

Energy Transition Index

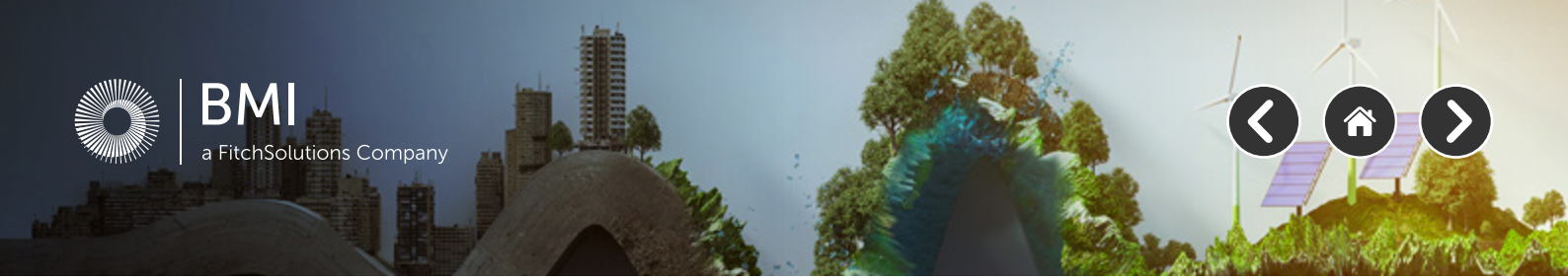
The Energy Transition Index ranks more than 90+ markets we cover in the Energy Transition service based on four pillars: **Economic Stability**, **Exposure**, **Resilience** and **Sustainability**. We weight these four pillars according to the below in order to reflect the challenge policymakers face in tackling energy transition without sacrificing the economy or energy security in the search of an equitable and stable transition.

This enables us to compare how markets seek to address key policy challenges, such as favouring net zero goals over energy security and vice versa. We measure these four pillars over time to assess changes and how the implementation of certain policies might impact the energy transition's development, and the market's ability to transition to a low-carbon economy. The below diagram outlines the key component indicators that are included:

ENERGY TRANSITION INDEX

Economic Stability 20%	Exposure 20%	Resilience 20%	Sustainability 40%
Consumer Price Inflation Growth Rate, % y-o-y	Petroleum Import Exposure, USD and BTU	Refinery Utilisation Rate, %	Average Low Carbon Capacity Growth, MW
Real GDP Per Capita, USD	Natural Gas Imports Exposure, USD and BTU	Energy Imports vs Consumption Ratio	Green Hydrogen Production Capacity, MW
Energy Intensity Per GDP, EJ per USD	Coal Import Exposure, USD and thousand tonnes	Diversity Of Primary Energy Supply, %	EV Penetration Ratio, %
Energy Intensity Per Capiuta, EJ	Net Electricity Imports, TWh	Age Of Energy System, MW Capacity	Carbon Intensity per GDP, MMtonnes CO2 per USD
		Transmission & Distribution Losses, %	Carbon Intensity per Capita, MMtonnes CO2

Index scores range from 0-100, with 100 being the highest risk.
Source: BMI



Indicator Rationale & Description

Economic Stability

This pillar assesses the impact of economic factors on the cost of energy, reflecting the overall economic strength and efficiency that determine how easily individuals and markets can access and afford energy.

- **Consumer Price Inflation Growth Rate, % y-o-y:** Used to assess how inflation affects purchasing power and the cost of energy, influencing energy affordability and economic resilience.
- **Real GDP Per Capita, USD:** Reflects individual economic output and purchasing power, and is important for understanding energy affordability.
- **Energy Intensity Per GDP, EJ per USD:** Indicates energy efficiency in economic output, showing how energy transitions can lead to economic decarbonisation.
- **Energy Intensity Per Capita, EJ:** Highlights individual consumption patterns and the potential for efficiency improvements.

Exposure

This pillar quantifies and assesses the comparative fuel price and volume vulnerability to the importation of different energy sources that can affect the market's energy security and economic stability.

