CHAPTER II

RECENT POLICY DEVELOPMENTS AND KEY ISSUES

INTRODUCTION

In response to the economic challenges posed by the expected economic downturn, many countries ramped up their investment policymaking activity in 2022 (section A). Measures favourable to investment surged in both developed and developing countries. Their number nearly doubled, bringing their share of total measures back to pre-pandemic levels. Developing countries continued to prioritize investment promotion and facilitation measures to attract foreign direct investment (FDI) across various sectors, while developed countries mainly incentivized investments that have a positive environmental impact.

In parallel, the trend observed in recent years towards introducing or tightening national security regulations that affect FDI in strategic industries continued and expanded. The approach to FDI screening varies significantly from country to country, resulting in a patchwork of different regimes. Together, countries with FDI screening regimes accounted for 71 per cent of global FDI flows and 68 per cent of FDI stock in 2022, compared with 66 and 70 per cent, respectively, in 2021. Furthermore, the number of merger and acquisition (M&A) deals valued at more than \$50 million withdrawn by the parties for regulatory or political concerns in 2022 increased by a third, and their value increased by 69 per cent.

The trend towards reforming the international investment agreements (IIA) regime continued in 2022, with several notable developments (section B). These included the emergence of new types of investment-related agreements, the termination of bilateral investment treaties (BITs) and continued multilateral discussions on the reform of investor–State dispute settlement (ISDS) mechanisms. Negotiations were concluded on several international investment governance instruments with proactive investment facilitation features and with an increased focus on responsible investment. At the same time, about 2,300 old-generation IIAs are still in force. Their continued prevalence entails risks for climate action, the energy transition and other global objectives, highlighting the need to accelerate the reform of the IIA regime.

Looking at trends in investment treaty arbitrations, about 80 per cent of the new ISDS cases in 2022 relied on IIAs signed in the 1990s or earlier. The total count of ISDS had reached 1,257 by the end of 2022, with 46 new arbitrations initiated that year. The Energy Charter Treaty (ECT) continued to be the most frequently invoked IIA.

Investment policies at both national and international levels play a crucial role in driving the shift towards clean energy, which is at the center of the policy response to climate change (section C). Countries utilize a variety of policy instruments to promote investment in the renewable energy sector. Section C.1 provides an overview of the key ones, based on analysis of renewable energy policies worldwide. Developing countries and least developed countries (LDCs) typically favour conventional promotion instruments such as tax incentives (particularly profit-based ones). In contrast, developed economies tend to rely on financial incentives as well as more complex, but more targeted tools, such as feed-in tariffs and green certificates, to promote investment in renewables and facilitate the low-carbon energy transition. Auctions have increasingly been embraced by countries at every level of development. These policy tools come with both benefits and challenges, and they should be implemented and tailored to country-specific circumstances and objectives.

The chapter also reviews the use of fossil fuel subsidies, which effectively disincentivize renewable energy investment because they artificially lower the cost of producing and consuming fossil fuels, making them more attractive to consumers and investors. In addition, fossil fuel subsidies create an incumbent advantage, reinforcing the position of fossil fuels in

the energy system. Despite reiterated commitments to discontinue fossil fuel subsidies, they have reached record levels and increasingly benefit producers. Phasing them out remains a complex issue, particularly for developing countries, but it would help increase investment in renewables and signal a country's commitment to a low-carbon economy.

At the international level, the energy transition adds to the urgency of international investment governance reform (section C.2). Most IIAs do not include proactive investment promotion and facilitation provisions supporting low-carbon energy investments. This challenge is compounded by the rising number of ISDS cases related to the fossil fuel and renewable energy sectors that are brought based on IIAs. Investors in these sectors – albeit different, but equally important to the energy transition – have been frequent claimants, together accounting for about 25 per cent of all ISDS cases. To transform IIAs into tools that are conducive to sustainable energy investment and climate objectives, UNCTAD has developed a toolbox with policy options focused on four action areas: the promotion and facilitation of sustainable energy transition, and corporate social responsibility. Renegotiation, amendment and termination of the large stock of old-generation IIAs are the main options to ensure that the international investment regime positively contributes to – and does not constrain – the energy transition and climate action.

A. NATIONAL INVESTMENT POLICIES

1. Overall trends

Investment policymaking activity surged in 2022, as many countries adopted measures to counter an expected economic downturn. After registering record low levels in the aftermath of the pandemic, measures favourable to investment increased in both developed and developing countries, bringing their relative share back to pre-pandemic trends.

Sixty-six countries introduced a total of 146 policy measures affecting foreign investment in 2022, an increase by 35 per cent from the number in 2021 (figure II.1). The number of measures favouring investment nearly doubled, from 55 to 102, while the number of policies that were less favourable to investment remained stable. This brought the relative share of favourable policies back to pre-pandemic levels (figure II.2), reflecting recognition by policymakers of the need to stimulate investment and promote economic growth in the face of unprecedented challenges posed by the current global crises.

Developing countries continued to prioritize investment attraction as a key element in their economic recovery and development strategies. In 2022, three quarters of the measures more favourable to investment were adopted in developing countries. For the first time since the pandemic, the share of more favourable investment measures also grew significantly in developed countries (by 21 per cent). Investment facilitation initiatives and incentive regimes for promoting renewable energy and other climate-related investment were among the measures most frequently implemented (section 1.b).

Figure II.1. Changes in national investment policies, 2013–2022 (Number of measures)



Source: UNCTAD, Investment Policy Monitor

The number of new measures less favourable to investment remained stable compared with 2021, and their share returned to the pre-pandemic level (28 per cent of non-neutral measures) (figure II.2). In developing countries, less favourable measures constituted only 13 per cent of the total. In contrast, half of the measures adopted by developed countries introduced or reinforced investment restrictions, a decrease of 29 percentage points compared with 2021. Several of these policies were directly or indirectly related to national security concerns about foreign ownership of critical infrastructure, core technologies or other sensitive domestic assets. Often, they represented an extension of restrictions introduced during the pandemic, motivated by the desire to protect sensitive domestic businesses from foreign takeovers (section 2).



Source: UNCTAD, Investment Policy Monitor.

An additional five measures were of a neutral or indeterminate nature, such as changes of mandate for institutions in charge of investment promotion or screening (figure II.1).

In regional terms, countries in Asia continued to be the most active reformers, followed by those in Africa and in Latin America and the Caribbean. Among developed regions, European countries continued to adopt the largest number of measures, more than double the number in 2021. The number of measures adopted in North America and other developed regions remained stable compared with 2021 (figure II.3).

Among the 21 investment policy measures adopted in the first quarter of 2023, 76 per cent (16 measures) were adopted by developing countries. Fourteen of them aimed to facilitate or attract FDI. In contrast, among the remaining five measures adopted by developed countries, two aimed to tighten control on FDI and one adopted a windfall profit tax.



a. FDI screening and windfall profit taxes were prominent among measures introduced in developed countries

In 2022, the trend towards increased screening of FDI continued and expanded. Another significant trend was the introduction of windfall profit taxes by several European countries.

