

International financial flows

Foreign sources of public and private finance can be useful in countries lacking sufficient access to domestic sources of finance. They can help catalyse investment for environmental projects and technologies, thus fulfilling the twin development-environment objectives. Public and private sources of international finance can also contribute to cross-border exchange of know-how and skills, foster local entrepreneurship and strengthen local absorptive capacity. This, in turn, can facilitate international technology transfer.

There are two main challenges for government. First, to successfully attract foreign sources of finance governments must improve the framework conditions (e.g. rule of law, human capital) and pursue policies that facilitate market entry and exit and do not discriminate among different categories of investors. Second, governments must strengthen the use of public financing to mobilise private finance for projects supporting the transition to greener growth. A particular concern is to minimise the potential for public finance to crowd out private finance (e.g. Cárdenas Rodríguez et al. 2014).

Main trends and recent developments

Official development assistance (ODA) is an important source of government-funded international financial flows. Members of the OECD Development Assistance Committee (OECD-DAC) provide as much as 95% of global development aid. Despite the recent financial crisis, bilateral ODA flows continued to rise to 2015, reaching a total of USD 136 billion. However, the collective efforts of OECD-DAC members fell short of the international ODA target of 0.7% of gross national income (Figure 14.2c).

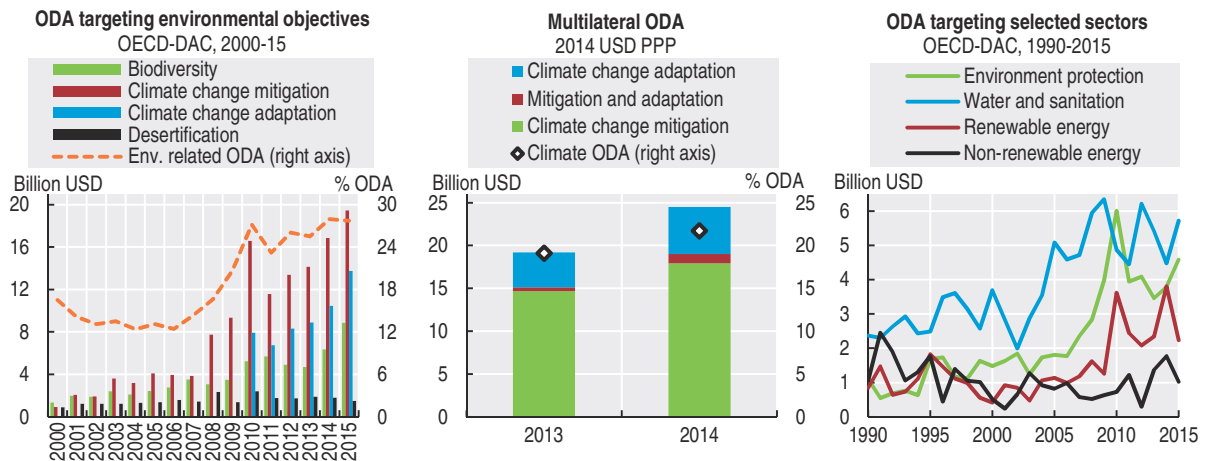
Environmentally related ODA has increased, from both bilateral and multilateral donors

ODA targeting the biodiversity, climate change and desertification objectives of the Rio conventions has been increasing since the late 1990s. In 2015, DAC members allocated USD 35.5 billion to environmentally related ODA. Most of these funds were for climate change mitigation and adaptation. Much less was directed at biodiversity- and desertification-related ODA. Data on multilateral ODA are more limited, but suggest a similar pattern of rising emphasis on the environment in ODA targeting (Figures 14.1a-b).

ODA targeted at renewables has surpassed ODA for non-renewable energy generation

Since the mid-2000s bilateral donors have strengthened their support for the water and sanitation sector, particularly for environmental protection. ODA targeted at energy generation from renewable sources has increased five-fold since 2000, surpassing ODA for non-renewable energy (Figure 14.1c). Rail transport largely dominates all environmentally related projects supported by ODA in 2015 across all ODA providers.

