

OVERVIEW OF FINANCING OPTIONS FOR THE ENERGY TRANSITION

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The energy transition will be capital intensive



- Solar panels
- Geothermal
- Wind turbines
- Transmission
- Energy storage
- Energy efficiency
- +++

In 2021, global investment in renewables alone was >US\$360 billion ([IEA](#))



Overview of finance sources

Private

Government
revenue

Public sector
borrowing

International
concessional
finance

Private



- There is a large amount of financial capital available
- Both domestic and international
- If policy settings for the energy transition are facilitative, private finance can flow strongly
- Private finance is more likely to flow if:
 - Risk is lower
 - Expected rate of return is higher



Government revenue



- Public investments are important
- Especially for:
 - Research & development
 - Network infrastructure such as electricity transmission
- Indonesia's central government tax-to-GDP ratio is low (~ 9%)
- Indonesia could mobilise more domestic resources for government use
- Spending could also be reoriented to free up fiscal space



Public sector borrowing



- It is also possible to borrow, for example via:
 - Issuing bonds
 - Other loans

Example

- In 2021 PLN borrowed US\$500 from international banks for green projects
 - Risk was reduced by guarantees from the Multilateral Investment Guarantee Agency (MIGA)

[\(read more\)](#)



International concessional finance



- Loans and grants
- Multilateral: World Bank, Asian Development Bank (ADB)
- Bilateral: US, Germany, Australia, +++
- To support specific infrastructure projects or other activities such as technical assistance

Example: Eastern Indonesia Renewable Energy Project (Phase 1), ADB

Provided loan funding for a wind farm in South Sulawesi ([read more](#))



Conclusion



- The most important first step is for a suitable policy environment to be established
- If an ambitious clean energy target is set and well-designed policies are in place, there could be substantial private sector interest
- Government investments are also important, funded from revenue or borrowing
- Concessional sources can also be accessed



Thank you



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