

BRUNEI
DARUSSALAM



COUNTRY OVERVIEW

Brunei is located on the north coast of the island of Borneo, facing the South China Sea, surrounded by East Malaysia. The monarchy gained its independence from the United Kingdom in 1984, and today the lowest population in the ASEAN (ca. 450.000), though with one of the highest GDP per-capita levels in the region. Brunei has abundant natural resources, and offshore oil-drilling is the base of the economy, providing almost half of the GDP (47.4%) and more than half of export revenue (51.4%). During the COVID-19 pandemic, revenues from oil and gas have shrunk, while the non-oil and gas sector continued to expand, supported by a strong increase in agriculture and services.

The country has a masterplan for economic and social transformation called Vision Brunei 2035 (or Wawasan Brunei 2035), the main goal of which is to achieve a state, when the country is no longer reliant on income from oil and gas reserves. The business development part of this blueprint focuses on local small and medium sized enterprises (SMEs) as the target of the government's effort to give business opportunities for them and enable Brunei Malays to achieve leadership.

One of the more detailed goals of Vision Brunei 2035 is to improve the country's self-sufficiency rate, thus reducing dependency on imports. The latest national development plan and information on Vision Brunei 2035, can be found [here](#).



SECTOR OVERVIEW

Brunei has one of the best natural asset bases that could be the starting point of a sustainably developing cleantech and renewables sector. The country has primary rainforests with a very low annual deforestation rate, and enough freshwater for agricultural and industrial use. Brunei is the true green heart of Borneo and 29% of the country is territorial and marine protected area.

Renewable energy

Brunei aims to increase the deployment of its renewable energy to at least 30% by 2035. This commitment has also been reflected in the Brunei National Climate Change Policy. Due to its geographic location less than 500 km from the Equator, Brunei has great potential in solar energy, although the deployment of renewable energy is still in an early stage. Even though energy production from oil and natural gas remains the cheapest option for Brunei for the foreseeable future, the country is aware that the costs of renewables, especially solar panels have been decreasing significantly in the last decade, and other benefits may make it equal to fossil energy sources.

In March 2021, the Brunei Ministry of Energy announced that the country will build three new solar power plants before 2026, as part of the transition from fossil fuels to clean energy. One of the sites is located at the former landfill area, expecting to generate 30MW of solar power., The Ministry also announced the expansion of the current solar energy plant in Seria from 1.2 to 4.2 MW. All the new solar farms are likely to be developed via public-private partnerships.

Brunei is developing the Temburong Smart City as a pilot project, under the marketing name of 'Green Jewel of Brunei', which would be powered mostly from solar. The country aims to attract foreign investors in the renewable sector, but due to the small market-size and the country's image as an oil-rich sultanate it is of less interest to many larger and more experienced investors. This may however enable smaller regional players, even SMEs with innovative solar-based technologies, i.e., solar powered water-treatment blocks and mini-grids, to enter the market.

Experts from the renewable sector agree that, due to its natural and financial capability, Brunei could play a bigger role in ASEAN's energy transition and IRENA expects Brunei to contribute to ASEAN reaching its 23% renewable energy target by 2025.

Sustainable energy segment

The Brunei government has made a distinction between the traditional renewable energy sector and the sustainable energy segment of traditional energy production. Technologies, equipment, and solutions in this 'sustainable energy' segment provide 'greener' energy production from fossil sources: transforming it more efficiently, using less hazardous materials, and reducing environmental risks.

As the energy sector is still a core driver of Brunei's economy, accounting for over 60% of its GDP, and employing more than 24,000 people, modernising this industry is unavoidable in any efforts to create a more sustainable national economy.

Waste treatment and recycling

Brunei's waste generation is increasing yearly due to the effects of development and its growing population. As the economic and population growth continue to increase, waste management is increasingly getting more complex as landfill capacity runs out. Brunei currently has only one engineered landfill equipped with a leachate treatment facility located at Sungai Paku in Tutong District, which serves as the main landfill for the majority of Brunei's waste.

With the growing concerns and threats from increased waste generation, the government has taken pro-active measures to ensure a more sustainable and efficient waste management system is in place. This includes looking into: (i) waste minimisation initiatives, (ii) efficient, cost-effective and sustainable collection, (iii) adoption of waste-to-resource technologies, (iv) youth empowerment and (v) enforcement enhancement. As waste management is a cross sectorial issue, these strategies aim to collectively and holistically address waste issues through close collaboration and coordination between relevant stakeholders across the board, including government agencies, private sectors, NGOs, as well as public support and participation.

