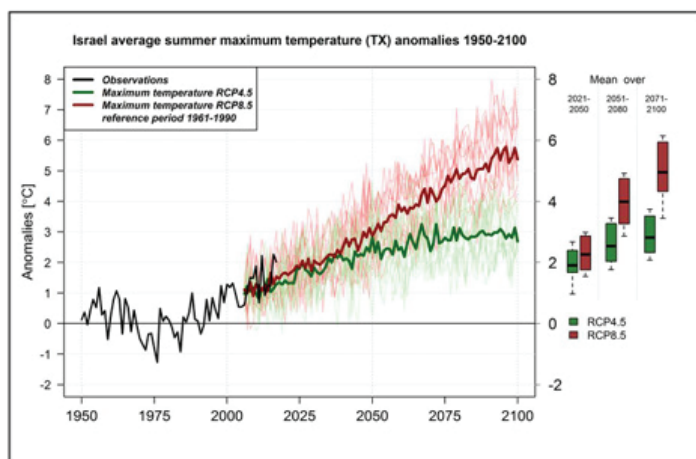


Government decision

- * 1282 – National Plan for the Prevention and Reduction of Air Pollution and Greenhouse Gas Emissions – implementation plan, 2022
- * 1022 Shading and Cooling of Urban Space through Street Trees as Part of Climate Change Preparedness, 2022

ADAPTATION

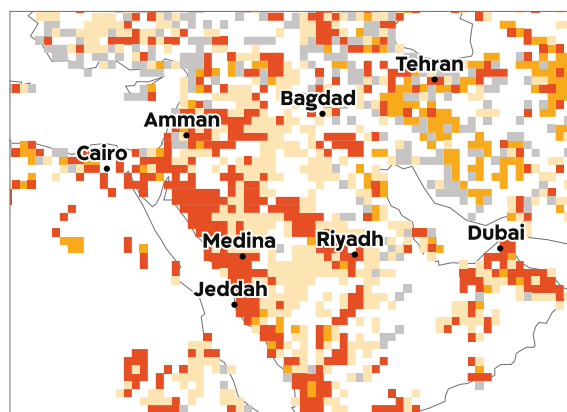
At the current rate of global warming, the average temperature in Israel is expected to rise by 1.5 degrees by the middle of the century. It will result in a **15% increase in the number of hot days**, an increase of about **30% in the number of extremely hot days**, and an increase of about **20% in the number of hot nights**. The number of heat waves will increase, their duration will be slightly longer, and the average peak temperature during these waves is expected to reach over 42 degrees Celsius.



Data: Israel Meteorological Service

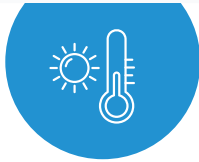
Israel is situated in the Middle Eastern region which is considered to be a Climate Change "Hot Spot". With its Mediterranean, semi-arid and arid climates, Israel is extremely vulnerable to climate change and climate risks such as droughts.

Water scarcity in the Middle East



IPCC AR6 WGII Annex-I Figure AI.48

The Israeli Climate Change Adaptation Administration with the help of the Israeli Meteorological Service defined the four main climatic trends that are expected to occur in Israel in the upcoming years. The four trends are:



Warmer

Facts:

2021-2050

- Increase of additional 1.5 °C (on top of the present increase of 1.4 °C)
- Decrease of 13 cold nights (below 7 °C) per year
- Increase of over 20 warm nights (over 20 °C) per year
- Increase of 12-20 hot days (over 30 °C) per year

Acts:

- **Government decision 1022** – shading and cooling of urban space
- First plans and pilots in over 20 authorities – 25 million NIS



More extreme

Facts:

- Increased frequency of fires, snowstorms and flooding

Acts:

