



PILLARS OF PROGRESS:

Tracking St. Kitts and Nevis' Journey to 2040

1 ENERGY TRANSITION

St. Kitts and Nevis aims to transition to sustainable, reliable, and affordable energy sources while reducing its carbon footprint. The nation envisions becoming a sustainable island state by shifting away from fossil fuels through strategic investments in renewable energy sources, including wind, solar, and geothermal energy. Over 95 percent of the population has access to electricity. However, the country heavily relies on fossil fuels for electricity generation and transport, making it vulnerable to international oil price fluctuations that impact the cost of electricity. The government subsidizes the fuel charge for residential customers to partially protect them from price volatility.

"We aim to reduce our carbon footprint by implementing bold strategies to reduce our reliance on non-renewable sources of energy. The goal is to transition towards a more secure, clean, cheaper and greener homegrown energy supply".



Hon. Konris Maynard
Minister of Public Infrastructure,
Energy and Utilities, Domestic
Transport, Information,
Communication and Technology

KEY FACTS

- In 2017, the primary energy supply reached about 3478 TJ, with 3438 TJ (99%) coming from oil. Renewables, such as wind and solar, accounted for the remaining 1% of the total primary energy supply.
- Most electricity is generated through diesel power plants (95%), with only 3% coming from wind and 2% from solar power.
- St. Kitts and Nevis' electricity utility rates average \$0.26 per kilowatt-hour (kWh), lower than the Caribbean regional average of \$0.33/kWh.
- Per capita electricity consumption in St. Kitts and Nevis is much higher than in other countries in the region (3,570 kWh per year compared to the regional average of 2,170 kWh).
- St. Kitts and Nevis' electricity grid has high distribution losses compared to other countries in the region, with 20% of generated electricity lost. The revised NDC aims to reduce transmission and distribution losses to 10% in St. Kitts and 6% in Nevis by 2030.

SEVEN PILLARS OF SUSTAINABILITY AND CLIMATE RESILIENCE:



ENERGY
TRANSITION



WATER
SECURITY



FOOD & NUTRITION
SECURITY



SUSTAINABLE
INDUSTRY



SUSTAINABLE
SETTLEMENTS



CIRCULAR
ECONOMY



HEALTH & SOCIAL
PROTECTION

GOALS & PRIORITIES

St. Kitts and Nevis aims to become the smallest green nation in the Western Hemisphere, striving for a diversified energy sector that prioritizes renewable energy sources. The overarching vision is to provide reliable, renewable, clean, and affordable energy to all citizens. This aligns with the country's commitment to achieving 100% electricity generation from renewable energy sources by 2030.

KEY TARGETS

- Reducing CO2 emissions by 2030 compared to 2010 levels.
- Transitioning to 100% renewable energy for power generation.
- Switching to at least 2% electric vehicles by 2030.
- Reducing energy consumption by 5% by 2030.
- Reducing transmission and distribution losses to 10% in St. Kitts and 6% in Nevis by 2030

STRATEGIC PRIORITIES

- Ensuring safe, efficient, reliable, affordable, and environmentally friendly electricity.
- Facilitating the transition to renewable energy.
- Ensuring supplies of reliable and affordable fuels and their clean handling.
- Ensuring an efficient and well-coordinated planning and management system.
- Ensuring efficient, environmentally clean, and cost-effective transportation.
- Achieving energy efficiency by ensuring the lowest possible energy intensity.
- Rationalizing the electricity tariff structure and rate.
- Promoting e-mobility (transitioning towards electric vehicles).

SDG ALIGNMENT TRACKER

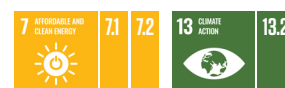
SISA ENERGY GOAL/PRIORITY

SDG ALIGNMENT (TARGET)

Reduce CO2 emissions by 2030 compared to 2010 levels



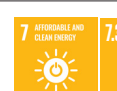
Transition to 100% renewable energy for power generation



Switch to at least 2% electric vehicles by 2030



Reduce energy consumption by 5% by 2030



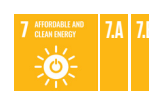
Reducing transmission and distribution losses to 10% in St. Kitts and 6% in Nevis by 2030



Ensuring safe, efficient, reliable, affordable, and environmentally friendly electricity



Facilitating the transition to renewable energy



Ensuring supplies of reliable and affordable fuels and their clean handling



Ensuring an efficient and well-coordinated planning and management system



Ensuring efficient, environmentally clean, and cost-effective transportation



Achieving energy efficiency by ensuring the lowest possible energy intensity



Rationalizing the electricity tariff structure and rate



Promoting e-mobility (transitioning towards electric vehicles)