The introduction or tightening of national security regulations affecting FDI represented 44 per cent of policy measures less favourable to investment, most of them introduced by developed countries (section 2). In addition, several developed countries introduced taxes aimed at (i) ensuring a fair distribution of profits in industries that have experienced significant gains because of the pandemic and (ii) financing recovery programmes or subsidies for energy consumers. For example,

- Croatia adopted the Corporate Windfall Tax Act, which affects all companies with revenue greater than approximately \$42.6 million in 2022. Any profit higher than 20 per cent of the average taxable profits generated in fiscal years 2018–2021 will be taxed at a rate of 33 per cent.
- Italy introduced a temporary solidarity tax for enterprises operating in the energy, oil and gas sectors. It applies to entities that derived at least 75 per cent of revenues for fiscal year 2022 from the production, import or sale of electricity, natural gas or oil products.
- Portugal introduced a temporary solidarity tax in the energy and food distribution sectors. It levies a rate of 33 per cent on taxable profits in 2022 and 2023 to the extent that they exceed by 120 per cent the average taxable profits in the preceding four years (2018 to 2021).
- *Romania* adopted a windfall tax on companies operating in the oil, natural gas, coal and refining sectors. Revenues that exceed the average profits of the preceding four years by more than 20 per cent will be taxed at a rate of 60 per cent.
- The United Kingdom imposed new windfall taxes on energy companies. The Energy
 Profit Levy, which applies to the profits of oil and gas companies, was introduced in
 May 2022 at a rate of 25 per cent and later increased to 35 per cent. In addition,
 a temporary 45 per cent levy was imposed on the extraordinary profits of companies
 that operate electricity-generating assets (Electricity Generator Levy).

b. Support for renewable energy and carbon neutrality predominated in developed countries' investment promotion measures

FDI promotion measures in developed countries focussed on incentivizing renewable energy and other investments with positive environmental impact.

In 2022, developed countries' efforts to encourage FDI centred on providing incentives for investments in renewable energy and other environmentally beneficial projects. For example,

- Albania introduced a one-stop-shop service, as well as financial grants and other support measures for domestic and foreign start-ups supporting innovation in priority areas, including initiatives that have positive environmental impacts.
- Italy provided incentives for building sustainable biomethane or electricity plants using agricultural waste or biogas. They include a 40 per cent capital contribution on eligible investment costs, up to a maximum limit, as well as a 15-year incentive tariff for biomethane production.
- The *Republic of Korea* decided to provide a cash reimbursement up to 50 per cent for foreign investment in strategic areas such as chips, batteries and vaccines.

- Spain introduced incentives for investing in renewable energy, allowing 100 per cent depreciation for facilities intended for self-consumption of electricity that use energy from renewable sources, as well as those installations for thermal use for own consumption that use energy from renewable sources, which replace installations that use nonrenewable fossil energy sources.
- The United States offered \$369 billion in incentives for energy and climate-related programmes, including tax credits, grants and research loans to boost manufacturing of clean energy components in the country. The country also provided tax credits for production of clean electricity and investment in clean energy infrastructure, and manufacturing tax credits for investments to cut emissions and improve efficiency. It also offered programmes to reduce the environmental impact of agriculture.

c. In developing countries, investment promotion and facilitation measures continued to dominate

At least 40 developing countries implemented promotion and facilitation measures in 2022, to attract additional FDI and to help overcome the economic challenges caused by the global crisis. Investment facilitation measures accounted for almost 52 per cent of all measures more favourable to investment.

(i) New investment incentives

At least 22 developing countries introduced incentives for investors, most of them in the form of new fiscal benefits for priority sectors or through the institution of special economic zones. For example,

- Algeria implemented a law on free trade zones, which exempts activities in these zones from most taxes, duties and levies, except for taxes related to vehicles and passenger cars and contributions to the social security system.
- Argentina implemented tax benefits for investors in the automotive industry, including
 accelerated depreciation and early refund of value added tax (VAT) paid on acquisitions
 of new capital goods and full exemption (a zero per cent rate) from export duties for
 manufactured goods produced by investment projects.
- Egypt announced incentives on FDI-funded projects in key industries and areas of up to 55 per cent of the value of the tax on the income generated. The incentives will be granted if at least 50 per cent of the investment project or its expansion is financed by foreign currency.
- *Ethiopia* implemented income tax exemption for investors from the date of obtaining a business license or expansion permit and allowed investors to import capital goods, construction materials and motor vehicles free from customs duties.
- Saudi Arabia unveiled its first Special Integrated Logistics Zone, which offers investors (including those with 100 per cent foreign ownership) a 50-year tax holiday. In addition, it provides investors with VAT advantages on servicing and assembly.

(ii) Other legal and institutional reforms to promote and facilitate FDI

Several countries adopted new or enhanced legal and institutional mechanisms to promote FDI in 2022. For example,

- *Bangladesh* enacted the Bangladesh Patents Bill 2022, which extended the duration of patent protection from 16 to 20 years.
- *Fiji* realigned the mandate and functions of Investment Fiji to enable it to transition from being a regulator of foreign investors to being a promotion agency for attracting both

foreign and domestic investors. The agency will focus primarily on promoting investment and expanding exports.

- Mexico launched the Invest in Mexico Business Center, which will provide investors with economic and commercial intelligence, information on investment opportunities in different regions, guidance on national procedures and assistance in establishing linkages with companies and vendors of the supply chain.
- Saudi Arabia established the Saudi Investment Promotion Authority, which will collaborate with the Ministry of Investment to gather opinions and prepare proposals for laws, procedures and manuals.
- *Sri Lanka* introduced a new Ministry of Technology and Investment Promotion, which will promote FDI and private sector investment.

(iii) FDI liberalization

FDI liberalization accounted for 21 per cent of the policy measures more favourable to FDI that developing countries introduced in 2022. For example,

- *China* revised the Negative List for Foreign Investment Access, removing the 50 per cent cap on foreign investment in automobile manufacturing and in ground-receiving facilities for satellite television broadcast.
- *Ethiopia* announced the privatization of 40 per cent of Ethio Telecom, the public telecommunication operator. The process is open to foreign investors.
- India approved a policy amendment allowing FDI in up to 20 per cent of the State-run Life Insurance Corporation of India. Until this amendment, even though foreign institutional investors were allowed to hold up to 74 per cent of private insurance companies and up to 20 per cent of State-owned banks, they were not permitted to own shares in the State-run insurer.
- The *Philippines* allowed international investors to set up and fully own small and mediumsized businesses and hold 100 per cent equity in firms in sectors where they could already operate. Previously, foreign investors could invest in small businesses only if they hired at least 50 Filipino workers.
- The United Arab Emirates allowed investors and entrepreneurs to establish 100 per cent foreign-owned companies in almost all sectors, except activities deemed to be strategic, such as defence and communications. Historically, foreign ownership was capped at 49 per cent with the remaining 51 per cent mandated for nationals of the country.

d. Investment restrictions in developing countries targeted, among other matters, national security and the protection of strategic assets

National security considerations and the protection of strategic industries also featured in some developing-country measures.

Some developing countries also placed emphasis on implementing investment measures that prioritize the protection of strategic industries and national security considerations. For example:

 India announced that any national from a country with which it shares a land border (Bangladesh, Bhutan, China, Myanmar, Nepal, Pakistan) must seek security clearance from the Ministry of Home Affairs, in order to be appointed as director in any Indian company.

- Mexico declared lithium a national resource of public utility and banned all concessions, licenses, contracts, permits or authorizations for exploration or exploitation of the mineral in the country. All such activities will be carried out by a decentralized public authority to be created by the Government.
- The *Philippines* introduced an FDI review mechanism in military-related industries, cyberinfrastructure, pipeline transportation and other such activities that may threaten the territorial integrity and the safety, security and well-being of Filipino citizens.

2. Investment screening

a. Continued expansion of FDI screening regimes

In 2022, the number of countries conducting investment screening on national security grounds continued to rise, reaching 37. Among them, 16 countries undertook 24 measures related to FDI screening, most of which expanded the scope of existing regimes.

As documented in recent editions of the *World Investment Report* and in UNCTAD's latest *Investment Policy Monitor* (UNCTAD, 2023b), the implementation of FDI screening mechanisms to address security concerns related to foreign investment is becoming increasingly common among countries (figure II.4).

The current trend began to emerge in the latter half of the 2000s. From 2006 to 2009, the number of countries making use of investment screening for national security increased from three to nine. In the aftermath of the global economic and financial crisis, and in parallel with the expansion of outward FDI from developing countries, more developed countries began to introduce dedicated regimes for screening investments. The main concern among some appeared to be that foreign investors may buy stakes in strategic industries to gain access to and knowledge of the latest technology or "national champions" (*WIR07*). By 2014, a total of 17 countries had incorporated elements of investment screening in their national investment policies.