- **Petroleum, Coal, Natural Gas, Electricity Price Exposure:** The vulnerability of the energy sector to four energy price fluctuations against the previous five-year average, weighted by oil's share in the energy mix.
- **Petroleum, Coal, Natural Gas, Electricity Import Volume Exposure:** The degree to which the energy sector relies on the imported commodity, with higher volumes increasing vulnerability to external supply shocks.

Resilience

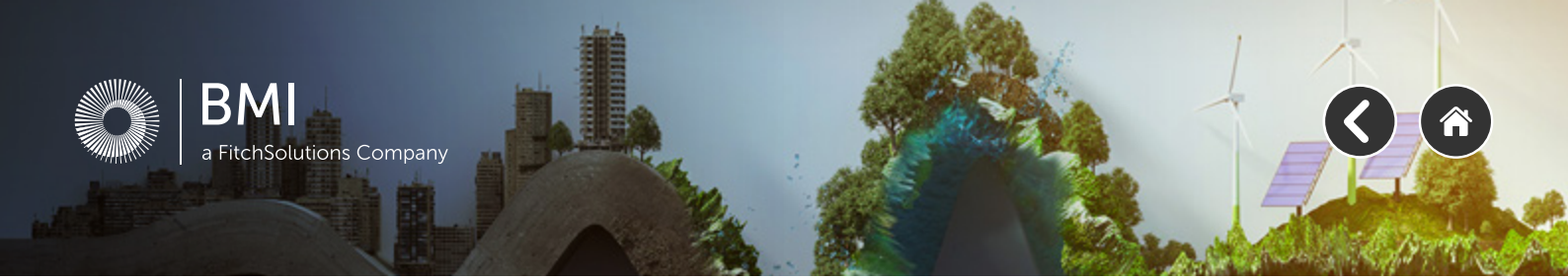
The pillar evaluates the robustness and adaptability of a market's energy system to ensure stable and continuous energy provision under various conditions through assessing the age, quality and modernity of the energy system.

- **Refinery Utilisation Rate, %:** Indicating the operational capacity of refineries, essential for fuel supply stability.
- **Energy Imports vs Consumption Ratio:** This ratio shows dependency on imported energy, affecting vulnerability to external shocks as well as the ability to scale up production.
- **Diversity Of Primary Energy Supply, %:** Evaluates the risk of reliance on limited energy sources and the benefits of a diverse energy mix.
- **Age Of Energy System, MW Capacity:** Assesses the need for energy system upgrades and modernisation to adapt to new technologies.
- **Transmission & Distribution Losses, %:** Outlines grid efficiency and the potential for energy loss reductions.

Sustainability

This pillar measures the progress and commitment of a market towards a sustainable energy future by analysing the adoption of low-carbon electricity, alternative fuels and the reduction of carbon emissions relative to GDP.

- **Average Low Carbon Capacity Growth, MW:** Measures progress towards low-carbon electricity development and decarbonisation policy direction and support.
- **Green Hydrogen Production Capacity, MW:** Considers hydrogen production which reflects advancement in alternative clean fuel technologies.
- **EV Penetration Ratio, %:** Indicates the adoption of electric vehicles as part of the transportation shift.
- **Carbon Intensity Per GDP,** MMTonnes CO2 per USD: Shows the carbon footprint relative to economic output, indicating decoupling of growth from emissions.
- **Carbon Intensity Per Capita, MMTonnes CO2:** Measures individual contributions to carbon emissions and the effectiveness of reduction efforts.



About BMI

In an uncertain macroeconomic environment, BMI's systematic, independent and data-driven market insights, analysis and forecasts enable you to recognize and assess risks and opportunities across 200+ markets and 20+ industries.

For more than 40 years, we have provided impartial and transparent analytics, data and research across themes, countries and sectors, with deep insight into emerging markets. Our detailed intelligence is frequent, consistent and systematic, enabling you to easily make comparisons and interrogate data to support your strategic plans and investment decisions.

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