The recycling industry in Brunei is not yet developed and is limited mostly to its collection services. Domestic recycling is very limited and collected recycled material from Brunei is usually exported to other ASEAN countries, mostly Malaysia, Indonesia, and occasionally Thailand. Some of the largest companies include Daikyo Environmental Recycling Sdn. Bhd., Syarikat Perindustrian Dan Perkembangan Pematangan Dan Memasak Besi and Sallima Recycling Works.

Recognising the gaps in recycling infrastructure and ecosystem, the government is also currently looking to develop the recycling industry and achieve a significant increase in the recycling rate by adopting policies, setting up institutional mechanisms and multi-stakeholder partnerships.

Water and wastewater treatment

Surface water supply, which makes up 100% of water utilised for all purposes in Brunei, comes from the three (3) main rivers of the country – the Tutong River, Belait River and Temburong River, have been the major freshwater source for the country. Despite being used for transportation, the rivers have largely been unaffected due to their natural self-purification.

While it is said that Brunei is following the WHO Drinking Water Quality Guideline, this is being threatened by the growth in industrial output and rapidly developing population and the government is therefore taking steps to improve watershed protection, and to manage pollution. There are currently seven (7) government water treatment plants in Brunei responsible for maintaining good drinking water quality.

Foreign businesses may find opportunities in the water and wastewater treatment sector. Under the National Development Plan Brunei will upgrade its existing facilities including monitoring system, including water treatment facilities.

As climate change increases its effect on Brunei's coastline, dams (surface reservoirs) and barrages are being built as regulating reservoirs and to prevent saltwater intrusion and to make the country resilient to occasional water supply shortages.



REGULATION

Public administration

The core authorities of the environment protection, cleantech and related segments are the Department of Environment, Parks and Recreation (JASTRe) of the Ministry of Development and the Sustainable Energy Division of the Ministry of Energy which supervises the development of renewable energy sources and regulates installation.

Legislation

The most important pieces of Environmental legislation are the 'Environmental Protection and Management Order 2016' and the 'Hazardous Waste Order 2013', more information on which can be found on the website of the Department of Environment, Parks and Recreation.

The country still needs to adopt a regulatory regime to scale up the development of renewable energy, particularly solar energy, which is more abundant than wind energy. A number of strategic actions are being taken to build the investment climate for renewable energy in Brunei Darussalam, including giving priority to renewable energy in the governance system, adopting and implementing key legislation, mobilising domestic investors, and improving market entry conditions for foreign investors.

Other relevant regulations include the Municipal Board Act, and the Water Supply Act. The Environmental Impact Assessment system is also worth mentioning, as it guides project proponents to survey, predict and assess environmental impacts and study possible environmental protection measures relating to prescribed activities.



MARKET ENTRY

The country is part of a 10-country regional grouping, ASEAN, whose economic goal is an integrated economy with free movement of goods, services, investment, and skilled workers, and freer movement of capital through tools such as elimination of import tariffs and facilitating trade, advancing the services trade liberalisation agenda, as well as liberalising and facilitating investment. These goals are also shared with ASEAN's 7 FTA partners, namely: Australia, China, Hong-Kong, India, Japan, Korea and New Zealand through the various FTA arrangements. Brunei has eliminated import duties on 99.6% of its tariff line with ASEAN and an average of more than 94% for its FTA partners. In January 2022, Brunei Darussalam will start implementing the Regional Comprehensive Economic Partnership (RCEP) Agreement which is an agreement involving ASEAN and its FTA partners: Australia, China, Japan, Korea and New Zealand. Once implemented, RCEP will be the largest trading bloc in the world consisting of 2.3 billion people and 30% of global GDP.

Brunei Darussalam is also part of ASEAN's sub regional grouping, Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA), which aims to increase the economic integration of these countries into a vibrant economy. With a favourable geo-position and connectivity work under EAGA, Brunei Darussalam is well connected to all major points in the sub-region.

Traditional trade promotion opportunities, such as fairs, product shows, etc. are regularly held but are very limited in Brunei, due to the country's market size.

Establishing a local business

Brunei amended its laws to make it quicker and easier and quicker for entrepreneurs and investors to establish businesses. The Business License Act (Amendment) of 2016 exempts several business activities from needing to obtain a business licence. The Miscellaneous License Act (Amendment) of 2015 reduces the wait times for new business registrants to start operations, with low-risk businesses, such as eateries and shops able to start operations immediately.

There is no restriction on total foreign ownership of companies incorporated in Brunei. The Companies Act requires locally incorporated companies to have at least one of the two directors – or if more than two directors, at least two of them – to be ordinarily resident in Brunei, but exemptions may be obtained in some circumstances. The rate of corporate income tax is the same whether the company is locally or foreign owned and managed.