Figure II.4. Countries introducing or expanding security-related investment screening, 1995–2022 (Number)

Source: UNCTAD.

Starting from 2016, countries have introduced a significant number of amendments to existing investment screening regulations, mostly seeking to expand their scope. Most of these reforms took place in 2020 and 2021, when 17 and 12 countries respectively adopted amendments to their screening regimes. The peak of regulatory activity came in 2020 (see figure II.4), when the world economy faced risks associated with the COVID-19 pandemic, which accelerated the trend.

As of the end of 2022, at least 37 countries had established investment screening mechanisms for national security reasons since 1995.¹ Of these, 22 are developed economies in Europe. In other regions, a handful of developed and developing countries have implemented comprehensive FDI screening regimes (nine in Asia, two in North America, two in Oceania, one in Latin America, and one in Africa). In addition, at least eight countries are in the process of introducing FDI screening mechanisms to address potential risks posed by certain investments to their national security.² Finally, discussions are ongoing in the European Union and the United States about the possible introduction of outward investment controls.³

In 2022 alone, a total of 24 policy measures related to FDI screening were adopted by 16 countries, nearly all of them developed economies. Most of the measures that were adopted focussed on extending the scope or requirements for screening, though some were meant to streamline or clarify procedures (figure II.5).

Figure II.5. Key changes to FDI screening in 2022 (Number of measures)



Source: UNCTAD, Investment Policy Monitor.

(i) New or expanded regimes

In 2022, new FDI screening regimes entered into force in the United Kingdom and in the Philippines (section 1.d), bringing to 37 the total number of countries with comprehensive FDI screening regimes based on national security. Together, these countries accounted for 71 per cent of global FDI flows and 68 per cent of FDI stock that year (compared with 66 and 70 per cent respectively in 2021).

At least four countries (France, Italy, Poland and Spain) extended the temporary screening provisions introduced during the COVID-19 pandemic or made them a permanent part of their screening regime. Originally, these temporary regimes aimed to safeguard domestic capacities related to strategic sectors, especially in health care, pharmaceuticals, medical supplies and equipment (*WIR20*). Subsequently, their extension was justified by broader considerations including, in Italy, "the extraordinary need and urgency to ensure the strengthening of safeguards for security, national defence, electronic communication networks and supplies

of raw materials",⁴ and, in Spain, "the impact of the pandemic and the geopolitical tensions on different sectors, global value chains and the instability of financial markets".⁵

Seven countries broadened the scope of their FDI screening mechanisms by including additional sectors, activities or strategic assets or by expanding the definition of investment or investor, or the level of control that triggers FDI screening. For example,

- Canada released a policy statement clarifying that investment in Canadian entities and assets by State-owned enterprises in critical minerals sectors could be deemed injurious to national security as per the Investment Canada Act. The policy applies to all stages of the value chain and all types of investment, regardless of value, or level of control.
- Italy expanded its special power over strategic assets in the energy, transport and communication sectors to cover geothermal resources, procurement related to 5G networks and cloud services, and other cybersecurity assets and technologies. In addition, it extended the mandatory notification regime to new legal entities in strategic sectors that have ownership from countries outside the European Union (EU) of more than 10 per cent of capital or voting rights.
- Japan introduced a pre-notification procedure for real estate objects located in "special monitored areas" to safeguard national security interests by preventing "inappropriate use of real estate that impedes the functions of important facilities and border islands".
- The Russian Federation expanded the list of activities considered strategic for national security and subject to FDI screening to include analysis of the vulnerability of fuel and energy complex facilities, physical protection of these facilities, and the transportation of goods by sea and inland waters and associated information technology services.
- Slovakia broadened its FDI screening regime to include all foreign investments that may threaten security or public order. Previously, only investments in critical infrastructure were subject to screening. In addition, it expanded definitions of foreign investment, effective participation and foreign control, foreign investors, and critical foreign investments.

Two countries increased control over FDI by introducing or tightening administrative requirements:

- New Zealand tightened the test for overseas investors seeking to convert land to new
 forestry production by eliminating the option of relying on the simplified "special forestry test".
- Romania expanded the screening framework by adopting a mechanism in line with the EU Guidance on FDI screening. Under the new law, the de minimis threshold for screened investment is €2 million. However, if an investment is deemed to have the potential to affect national security or public order, the screening procedure may be initiated ex officio, regardless of whether the FDI exceeds the required threshold.

(ii) Streamlining and clarification of existing regimes

At least five countries introduced measures to clarify or streamline their FDI screening procedures and reduce the regulatory burden on investors. For example,

- Australia amended the Foreign Acquisitions and Takeovers Regulation of 2015 to clarify certain aspects of the foreign investment review framework and streamline the process for certain less sensitive types of investment. It also updated the Guidance Notes covering agriculture, commercial land, mining, residential land and securities, among other investment targets.
- *Canada* allowed non-Canadian investors to seek pre-implementation regulatory certainty for national security review of investments that do not require filing under the Investment Canada Act, by introducing a voluntary filing process that shortens the review period to 45 days from five years.

- France issued its first set of guidelines on FDI control that "aims to ensure predictability and legal certainty of the operations envisaged by foreign investors and thus contribute to further enhancing the attractiveness of France".⁶ The guidelines clarify the official position on the scope of the definition of an investor, types of investments covered by the screening regime and covered activities, and procedural aspects of FDI screening.
- *Italy* introduced a pre-filing procedure for FDI transactions in strategic sectors. The new procedure seeks to shorten the time frame for the preliminary assessment of transactions by the Government.
- The United States updated the "excepted foreign States" list to include Canada and Australia. Subject to certain conditions, investors from these countries do not fall under the jurisdiction of the Committee on Foreign Investment in the United States over non-controlling investments and certain real estate transactions, and they are exempt from mandatory filings.

b. Significant differences exist among FDI screening regimes

A recent review by UNCTAD highlighted that the approach to FDI screening varies greatly from country to country, leading to a patchwork of differing regimes.

UNCTAD recently conducted an extensive review of investment screening mechanisms in 29 countries that have established comprehensive rules for screening investments on national security grounds (UNCTAD, 2023b). The review revealed that there is no standardized approach, resulting in significant differences in the clarity, scope and transparency of various mechanisms. In some cases, these mechanisms can create significant barriers to investment and a high administrative burden for host-country authorities.

Notably, the review identified significant variations in the scope and rationale of investment screening mechanisms, including how the subject of the mechanism is determined. Some are based on the economic grouping(s) of the country of origin of the investor, while others are based on whether the foreign entity subject to screening is public or private. In addition, there is a wide range of often undefined screening criteria and rationales (figure II.6), and the scope of the screening procedures can be sector-specific, cross-sectoral or entity-specific.

Wide variations also exist in the governance of screening mechanisms. In over half of the countries reviewed, screening is conducted by the authorities in charge of investment matters; only six countries rely on a national regulatory authority to take on screening duties. In addition, investors affected by screening can be subject to different administrative requirements such as filing schemes, notification procedures and pre-authorization procedures, or different combinations of those requirements.

Finally, investment screening regimes tend to operate outside public scrutiny and provide limited levels of transparency to those involved in the screening process. To increase legal certainty and predictability for investors, several countries have introduced provisions that set out in detail the factors to be considered by the authorities in the screening process, as well as the aspects or investor features that are taken into consideration for assessment of an investment project. Efforts to improve the transparency, predictability and administrative efficiency of investment screening mechanisms and introduce effective appeals will become increasingly important, as investment screening regimes become more widespread and comprehensive.

Figure II.6.Investment screening rationale, most frequently used criteria



Source: UNCTAD.

c. FDI screening - summary of available data

A limited number of countries currently disclose official data on FDI screening and there is no standardized reporting framework, but the data points to an increase in the number of screened projects and a low rejection rate.

Table II.1 on the following page presents data drawn from official sources or provided directly by the screening authorities to UNCTAD, detailing the number of FDI projects undergoing evaluation processes and, where available, information about rejected, blocked or withdrawn projects, as well as those that have undergone modifications.