KEY ACHIEVEMENTS

- **Energy Cost and Infrastructure Upgrades:** Invested \$63.5 million to stabilize electricity prices, \$12 million to subsidize gas, purchased two 18 MW hybrid generators for \$40 million, and installed a temporary 6 MW generator to stabilize the grid.
- **Solar and Renewable Projects:** Initiated plans for a 50 MW solar plant with battery storage, advanced procurement with Taiwan, and constructed a 70,000-gallon-per-day solar desalination plant
- **Geothermal and Hydrogen Initiatives:** Secured a \$16 million CDB loan guarantee for geothermal drilling, with additional funding assessments from the Saudi Fund and CDB.
- **Energy Efficiency:** Launched the SKN 100 carbon-free economy project, finalized regulations for small-scale renewable energy systems, and introduced smart meters to optimize household energy usage.
- **Grid Modernization:** Conducted grid studies, including tariff and EV integration assessments, and developed a "buyback tariff" system enabling solar households to sell excess energy.
- **Electric Vehicle Transition:** Launched a national EV policy with concessions, incentives, and an action plan to support adoption.
- **Workforce Development:** Certified participants in solar panel and EV technology through training programs, enhanced TVET with simulators and certifications
- **Center of Excellence:** Established the Caribbean Center of Excellence at CFBC for renewable energy research, innovation, and workforce training.
- **Energy Buyback Program:** Developed a "buyback tariff" system allowing households with solar panels to sell energy back to the grid.

FLAGSHIP INITIATIVE

GEOTHERMAL ENERGY DEVELOPMENT PROJECT

The geothermal energy development project in Nevis is a major initiative by the government of St. Kitts and Nevis to transition to renewable energy sources and achieve energy independence. The project, which received a US\$17 million grant from the Caribbean Development Bank (CDB) in December 2022, involves drilling two geothermal production wells and one injection well to establish a 10-megawatt geothermal power plant.

This power plant will be able to meet all of Nevis' domestic electricity demand. The project is a collaborative effort involving the government, the Nevis Island Administration (NIA), the energy providers NEVLEC and SKELEC, the CDB, the Caribbean Community Climate Change Centre (CCCCC), and the Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE). The geothermal project is a crucial step towards reducing electricity costs, decreasing carbon emissions, and bolstering energy security for St. Kitts and Nevis.

PROGRESS METER

GoSKN is actively working on fiscal incentive packages to attract investments in renewable energy. Diversifying the energy supply and promoting efficiency and conservation is paramount and will contribute to improving livelihoods and prosperity by lowering energy costs for consumption and production and reducing the carbon footprint. There is also a need to strengthen the human resources and capabilities of the officers within the Energy Units, SKELEC and NEVLEC, to complement the energy transition.



Progress determined by NDPF indicators

INVESTMENT PRIORITIES

- **Transitioning to 100% renewable energy in power generation:** Shifting to solar, wind, and geothermal to eliminate fossil fuel reliance and provide reliable, affordable energy.
- **Improving electricity transmission and distribution efficiency:** Reducing transmission losses to 10% in St. Kitts and 6% in Nevis by 2030 through system upgrades.
- **Electrifying 2% of the vehicle fleet by 2030:** Transitioning the government fleet to electric vehicles and expand charging infrastructure.
- **Developing EV infrastructure:** Establishing accessible and reliable charging stations across both islands.
- **Expanding renewable energy projects:** Advance geothermal in Nevis and solar, wind, and waste-to-energy initiatives in St. Kitts.
- **Interconnecting the electricity grids of St. Kitts and Nevis:** Link grids and adopt energy storage solutions to improve energy security.



SISA 2040 VISION

The Government of St. Kitts and Nevis (GOSKN) established a vision for a Sustainable Island State by 2040 in which government agencies, civil society, and the private sector are encouraged to collaborate in redefining approaches to governance, public policy, and socio-economic development.

The SISA Vision is to transform St. Kitts and Nevis into a Sustainable Island State by 2040, by developing a robust, diversified economy that integrates sustainability with economic prosperity. The aim is to attract green investments and foster industries that utilize local sustainable resources, thereby enhancing economic stability and creating high-quality, sustainable jobs.

THE SISA APPROACH

The SISA is more than a vision; it's a dynamic, structured mechanism designed to guide the nation's transition to a sustainable island state by 2040. It achieves this through a multifaceted approach that encompasses several key strategies:

- **Strategic Alignment:** The SISA is strategically aligned with the existing National Development Planning Framework (NDPF), by leveraging its robust methodology, data-driven analysis, and key sustainability indicators.
- **Resource Mobilization:** A core function of SISA is to actively mobilize resources for climate resilience and sustainability efforts by promoting existing projects and identifying flagship initiatives to secure regional and international funding.
- **Visibility and Communication:** SISA serves as a central hub to promote sustainability efforts, raise public awareness, and boost recognition through targeted branding and outreach strategies.
- **Inter-Ministerial Collaboration:** SISA coordinates cross-ministry efforts, supporting communication and cooperation to advance holistic, cross-sectoral sustainability initiatives.
- **Societal Engagement:** SISA promotes shared responsibility for sustainability, encouraging active participation and collective action across all segments of society.



**MOBILIZE
RESOURCES**



**CREATE
VISIBILITY**



**ALIGN &
CONNECT**



**INSPIRE
ACTION**

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