Foreign investments

Despite having a small domestic market due to its small population, figures from UNCTAD showed that Brunei Darussalam secured US\$ 577 million in new investments in 2020, up by US\$ 275 million from the previous year. Brunei is now more geared toward attracting new investments of higher value that can spur the country towards becoming a dynamic and sustainable economy. This will be achieved by projects that are 100% export oriented helped by Brunei G-G trade capacity building, by securing more bilateral and multilateral trades agreements, creating high value jobs for local talents, providing technology transfer through a co-investment approach, and spurring existing or creating new domestic SME opportunities in the service industries of supply-chains, logistics, warehousing, and many more.

The FDI Action and Support Centre (FAST), is a function under the BEDB which is responsible for the promotion and engagement of new investment to the country and for supporting and facilitating incoming investment on a fast-track approval process right up to the operational of the FDI project. More information can be found on InvestBN (www.invest.gov.bn) website.

Special market entry advice for cleantech companies

Renewables, solar panels

At the moment, there are no regulations governing the installation of solar panels in Brunei. Companies follow international standards for solar PV systems that convert solar energy into electrical energy, as well as for all the elements in the entire system. For hybrid solar power systems, the Department of Electrical Services is informed on the installation by the company and approved licensed electricians are engaged to commission the installation. It is advisable that the designer or installer not allow direct connection to the public utilities to avoid back feed. There are currently six companies listed in the Sultanate to provide household solar panels, and there is news about the government building a larger (30MW) solar power plant. Due to the large unused potential, ambitious renewable energy targets and relatively open market, experience in every aspect of the solar industry is needed in Brunei, and there are good opportunities for foreign technology providers.

Recycling

The Government of Brunei has published a list of companies under the Department of Environment, Parks and Recreation in the recycling sector, searchable by name, activity, and main contacts on their website, which is a useful tool to find the first contacts in the country. Recycling activity in Brunei is very minimal, but recent changes in the laws in neighbouring countries which no longer accept waste from foreign countries, is likely to kickstart development of this area. Small-scale, on-site recycling of particular materials may also be a viable economic option, in cooperation with established Brunei waste collection businesses.



RECOMMENDATIONS AND TRENDS

Brunei Darussalam may be the smallest of the ASEAN countries, but it will face large challenges in the next 10–15 years.

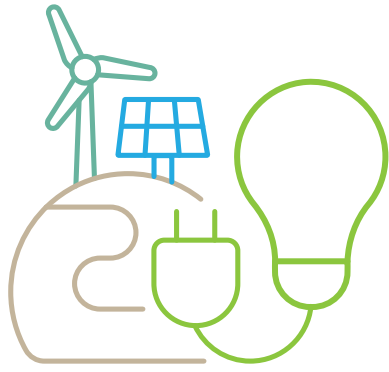
The fast-growing population is expected to cause more potential exploitation of the country's still abundant natural resources, including freshwater reserves, tropical rainforests and its biodiversity, healthy marine life and underground materials such as natural oil and gas. The growing population requires safe drinking water supply, and a healthy environment. Just to maintain the current level, large investments are needed in waste and wastewater management, industrial wastewater treatment, as well as more sustainable energy production.

Secondly, climate change will make its effect on the coastline of Brunei. Rising sea levels may cause intrusions in freshwater sources, and rainfall may be scarcer, causing water shortages. To stay resilient, Brunei will need to invest in dams, water treatment plants and improve the water supply system. The country will have to develop a climate change resilience plan, measuring the new requirements, and establishing a more developed monitoring system.

Thirdly, the whole economy is dependent on oil and gas industry, which is no longer sustainable. As the Vision Brunei 2036 blueprint clearly illustrates, the country needs to transform its economy to a greener and knowledge-based one, requiring a greater investment in renewables and reducing its dependence on a fossil-fuel based economy.

The three aspects of the new challenges show a straight path for the cleantech sector. Brunei needs new technologies and equally importantly new investors in the sector. As the larger part of the sector is related to government operation and state-owned utility companies, there can be a great role for inter-governmental cooperation projects. Other ASEAN companies may enter the market as suppliers of these G2G operations.

On SME level, while many of the investments needed are large-scale and require government mandates, the country still has a need for many small-scale technologies, including within the solar power sector – particularly off-grid, waste treatment and water treatment sectors. With its favourable taxes and regulations, besides its stability, Brunei can be a small but valuable market for innovative, green companies.



CLEANTECH SECTOR BRIEF