In the absence of a standardized reporting framework, significant variations exist in the type of information reported, the reporting periods and the metrics used by countries. Specifically, some countries consider the total number of FDI applications received, whereas others focus solely on FDI projects that require a thorough examination or evaluation to address national security concerns.

Despite the differences in methodology, two notable trends appear. The first is an increase in the number of transactions that undergo review, likely because of the expansion of screening regimes and their scope in recent years. This applies to all countries with historical data. The second is that instances of investment rejection or prohibition are relatively infrequent (less than five per year across all countries). This can be attributed to the widespread implementation of robust mitigation measures, along with the high number of projects withdrawn from the screening process, whether for commercial reasons or for failure of the parties to address national security concerns raised by the screening authority during the review process.

Table II.1.

FDI projects screened on national security grounds (selected countries)

Country	Period	Screened	Authorized	Modified or authorized with conditions	Rejected	Withdraw
	4/2020-3/2021		28	4		
Australia	4/2021-3/2022		67	39		
	3/2022-12/2022		55	10		
Austria	7/2020-7/2021	50	41	2	3	4
	4/2019-3/2020	10	4		3	3
Canada	4/2020-3/2021	23	16		3	5
	4/2021-3/2022	24	16		0	7
Czechia	5/2021-12/2021	3	1	0	0	0
Czechia	2022	6	3	0	0	1
	2019	15			0	
Finland	2020	15			0	
Finiano	2021	32			0	
	2022	35			0	
France	2021	328	57	67		
	2019	106		12		
	2020	160		12		
Germany	2021	306		14		
	2022	306		7		
	2019	83	39	13	0	
Italy	2020	342	135	40	2	
	10/2020-12/2020	13	2	1	0	0
Malta	2021	81	2	6	2	0
	2022	22	0	0	1	3
	2021	0	0	0	0	0
Slovakia	2022	0	0	0	0	0
	2019	6	6	0	0	0
. .	2020	37	34	3	0	1
Spain	2021	57	51	6	0	1
	2022	77	67	9	1	1
United Kingdom	2022	222		9	5	
	2019	231		28	1	30
United States	2020	313		16	1	30
	2021	436		26	0	74

Source: UNCTAD, based on official sources and country inputs.

Notes: The number of authorized projects does not include the number of projects modified or authorized with conditions. For Germany, the number of projects modified or authorized with conditions includes prohibitions, side conditions, public legal contracts and administrative orders. In the United Kingdom, data on screened projects is valid only for the first quarter of 2022, and the review mechanism applies equally to domestic and foreign parties.

d. M&A controls affecting foreign investors

In 2022, the number of M&A deals valued at more than \$50 million that were withdrawn because of regulatory or political concerns increased by a third (21 deals), and their total value increased by 69 per cent, to \$70 billion.

The greater attention paid to national security considerations in regulatory approaches to FDI is reflected in the implementation of M&A controls. Among large M&A deals for which data are available, at least 21 were terminated by the parties in 2022 for regulatory or political

reasons, 7 more than in 2021, and their aggregate value jumped by almost 70 per cent, to \$70 billion from \$47 billion. This corresponds to 5.4 per cent of total FDI inflows in 2022. The terminated deals were in a variety of sectors, including extractive industries, semiconductors, automotive, aviation, communication, financial and banking services, trading and media, and commercial physical and biological research.

At least four deals were formally prohibited by the host country for national security reasons (table II.2). Another four were discontinued because of concerns from competition authorities, and at least six were withdrawn for regulatory reasons. Finally, at least seven planned deals were terminated because of delays in receiving approval from the host country. It should be noted that the total number and value of deals screened out by governments worldwide for these reasons is likely to be significantly higher. The adoption or announcement of tighter screening mechanisms, discussed earlier, is also likely to have had a chilling effect on the number of deals initiated in several strategic sectors.

Table II.2.Foreign acquisitions withdrawn for regulatory or political reasons in 2022 (Illustrative list)					
For national security reasons					
Silex Microsystems AB– Elmos Semiconductor SE	On 9 November 2022, Silex Microsystems (Sweden) withdrew its plans to acquire the 200 mm wafer fabrication activities of Elmos Semiconductor (Germany) for \$95.9 million after the Federal Cabinet prohibited the sale. In a press release emitted on 2 November 2022, the Federal Ministry for Economic Affairs and Climate Protection justified the ban by stating that "the acquisition would have endangered public order and security in Germany".				
Magnum Opus Acquisition Ltd–Forbes Media LLC	On 1 June 2022, Magnum Opus Acquisition (Hong Kong, China) withdrew its agreement to merge with Forbes Media (United States), a periodical publisher, for \$180 million. A group of United States Senators had expressed concerns for national security regarding the proposed acquisition of Forbes by an entity with ties to the Chinese Communist Party.				
2869889 Ontario Inc– Petroteq Energy Inc	On 29 August 2022, 2869889 Ontario (Canada) announced the withdrawal of its tender offer to acquire the entire share capital of Petroteq Energy, a United States—based natural gas distributor, for \$410.2 million in cash. The withdrawal was prompted by the rejection of the company's request for clearance by the United States Department of the Treasury. The company decided not to proceed with the transaction without the safe harbour that the notice would have offered by preventing any later determination that the protection of U.S. national security could be invoked.				
Asymchem Laboratories Co Ltd–Snapdragon Chemistry Inc	On 18 September 2022, Asymchem Laboratories Co Ltd (China) cancelled its acquisition plans for the remaining 81.8 per cent interest in Snapdragon Chemistry Inc (United States), a provider of biotechnology R&D services, for \$57.9 million in cash. The two firms were unable to agree on mitigation terms that would satisfy the Treasury Committee on Foreign Investment in the United States, which has the authority to block FDI on the grounds of national security.				
	For competition reasons				
Nvidia Corp–ARM Ltd	On 8 February 2022, Nvidia Corp (United States) withdrew its plans to acquire the entire capital of ARM (United Kingdom), a manufacturer of semiconductors and related devices, for \$40 billion after the transaction was blocked by the US Federal Trade Commission, which argued that Nvidia would gain too much control over chip designs used by the world's biggest technology companies.				
FNZ UK Ltd–Link Administration Holdings Ltd	On 21 March 2022, FNZ Ltd (United Kingdom) terminated its plans to acquire the Retirement & Superannuation Solutions business of Link Administration Holdings (Australia), a provider of office administrative services, for an estimated \$1.1 billion in cash. The Australian Competition and Consumer Commission had raised concerns over the "vertical integration" of the company's \$3.5 billion takeover by Dye & Durham.				
China International Marine Containers Co Ltd–Maersk Container Industry A/S	On 25 August 2022, China International Marine Containers (China) withdrew its agreement to acquire the entire share capital of Maersk Container Industry (Denmark), a manufacturer of metal shipping containers, for a combined estimated value of \$1.1 billion. The decision to withdraw came after the Federal Cartel Office, Germany's competition regulatory agency, provided the companies with a detailed explanation of its considerable concerns regarding concentration and competition.				
Hydro Aluminium AS– Alumetal SA	On 12 October 2022, Hydro Aluminium (Norway) abandoned its planned acquisition of the entire share capital of Alumetal (Poland), an aluminium foundry operator, for \$238.9 million. The Commission expressed concern that Alumetal had a "strong growth potential" for alloys made with recycled aluminium and that the deal may (1) reinforce Norsk Hydro's leading position as a supplier of aluminium foundry alloys, and (2) "eliminate a growing competitor able to bring cheaper and advanced recycled aluminium products to the market".				