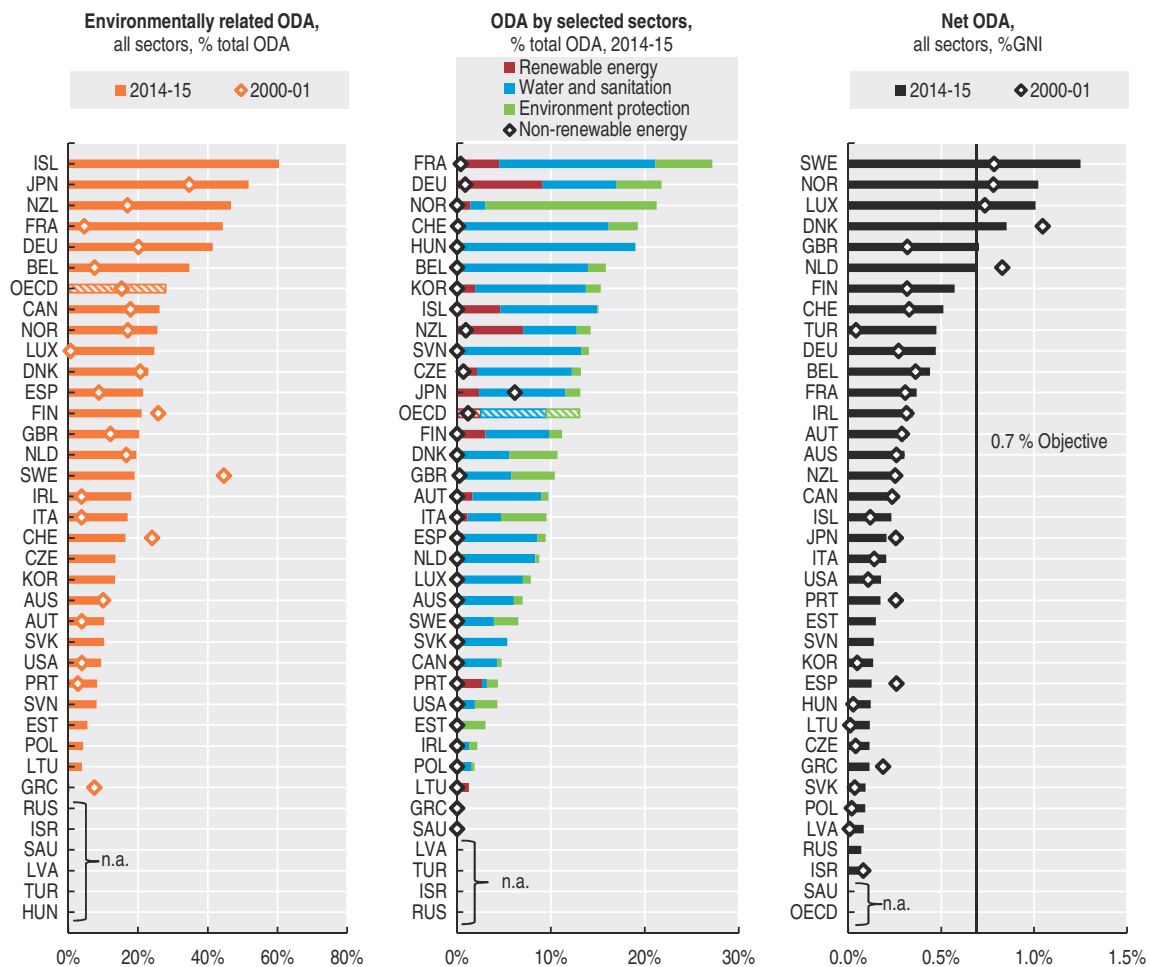
Figure 14.1. ODA puts more emphasis on the environment



Note: Indicators are constructed from project-level data. Expressed in 2014 USD using PPPs.
Source: Source: OECD (2016a, 2016b) OECD International Development Statistics (database).

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Figure 14.2. ODA by donor country



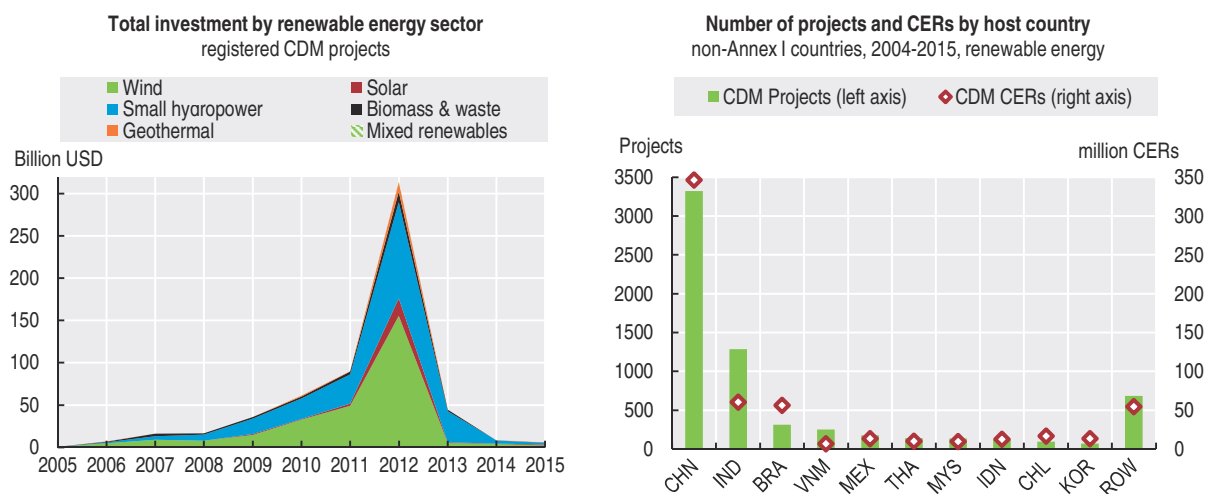
Source: OECD (2016a), OECD International Development Statistics (database).