- New reference scenarios for flooding, fires and extreme heatwaves by the National Emergency Management Authority
- New surface runoff regulations by the Israel Planning Administration
- **Government decision 1091:** A national plan to cope with forest, woodland and open spaces fires
- **Government decision 378:** A plan to repair fire damage in the Mateh Yehuda Regional Council
- **Government decision 207:** Promoting infrastructure and managing flood risks



Higher

Facts:

- 2021 – 2100 – Sea level rise for Mediterranean coast of 1.06 m

Acts:

- Preparation of a forecast for the Red Sea
- Improvement of sea-rise modelling
- Establishment of sub-committee in the Climate Change Adaptation Administration



Drier

Facts:

- 2021-2050 – Increased frequency of drought in central and southern parts of country
- 2021-2100 – decrease of 10-24% in precipitation, especially in north-east of the country

Acts:

- **Government decision 625** – The establishment of A 'DeserTech' center, focused on climate change in dry climates, as part of the upcoming innovation district in the city of Be'er-Sheva
- Food systems and food security – national committee

Cross-sector action underway

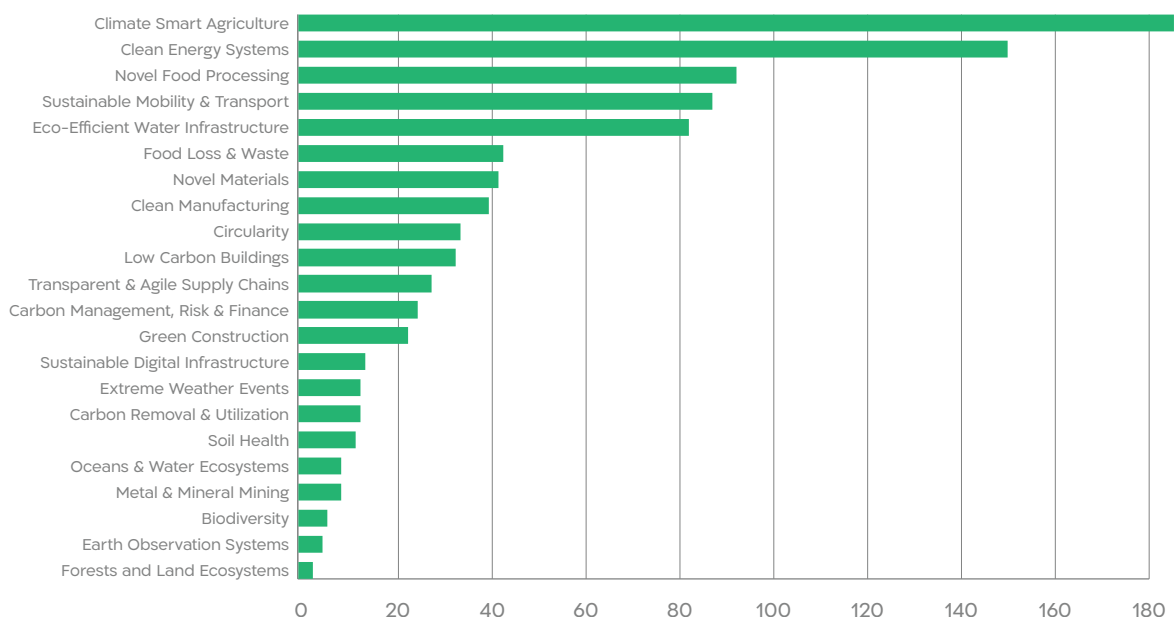
- Define climate change as a national threat (annual national assessment by National Security Council)
- Implementation of Government Decision 4079 (amendment to decision 1902) – Israel’s Preparedness to Adapt to Climate Change: Implementing Recommendations for a Strategy and a National Action Plan
- Implement climate education programs from kindergarten to 12th grade in collaboration with the Ministry of Education and establish young “climate leadership” in all youth movements and organizations
- Develop a National Climate Computation Center (Government Decision) and develop a climate change adaptation portal that includes mapping the risks, sensitivity, adaptive capacity and vulnerability to extreme weather events
- Develop adaptation plans for local authorities
- 22M NIS (around \$6M) for preparation of urban reforestation projects
- Israel’s NAP was submitted to the UNFCCC in 2024
- Mediterranean Sea Level Rise Report prepared based on government study