Table II.2.	Foreign acquisitions withdrawn for regulatory or political reasons in 2022
	(Illustrative list) (Concluded)

For other regulatory reasons

True Corporation PCL–Total Access Communication PCL	On 22 November 2022, True Corporation PCL, a joint venture between Charoen Pokphand (Thailand) and Telenor ASA (Norway), withdrew its tender offer for the entire share capital of Total Access Communication (Thailand), a wireless telecommunication carrier, for \$3.2 billion in cash. The cancellation followed a notification from the Securities and Exchange Commission of Thailand about the conditions and methods for the acquisition of securities for business takeovers, which require a tender offeror to announce the abolition of the offer if it cannot meet the conditions within one year.			
Penguin Random House LLC–Simon & Schuster Inc	On 21 November 2022, Penguin Random House LLC, a multinational conglomerate publishing company owned by Bertelsmann (Germany), withdrew its definitive agreement to acquire Simon & Schuster Inc (United States), a book publisher for an estimated \$2.2 billion in cash. The sale was blocked by a United States judge as the purchase of Simon & Schuster "would be illegal because it would hit authors' pay".			
Dye & Durham Ltd–Link Administration Holdings Ltd	On 23 September 2022, Dye & Durham (Canada) cancelled its plans to acquire the entire share capital of Link Administration Holdings (Australia), a provider of office administrative services, for \$1.7 billion. The looming threat of regulatory fines for Link's United Kingdom subsidiary led Dye & Durham to revise its offer from \$5.50 to \$4.81 per share in July. The risk perception was heightened in September when the Financial Conduct Authority of the United Kingdom approved the \$2.5 billion takeover with a proviso setting aside £306 million for the payment of fines, followed by a warning notice about additional penalties.			
Lunar Group A/S– Instabank ASA	On 30 September 2022, Lunar Group (Denmark) withdrew its tender offer for the entire share capital of Instabank (Norway), a commercial bank, for \$144.8 million in cash. In May, the Norwegian Financial Supervisory Authority notified the company that extra capital would be needed to receive approval of the acquisition. Lunar could not raise sufficient capital to obtain the regulatory approval.			
SAN JV Pty Ltd–SAHAM Assurance SA	On 4 January 2022, SAN JV (South Africa) abandoned its planned acquisition of a minority stake in SAHAM Assurance (Morocco), a direct life insurance carrier, for \$138.5 million in cash, owing to failure to fulfil the conditions precedent to the transaction. One of the conditions was the approval of relevant regulatory authorities in both countries.			
Edison Motors Co Ltd– SsangYong Motor Co Ltd	On 7 April 2022, Edison Motors (Republic of Korea) withdrew its plans to acquire an undisclosed majority interest in SsangYong Motor, a manufacturer of automobiles owned by Mahindra & Mahindra (India), for \$240 million, following a court decision that cancelled its proposed takeover for failing to make the scheduled second and final payment by 25 March 2022.			
	While waiting for host-country approval			
Jadestone Energy PLC– Maari Oil Field	On 27 September 2022, Jadestone Energy (Singapore) aborted its plans to acquire a 69 per cent interest in Maari Oil Field (New Zealand), a producer of crude petroleum and natural gas, for \$52.6 million. The decision was taken for lack of progress in obtaining the regulatory approval almost three years after the planned acquisition was disclosed.			
First Abu Dhabi Bank PJSC–EFG Hermes Holdings SAE	On 14 April 2022, First Abu Dhabi Bank (United Arab Emirates) reversed its decision to acquire a 51 per cent interest in EFG Hermes Holdings (Egypt), an investment bank, for \$601 million in cash, after enduring lengthy regulatory delays in Egypt.			
GlobalWafers Co Ltd– Siltronic AG	On 1 February 2022, GlobalWafers (Taiwan Province of China) withdrew its conditional tender offer to acquire the entire ordinary share capital of Siltronic (Germany), a manufacturer of semiconductors and related devices, for \$5.3 billion in cash. GlobalWafers could not secure the final approval from Germany's economy ministry before the offer expired.			
VPC Impact Acquisition Holdings II–FinAccel Pte Ltd	On 11 March 2022, VPC Impact Acquisition Holdings II (United States) dropped its plans to merge with FinAccel (Singapore), a provider of financial transactions services, for \$2.5 billion, because of delays caused by tighter audit and compliance standards set by the United States Securities and Exchange Commission.			
Au Xingao Investment Pty Ltd–Bullseye Mining Ltd	On 2 September 2022, Au Xingao Investment, an Australian subsidiary of Xinhu Zhongbao Co Ltd (China), withdrew its hostile tender offer for the entire share capital in Bullseye Mining (Australia), a gold ore mine operator, for \$97.2 million in cash. The offer expired while it was still subject to various defeating conditions, including approval by the Foreign Investment Review Board.			
Fintech Acquisition Corp V–eToro Group Ltd	On 5 July 2022, Fintech Acquisition Corp V (United States) withdrew its plans to acquire the entire share capital of eToro Group (Israel), a brokerage, for \$10.4 billion. The cancellation was caused in part by the lengthy scrutiny by the United States Securities and Exchange Commission, which is increasingly cautious about special-purpose acquisition companies involved in crypto-related deals.			

Source: UNCTAD, based on media and company reports.

B. INTERNATIONAL INVESTMENT POLICIES

1. Trends in IIAs: new treaties and other policy developments

Several notable developments in 2022 continued the reform of international investment agreements (IIA) regime at the bilateral, regional and multilateral levels. These include new types of investment-related agreements, the termination of bilateral investment treaties (BITs) and continued multilateral discussions on the reform of investor–State dispute settlement (ISDS) mechanisms.

a. Developments in the conclusion and termination of IIAs

In 2022, countries concluded 15 IIAs. For the third consecutive year, the number of effective treaty terminations exceeded that of new IIAs, with 84 terminations.

In 2022, countries concluded at least 15 new IIAs: 10 BITs and 5 treaties with investment provisions (TIPs). This brought the size of the IIA universe to 3,265 (2,830 BITs and 435 TIPs).⁷ In addition, at least 17 IIAs entered into force in 2022, bringing the total of IIAs in force to at least 2,584 by the end of the year (figure II.7). The network of IIAs currently in force is complex and largely dominated by old-generation IIAs (figure II.8).

Figure II.7. Stock of IIAs signed and in force, 1959–2022 (By date of signature)



Source: UNCTAD, IIA Navigator.

Note: The figure does not include IIAs that were effectively terminated





Source: UNCTAD, IIA Navigator; data visualization through Gephi (https://gephi.org).

Note: Based on IIAs in force, not including "framework agreements" that lack substantive investment provisions or agreements with limited investment-related provisions. The IIA relationships of Belgium and Luxembourg and of Switzerland and Liechtenstein have been counted only once. IIAs between member States of a country grouping and an external partner have been considered not to create intracountry grouping effects unless the IIA text explicitly clarifies it to have such effects.

The IIAs currently in force create a network of more than 4,400 bilateral IIA relationships between pairs of economies. Close to a third of them overlap with at least one other IIA between the same economies. Over 88 per cent of IIA relationships are based on IIAs signed before 2012, and the IIA networks of all but eight economies contain such old-generation IIAs. In addition, at least 40 per cent of the relationships created by new-generation IIAs coexist with an earlier one between the same economies. This is the case also for the majority of relationships created by megaregional agreements such as the Regional Comprehensive Economic Partnership (2020) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (2018) (*WIR19*).

The number of terminations in 2022 exceeded the number of newly concluded IIAs: At least 58 IIAs were effectively terminated, of which 54 were by mutual consent, 1 was unilateral and 3 were replacements (through the entry into force of a newer treaty). Most terminations by mutual consent were based on the agreement to terminate intra-EU BITs, which became effective in 2022 among all 23 EU Member States that had signed it.⁸ By the end of the year, the total number of effective terminations reached at least 569, with about 70 per cent of IIAs terminated in the last decade (figure II.9).

