



Fact Sheet

Key Barriers in Japan's Renewable Energy Development



Japan rapidly increased its renewable energy capacity following the introduction of Feed-in Tariffs (FIT) in 2012. However, despite ambitious climate targets, this expansion has slowed.



There is a widening gap between the country's 2030 target of 36%-38% renewable electricity generation and the current deployment path. This slowdown jeopardizes Japan's broader carbon neutrality commitment by 2050.



The primary constraints to renewable energy deployment stem from structural and institutional barriers rather than technical or resource limitations.

Scalable Subnational Approaches

Several prefectures, such as Fukushima, Saga, Akita, and Hokkaido, have demonstrated effective renewable deployment strategies through:

- Local renewable energy targets with community support
- Land use planning and zoning coordination
- Regional financial mechanisms and investment partnerships
- Power purchase agreement (PPA) frameworks for corporate buyers

Scaling these approaches nationally requires regulatory and grid access reform, enhanced utility accountability, and modernized market frameworks that prioritize renewable integration over fossil fuel dependence.



Challenges & Barriers to Renewable Energy Deployment	IEEFA Recommendations
Reluctance of electric utilities toward renewables <ul style="list-style-type: none"> Major utilities control 75% of installed capacity Renewables represent only 0-2% of major utility generation portfolios Utilities prioritize fossil fuel and nuclear assets over domestic renewables 	<p>The government should strengthen the enforcement of the 44% non-fossil fuel obligation by introducing penalties or binding compliance mechanisms</p> <p>Require major utilities to increase their domestic renewable generation capacity</p>
Underutilization of Non-Fossil Certificates (NFCs) <ul style="list-style-type: none"> Low purchase rates by major utilities Renewable-designated NFCs remain limited 	<p>The government should encourage higher NFC uptake by major utilities through stronger guidance from the Ministry of Economy, Trade and Industry (METI) and disclosure of non-compliance</p>
Grid connection constraints and curtailment <ul style="list-style-type: none"> Widespread curtailment in renewable-rich regions (such as Kyushu, Hokkaido) Thermal power plants receive dispatch priority over renewables Limited long-distance transmission connecting rural generation to urban demand High grid access costs and lengthy connection delays 	<p>National policy should facilitate more flexible, region-specific transmission strategies, including mechanisms for cost allocation, priority connection rights, and independent infrastructure development</p>
Lack of financial and regulatory frameworks for transmission <ul style="list-style-type: none"> Inadequate cost-sharing mechanisms for grid infrastructure Transmission investments are currently borne primarily by developers, making it financially challenging for projects in renewable-rich regions 	<p>Establish a national cost-sharing mechanism to reduce the financial burden on developers in renewable-rich regions</p> <p>Prioritize transmission investment equal to Green Transformation (GX) subsidies to ensure timely grid development</p>
Urban-rural renewable energy gap <ul style="list-style-type: none"> Urban rooftop solar adoption remains low (Tokyo: 1.6%) Split incentives in rental housing 	<p>Japan should develop green lease frameworks that equitably distribute costs and benefits between landlords and tenants</p> <p>Third-party ownership schemes (such as PPAs and tax incentives targeting building owners, rather than residents) could also accelerate adoption</p>
Overregulation in rural areas <ul style="list-style-type: none"> 72% of 403 local ordinances restrict renewables development Community opposition is increasing 	<p>Proactive land use planning and close collaboration with local communities have proven essential for accelerating deployment</p>

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