INNOVATION

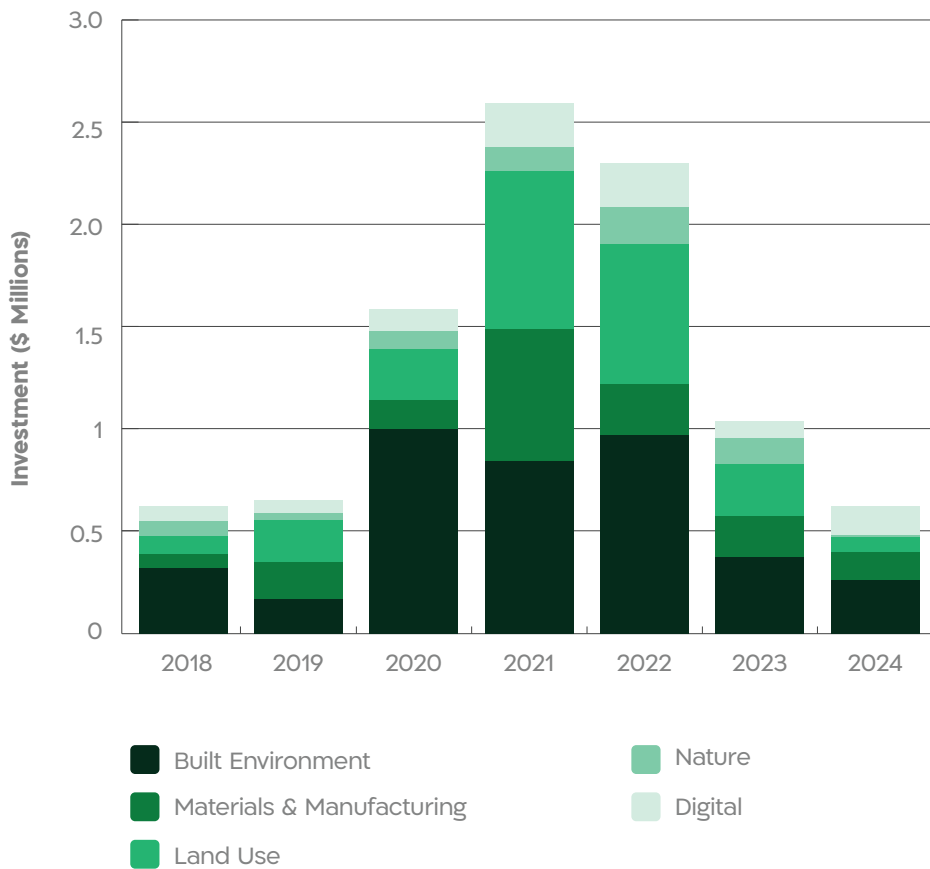
946 Israeli climate tech startups

5 main challenges: Climate Smart Agriculture, Clean Energy Systems, Novel Food Processing, Sustainable Mobility & Transport, Eco-Efficient Water Infrastructure

Total (Updated) – 946



Investments in Israeli Climate Tech Startups



Capital Investments

- Climate tech demonstrated notable resilience within Israel's tech ecosystem, despite economic and geopolitical challenges
- In 2023, climate tech accounted for 14.5% of total tech investments, up from 14.3% in 2022
- Climate tech investments in 2023 totaled \$1B and \$613M in 2024 (the decline in comparison to previous reports)
- Investments in Israeli climate tech ventures totaled \$9.5B between 2018-2024
- Rapid growth in AI applications led to a significant increase in investments in Sustainable Digital Infrastructure that can be attributed to the rising demand for energy-efficient solutions, data center cooling technologies, computational optimization