The TIPs signed in 2022 can be grouped into two categories:

- 1. Agreements with obligations commonly found in BITs, such as substantive standards of investment protection:
 - New Zealand–United Kingdom FTA
 - Pacific Alliance (Chile, Colombia, Peru)-Singapore FTA
- 2. Agreements with limited investment provisions (e.g. market access, national treatment (NT) and most-favoured-nation treatment (MFN) with respect to commercial presence, investment promotion, facilitation and cooperation):
 - Australia–India Economic Cooperation and Trade Agreement
 - India–United Arab Emirates Comprehensive Economic Partnership Agreement
 - Indonesia–United Arab Emirates Comprehensive Economic Partnership Agreement

IIAs signed since 2020 feature many reformed provisions aimed at safeguarding States' right to regulate and reforming ISDS (figure II.10). In light of emerging interpretations of reformed provisions in investment treaty arbitration cases, it remains to be seen whether they are sufficiently robust to support and not hinder countries' implementation of legitimate measures and their efforts towards achieving the SDGs. In addition, hortatory references to

the protection of broader policy goals or sustainable development in the treaty preamble continue to be the most common reform feature (96 per cent of surveyed IIAs), despite their limited effect. Only a minority of new-generation IIAs address other important areas of IIA reform. Less than half of the IIAs reviewed contain proactive provisions that promote and facilitate investment and only 13 per cent include investor obligations.

The problems arising from the limited depth of these reforms are compounded by the fact that most recent IIAs continue to bind countries for long periods, with an initial period of validity of 10 years or more, automatic renewal and a survival clause. This can limit countries' ability to adapt to changing economic realities and new regulatory imperatives, such as the urgency of addressing climate change and other global challenges.

Figure II.9.

Number of terminated IIAs, 1993–2022 (By date of effective termination)



Source: UNCTAD, IIA Navigator.

New-generation IIAs also continue to exist in parallel with older IIAs (see figure II.8), highlighting the importance of expediting the modernization and consolidation of the existing stock of treaties through amendment, replacement or termination. Few of the IIAs signed since 2020 replace an earlier treaty or ensure that the reformed provisions they contain would be effectively applied (where parallel old-generation IIAs exist).

Figure II.10.

Prevalence of selected reform features in recent IIAs, 2020–2023 (Per cent of IIAs)



Source: UNCTAD.

Note: Based on 24 IIAs concluded in 2020–2023 for which texts are available, not including "framework agreements" that lack substantive investment provisions or agreements with limited investment-related provisions.

^a For this category, IIAs are counted that contain reform language for at least five key substantive IIA provisions, including at least a circumscribed fair and equitable treatment standard and a clarified indirect expropriation clause, or a general exceptions clause alongside other reformed clauses, in line with UNCTAD's IIA Reform Accelerator (UNCTAD, 2020).

b. Other developments relating to investment rulemaking

Other notable developments continued the trend towards reforming the international investment regime and highlighted the growing need for its adaptation to meet emerging global objectives and challenges. These include greater attention to investment facilitation and climate change.

The year was marked by the conclusion of negotiations of several investment governance instruments that contain proactive investment facilitation features and pay greater attention to responsible investment and to the right of host States to regulate in the public interest. African Heads of State and Government adopted the African Continental Free Trade Area (AfCFTA) Investment Protocol, recognizing UNCTAD's work on IIA reform in its preamble. At the same time, plurilateral efforts to amend the ECT appeared to reach a stalemate, highlighting the difficulty of reforming the existing stock of IIAs (table II.3).

Table II.3. IIA negotiations and new investment-related instruments					
	IIA negotiations and amendments				
AfCFTA Investment Protocol ^a	 The draft Investment Protocol was adopted by the Heads of State and Government during the Assembly of the African Union in February 2023. Negotiations on the Investment Dispute Settlement Annex to the Protocol are ongoing. The Investment Protocol Contains reformed provisions aimed at promoting, facilitating and protecting intra-African investment that fosters sustainable development while safeguarding the State Parties' right to regulate. Recognizes UNCTAD's work on IIA reform in its preamble. UNCTAD is a member of the task force assisting the AfCFTA Secretariat in the negotiations of the Investment Protocol and the Investment Dispute Settlement Annex. 				
Angola–EU Sustainab Investment Facilitatio Agreement⁰					
ECT developments°	 The Contracting Parties' vote on adopting the agreement on the modernization of tselected (agreed upon in principle on 24 June 2022) was postponed to 2023. In November 2022, the European Parliament adopted a resolution calling for a coordinated withdrawal from the ECT by the EU and its Member States. In December 2022, France, Germany and Poland formally notified their withdrawal from the ECT.^d 				
	New investment-related instruments				
Australia–Singapore Green Economy Agreement®	 The agreement was signed on 18 October 2022. The agreement Is a non-binding flexible instrument that excludes dispute settlement. Seeks to foster common rules and standards specific to trade and investment in green goods, services and technologies. Comprises Government-to-Government commitments and cooperative projects across a broad range of policy areas. 				
MERCOSUR Agreement on the Prevention and Fight of Corruption in International Trade and Investment ⁴	The agreement				

Source: UNCTAD, based on various sources.

AfCFTA = African Continental Free Trade Area, ECT = Energy Charter Treaty, MERCOSUR = Southern Common Market.

^a African Union, "Opening of the 36th Ordinary Session of The Assembly of the African Union", 18 February 2023, https://au.int/en/summit/36. For more information, see resolutions at https://au.int/en/decisions/decisions/declarations-and-resolution-thirty-six-ordinary-session-assembly-union.

^b For more information on this agreement, see https://ec.europa.eu/commission/presscorner/detail/en/IP_22_6136.

[°] See also https://www.energychartertreaty.org/modernisation-of-the-treaty.

^d Energy Charter Treaty, "Written notifications of withdrawal from the Energy Charter Treaty", 22 March 2023, https://www.energycharter.org/media/all-news.

e For more information on this agreement, see https://www.dfat.gov.au/geo/singapore/singapore-australia-green-economy-agreement.

^f For more information on this agreement, see https://www.mercosur.int/firma-de-acuerdos-en-materia-de-reconocimiento-de-titulos-lucha-contra-la-corrupcion-y-comercio.

Several investment policy guidance documents were launched in 2022 that built on UNCTAD's Core Investment Principles and its Investment Policy Framework for Sustainable Development. They provide overarching principles for countries in their efforts to reform their IIA networks in line with sustainable development and climate action objectives, taking into account countries' national development objectives (table II.4).

International organizations' work continued on diverse aspects of international investment governance, with advances in negotiations on investment facilitation and first outputs agreed upon for the reform of ISDS (table II.5). All these developments and their implications for the IIA regime and climate change will be discussed at the IIA Conference, an inclusive, multi-stakeholder dialogue platform on IIAs and ISDS, during the 2023 World Investment Forum.

Table II.4. Investment policy guidance 27th Conference of The Sharm El Sheikh Guidebook for Just Financing (2022)^b was launched through the coordination of the Government of the Parties of the Egypt in partnership with a broad range of stakeholders, including UNCTAD. The Guidebook highlights the need to minimize UNFCCC (COP27)^a the risk of climate-action-related ISDS cases and suggests options for IIAs to proactively promote and facilitate investments that are conducive to climate change objectives. Sharm El Sheikh (Egypt), 6-18 November 2022 The High-Level Forum on Global Investment and Trade for Climate Transformation (co-organized by UNCTAD and the World Trade Organization) discussed how the international investment and trade regimes can align with the Paris Agreement and how they can facilitate the achievement of climate goals. IsDB-UNCTAD The Islamic Development Bank (IsDB) Group and UNCTAD jointly developed a set of Non-Binding Guiding Principles for Non-Binding Guiding Investment Policymaking to support improvement of the investment climate in the IsDB member countries. Principles for · The Principles aim at **Investment Policies** - Promoting inclusive economic growth and sustainable development. (2022)° - Enhancing coherence in national and international investment policymaking. - Fostering an open, transparent and conducive global policy environment for investment. - Aligning investment promotion and facilitation policies with sustainable development goals.

Source: UNCTAD, based on various sources.

^a UNFCCC, https://unfccc.int/fr/cop27?gclid=EAlalQobChMI3J26gIqE_gIVrI1oCR20qQJwEAAYASAAEgI0fPD_BwE#events.