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Transactions under the Clean Development Mechanism have declined


Project-based transactions under the Clean Development Mechanism (CDM) declined over 2013-15 to close to nil. This was due to low demand in the European Union emissions trading system and other traditional markets for emission credits from CDM projects. In 2012, the value of new renewable energy projects under the CDM reached a peak of over USD 314 billion. In 2015, however, the transaction value fell below USD 6 billion (Figure 14.3). Throughout the CDM, wind and small hydropower have been the dominant sectors, accounting for 48% and 41% of total investment in renewable energy projects respectively.

Figure 14.3. Transactions in clean development mechanism projects have declined recently



Note: CERs = Certified Emission Reductions.

Source: Source: UNEP-Risoe (2016), data extracted in September 2016.

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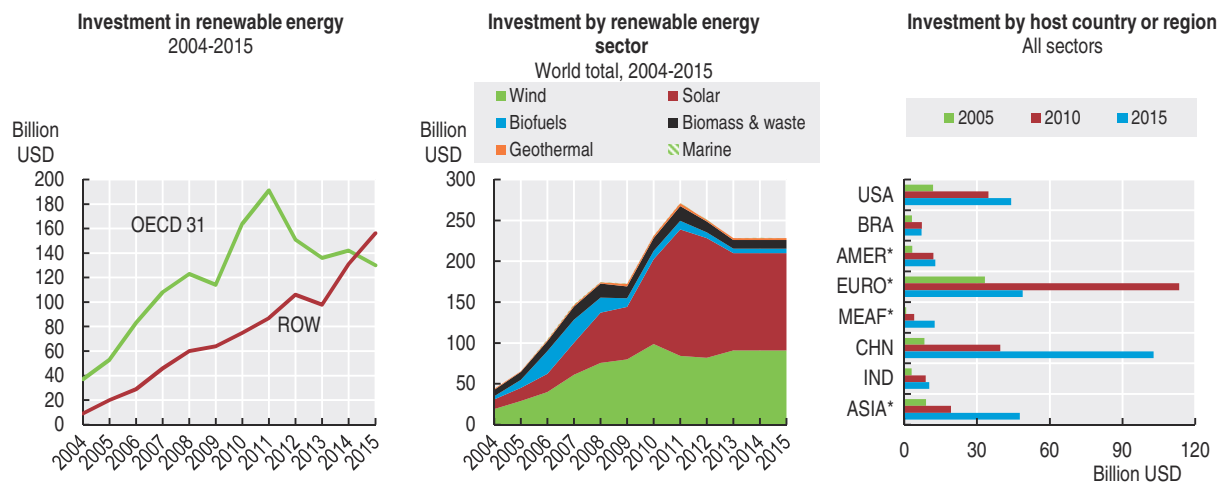
The People's Republic of China (hereafter China), has been the largest host country for CDM projects (50% of projects and 58% of emission credits issued), followed by India (19.5% and 10.0%) and Brazil (4.8% and 9.3%). The potential of CDM projects to crowd out profitable private investment (additionality) remains a key concern over the CDM mechanism.

Green financial markets are emerging

Sizeable opportunities in international financing have appeared in the field of clean energy. New investment flows, both domestic and international, have more than quadrupled in this field since 2005. In 2015, most funds were invested in projects related to wind (38%) and solar (56%) energy (Figure 14.4). Globally, investment in electricity generation from renewable sources has largely surpassed investment in fossil fuel technology, mainly due to falling cost of wind and solar photovoltaics. Investment in renewables-based capacity is sufficient to cover growth in global electricity demand in 2015, but it is not yet consistent with achieving the objectives of the 2015 Paris Agreement (IEA, 2016).