^b See Sharm El Sheikh Guidebook for Just Financing, https://guidebookforjustfinancing.com.

^c See Islamic Development Bank–UNCTAD Guiding Principles for Investment Policies, https://investmentpolicy.unctad.org/publications/1276/islamic-development-bank---unctadguiding-principles-for-investment-policies.

Table II.5. Work relating to investment rulemaking at international organizations, 2022–2023				
Organization/project	Work progress			
Expert Mechanism on the Right to Development, Office of the United Nations High Commissioner for Human Rights ^a	 The fifth and sixth session of the Expert Mechanism took place in 2022; the seventh session took place in April 2023. Delegates discussed the ongoing study on the "Right to development in international investment law". 			
International Centre for Settlement of Investment Disputes ^b	 The amended ICSID Arbitration Rules came into effect on 1 July 2022. The amended rules Incorporate greater transparency in the conduct and outcome of proceedings. Contain expedited arbitration rules for parties wishing to shorten further the procedural calendar. Broaden access to ICSID's procedural rules and administrative services. 			
Investment Facilitation for Development, World Trade Organization°	 On 16 December 2022, the draft Investment Facilitation for Development Agreement was circulated to all participating members. A finalized text is expected to be reached by mid-2023. In February 2023, Türkiye announced it is taking a "reflection pause" from the process, while continuing to observe the negotiations at the World Trade Organization. A Working Group of international organizations that work on investment facilitation, including UNCTAD, was established in February 2022 to develop a Self-Assessment Guide to help developing and least developed countries assess their needs in terms of implementing the future agreement. 			

Table II.5.	Work relat (Concluded)	ting to investment rulemaking at international organizations, 2022–2023				
OECD Work Prog Future of Investi		 Track 1 of the programme, considering challenges facing future IIAs and changes to the current treaty regime, in particular in relation to climate change, advanced through two conferences held in May 2022 and April 2023. Track 2 of the programme, discussing the possible modernization of provisions found in old-generation IIAs, advanced through meetings held in April and November 2022. 				
Open-Ended Intergovernmental Working Group on Transnational Corporations and Other Business Enterprises with Respect to Human Rights [®]		 Two sessions were convened in 2022 to discuss the third revised draft of the legally binding instrument, which aims to ensure that New investment agreements be compatible with countries' human rights obligations. Existing investment agreements be interpreted and implemented in a manner that does not affect countries' ability to fulfill their human rights obligations. 				
Organisation of Islamic Cooperation Intergovernmental Experts Group on ISDS ^r		 The first Organisation of Islamic Cooperation intergovernmental expert meeting on the establishment of a permanent mechanism for the settlement of investment disputes (under Article 17 of the OIC Agreement) took place in October 2022 in Casablanca, Morocco. Delegates benefited from inputs from Member countries, UNCTAD and external experts. 				
UNCITRAL Working Group III®		 UNCITRAL Working Group III held four sessions on investor-State dispute settlement reform in the reporting period. At the 45th Session held in March 2023, delegates agreed on draft provisions on mediation and on a draft code of conduct for arbitrators and judges. The 46th Session is scheduled for October 2023. 				
UNCTAD		 Developed guiding principles on investment policymaking for sustainable development that benefit 57 countries. Delivered technical assistance and capacity building to 159 countries and advisory services to 88 countries. Provided backstopping support and technical assistance as part of the task force working with the AfCFTA Secretariat on the Investment Protocol. At the 8th World Investment Forum, scheduled for 16–20 October 2023 (Abu Dhabi, United Arab Emirates), the IIA High-Level Conference will Discuss the implications of the IIA regime for climate change action. Offer a global multi-stakeholder platform for high-level discussions and action on investment policymaking. 				

Source: UNCTAD, based on various sources.

^a Office of the United Nations High Commissioner for Human Rights, https://www.ohchr.org/en/hrc-subsidiaries/expert-mechanism-on-right-to-development.

^b International Center for Settlement of Investment Disputes, https://icsid.worldbank.org/resources/rules-amendments.

° World Trade Organization, https://www.wto.org/english/tratop_e/invfac_public_e/invfac_e.htm.

^d Organisation for Economic Co-operation and Development, https://www.oecd.org/investment/investment-policy/investment-treaties.htm.

e Office of the United Nations High Commissioner for Human Rights, https://www.ohchr.org/en/hr-bodies/hrc/wg-trans-corp/igwg-on-tnc.

f Islamic Center for Development of Trade, https://icdt-cidc.org/meeting-the-oic-intergovernmental-experts-group-on-the-establishment-of-a-permanent-organ-mechanism-for-thesettlement-on-investment-disputes.

^g United Nations Commission on International Trade Law, https://uncitral.un.org/en/working_groups/3/investor-state.

2. Trends in ISDS: new cases and outcomes

The total ISDS case count reached 1,257 by the end of 2022, with 46 new arbitrations initiated that year. The ECT continued to be the most frequently invoked IIA.

As of 1 January 2023, the total number of publicly known ISDS claims had reached 1,257. To date, 132 countries and one economic grouping are known to have been respondents to one or more ISDS claims.

a. New cases initiated in 2022

In 2022, 46 known treaty-based ISDS cases were initiated, constituting the lowest annual case number since 2010 and significantly lower than the average of the last decade of 75 cases per year (2012–2021).

In 2022 claimants filed 46 new publicly known ISDS cases under IIAs (figure II.11), the lowest annual number of known cases since 2010 and significantly below the 10-year average of 75 cases per year (2012–2021). As some arbitrations can be kept confidential, the actual number of disputes filed in 2022 (and previous years) is likely higher.⁹

(i) Respondent States

The new ISDS cases in 2022 were initiated against 32 countries. Mexico, Romania, Slovenia and the Bolivarian Republic of Venezuela were the most frequent respondents, with three new known cases each. Two countries – Portugal and Sweden – faced their first known ISDS claims. As in previous years, the majority of new cases (about 65 per cent) were brought against developing countries.

(ii) Claimant home States

Developed-country claimants brought most – about 65 per cent – of the 46 known cases in 2022. The highest numbers of cases were brought by developed-country claimants from the United States (eight), the Netherlands (five) and the United Kingdom (four). Four cases were brought by claimants from China. Between 1987 and 2022, claimants from five countries – the United States, the Netherlands, the United Kingdom, Germany and Spain – initiated about 45 per cent of the 1,257 known ISDS cases.

(iii) Applicable investment treaties

About 80 per cent of investment arbitrations in 2022 were brought under BITs and TIPs signed in the 1990s or earlier. The ECT (1994) was the IIA invoked most frequently in 2022, with 10 cases, followed by NAFTA (1992), the Netherlands–Bolivarian Republic of Venezuela BIT (1992) and the Panama–United States BIT (1982) with two cases each.¹⁰ Between 1987 and 2022, about 20 per cent of the 1,257 known ISDS cases have invoked either the ECT (157 cases) or NAFTA (79 cases).

Figure II.11. Trends in known treaty-based ISDS cases, 1987–2022



Source: UNCTAD, ISDS Navigator.

Note: Information has been compiled from public sources, including specialized reporting services. UNCTAD's statistics do not cover investor–State cases that are based exclusively on investment contracts (State contracts) or national investment laws, or cases in which a party has signalled its intention to submit a claim to ISDS but has not commenced the arbitration. Annual and cumulative case numbers are continually adjusted as a result of verification processes and may not match exactly case numbers reported in previous years.

b. ISDS outcomes

(i) Decisions and outcomes in 2022

In 2022, ISDS tribunals rendered at least 44 substantive decisions in investor–State disputes, 25 of which were in the public domain at the time of writing. Ten of the public decisions principally addressed jurisdictional issues (including preliminary objections), and the tribunals declined jurisdiction in all of them. The remaining 15 public decisions were rendered on the merits, with 12 holding the State liable for IIA breaches and 3 dismissing all investor claims.