New opportunities for financing green growth-related projects have also emerged. A number of financial institutions have issued green-labelled bonds, for example. This market is still relatively small compared to global bond markets. However, the issuance of green-labelled bonds amounted to about USD 42 billion in 2015 (Figure 14.5).

Figure 14.4. Investment in renewable energy increasingly targets non-OECD economies

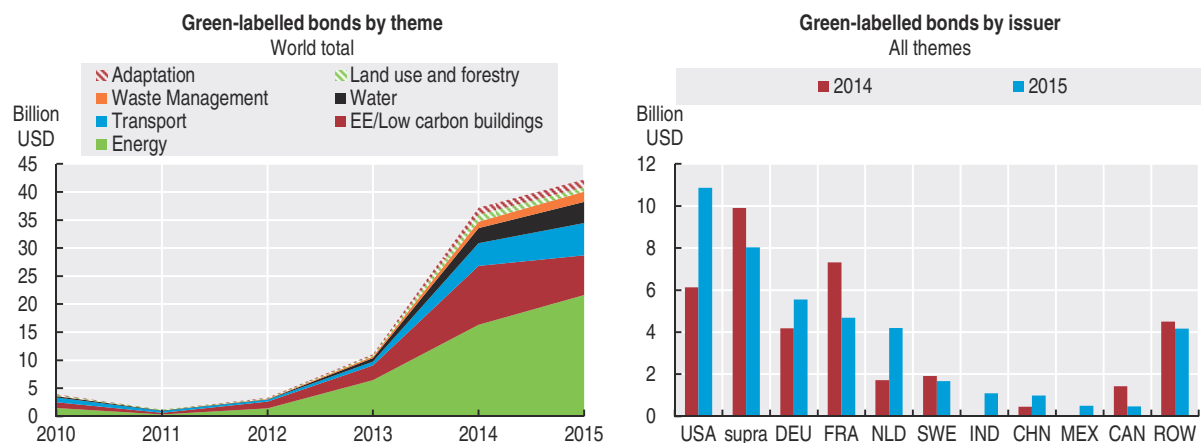


Note: OECD31 = all OECD excl. Mexico, Chile, Turkey and Latvia. ROW = Rest of the World. AMER = America excl. United States and Brazil. EURO = Europe, MEAF = Middle East and Africa, ASIA = Asia excl. China and India. All values are in nominal prices.

Source: Frankfurt School-UNEP Centre/BNEF (2016).

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Figure 14.5. Issuance of green-labelled bonds is growing, particularly in the energy and transport sectors



Note: “supra” = supranational (e.g. World Bank, European Investment Bank, etc.). All values are in nominal prices. Country coverage has been improving over time so trends should be interpreted with caution.

Source: Climate Bond Initiative (2016).

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Measurability and interpretation

The indicators presented in this chapter relate to the following:

- **Official development assistance**, including ODA directed at selected sectors (environmental protection, renewable energy, water and sanitation), ODA targeting the objectives of the Rio conventions (i.e. related to biodiversity, desertification and climate change mitigation and adaptation) and an additional “environment” marker. Finally, “net ODA” is presented as a share of gross national income. (For further details, see *Glossary*.)
- **CDM**: The structure of Clean Development Mechanism (CDM) projects in the pipeline and the emission credits issued (so-called certified emission reductions or CERs), expressed as a percentage of all projects, by countries and regions.

- **Investment** in renewable energy projects, from both private and public sources, presented in levels of investment by sector and by host country.
- **Green-labelled bonds:** Labelled bonds with proceeds earmarked for projects and assets that deliver environmental benefits, presented in value by theme and by issuer.

Rio markers for ODA refer to donors' commitments (i.e. policy objectives). There is no internationally agreed methodology for tracking actual disbursements of ODA related to each environmental objective.

The main statistical challenge is the monitoring of financial flows of importance to green growth. Some standards do exist, such as the OECD DAC Creditor Reporting System (CRS). However, it remains difficult to determine the environmental purpose of existing commitments and investment projects. ODA donors are requested to screen each activity reported to the CRS, but data gaps remain for some donors.

There is no internationally agreed methodology for classifying green bonds. The data and definitions from the Climate Bond Initiative are used here only for illustration.

These indicators are limited in that they do not systematically track all the relevant financial flows between countries directly. A "green" FDI-based indicator could help fill this gap. However, the lack of an agreed definition and the patchiness of the data make it impossible to calculate at this stage.

Sources

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Further reading

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