In addition, eight publicly known decisions were rendered in annulment proceedings at the International Centre for Settlement of Investment Disputes (ICSID). Ad hoc committees of the ICSID rejected the applications for annulment in all of them.

(ii) Overall outcomes

By the end of 2022, at least 890 ISDS proceedings had been concluded. The relative share of case outcomes changed only slightly from that in previous years (figure II.12).





Source: UNCTAD, ISDS Navigator.

^a Decided in favour of neither party (liability found but no damages awarded).

C. SUSTAINABLE ENERGY-RELATED INVESTMENT POLICIES

The energy system is at the centre of the policy response to climate change, and national policies are crucial for driving the shift towards clean energy. While recognizing that a well-designed regulatory framework that comprehensively addresses the legal, regulatory and institutional aspects is a key determinant of investment in the clean energy transition (chapter IV), section 1 focuses on some of the main incentives and disincentives to clean energy investment. First, it reviews and analyses renewable energy policies around the world and identifies the key policy tools utilized by countries in different regions and at different levels of development to promote investment in renewables (section 1.a). Second, it highlights trends in the evolution of fossil fuel subsidies around the world, which represent a disincentive to the promotion of investment in clean electricity generation (section 1.b). The key findings are presented in section 1.c, and the policy implications are discussed in chapter IV.

At the international level, the urgency of an effective energy transition highlights the need to reform international investment governance (section 2). Existing IIAs do not include proactive investment provisions for promotion and facilitation that support low-carbon energy investment (section 2.a). Although notable exceptions exist, much more work is needed. This challenge is compounded by treaty-based ISDS cases in both the fossil fuel and renewable energy sectors (section 2.b). UNCTAD has developed a toolbox with a focus on four connected action areas. They relate to the promotion and facilitation of sustainable energy investments, technology transfer, the right to regulate for climate action and the energy transition, as well as corporate social responsibility. For each action area, different policy options are indicated (section 2.c).

1. Renewable energy policies – a review of key investment incentives

a. Policy tools for the promotion of renewable energy investment

Countries at different levels of development adopt different policy tools to promote renewable energy investment. Developing economies, including LDCs and SIDS, mainly use tax incentives as a policy tool for promoting renewable energy investment, whereas developed economies favour financial incentives as well as targeted and more complex instruments such as feed-in tariffs (FITs). Auctions and tenders for renewable energy projects have gained momentum across all country groups in the last decade to become one of the instruments most used to attract renewable energy investment.

Based on the review and mapping of 212 laws and policies,¹¹ covering 94 developing and developed economies (49 and 51 per cent respectively), this section analyses the investment promotion instruments and incentives used around the world to foster private investment in renewable energy. Countries have adopted various types of incentives (table II.6). Among these, tax incentives are the instrument most often used for promoting renewable energy investment in developing countries (77 per cent), LDCs (90 per cent) and SIDS (67 per cent).

In contrast, developed countries favour more targeted and complex policy instruments, with FITs, auctions and financial incentives adopted by 91 per cent, 74 per cent and 70 per cent respectively (figure II.13).



Source: UNCTAD and Climate Change Laws of the World database.

Note: The graph covers laws adopted during the period 2000–2022, as well as amendments of some laws that were adopted before 2000. Feed-in tariff and auction data is based on other sources, covering 193 countries. "Other" includes quota-based instruments, guarantee schemes and business facilitation.

Table II.6. Investment promotion instruments for the renewable energy sector

Fiscal incentives				
Profit-based	Reduction of the standard corporate income tax rate or profit tax rate, tax holiday, loss carry-forward			
Expenditure-based	Accelerated depreciation, investment and reinvestment allowances, R&D tax incentives, tax credits			
Indirect taxes and duties	Exemption or reduction of value added tax on capital material, exemption on import taxes and duties			
Production-based	Production-based tax credits			
Financial incentives				
Grants and subsidies	Direct subsidies to cover (part of) capital, production or marketing costs			
Loans	Subsidized loans			
	Other tools			
Auctions	Stimulate investment through government calls for tenders to install a certain capacity of renewable energy-sourced electricity, with the best bidder typically winning a long-term power purchase power agreement that guarantees sales and prices and the auctions structured as packages that include additional incentives such as access to land or low-cost grid connections			
Feed-in tariffs	Incentivize the deployment of renewable energy by offering long-term contracts to producers with a guaranteed above-market price tariff, in a triple guarantee – certainty of sale, price and duration – that reduces project risk and encourages investment			

/...

Table II.6.	Invest	tment promotion instruments for the renewable energy sector (Concluded)		
Renewable portfolio standards or quotas, and renewable energy certificates		Renewable portfolio standards or quotas: define the share of renewable energy that must be present in the electricity mix of targeted entities, typically utility suppliers, companies or consumers Renewable energy certificates: represent the environmental benefits of one MWh of renewable energy generation, which can be bought and sold separately from the electricity itself Usually introduced together		
Other guarantee	schemes	Financial guarantees, including guarantees covering geological risks or other non-financial elements		
include dedicated single windows, facilitated access to land		A range of measures aimed at facilitating the implementation of and investment in renewable energy companies, which may include dedicated single windows, facilitated access to land and simplified permitting and licensing, as well as access to information related to the renewable energy potential and needs of the country		

Source: UNCTAD.

(i) Tax incentives

Tax incentives are well-established and well-known tools used by countries around the world to promote investment. The literature on their pros and cons is extensive. UNCTAD recently carried out a detailed mapping of their use across the globe (*WIR22*). Tax incentives can be customized to achieve certain policy objectives, and although they require governments to forgo tax revenue that could be used for other purposes, they do not typically require direct public spending. However, tax incentives may not directly address the main barriers to investment in renewable energy such as access to finance, market and infrastructure risks, and high upfront capital (chapter IV).

Nonetheless, tax incentives are a common policy tool for promoting renewable energy investment, particularly in developing economies and LDCs (figure II.14). Profit-based tax incentives such as corporate income tax reductions and tax holidays are particularly popular among developing countries (57 per cent of countries) and LDCs (70 per cent). The reduction or exemption of VAT and import duties is also very common in developing countries, as they often import most of the required capital goods and inputs. This instrument is used by 64 per cent of developing countries and 70 per cent of LDCs. In contrast, developed countries tend to favour the use of expenditure-based incentives and production-based tax credits. These findings are consistent with the broader analysis on the use of tax incentives for investment in developed and developing countries carried out by UNCTAD in the *World Investment Report 2022*.



Source: UNCTAD, based on Climate Change Laws of the World database.

Developed

Note: The graph covers laws adopted during the period 2000–2022, as well as amendments of laws that were adopted before 2000.

Developing (without LDCs)

E LDCs

SIDS

(ii) Non-fiscal incentives

Non-fiscal incentives to encourage investment in renewable energy include traditional policy instruments already used in the promotion of investment in other sectors, such as financial incentives (e.g. loans at preferred rates and traditional grants and subsidies), risk reduction mechanisms (e.g. guarantee schemes) and business facilitation measures. In addition, the unique specificities of the low-carbon transition have led to the development of more targeted, more complex policy instruments designed specifically to facilitate the deployment of renewable energy technologies. These new investment promotion tools include tariffbased instruments, auctions and quota-based instruments (discussed later).

Grants and subsidies are the most common investment promotion instrument among traditional investment incentives. They can partially address the issue of high upfront cost associated with renewable energy projects. They are particularly favoured by developed countries. They are mentioned in the majority of the renewable energy policies that include investment promotion provisions in LDCs (figure II.15). Loans, however, are not commonly used in investment promotion policies for renewable energy. In fact, only 16 per cent of developing countries and 13 per cent of developed countries use them.

Guarantee schemes include financial guarantee schemes and other "in kind" type of guarantees, such as priority access to the grid, or industrial guarantees on the availability of network or spare parts for the renewable energy sector. Due to the intermittency of renewable energy sources such as solar and wind, priority access to the grid, in particular, is a key element to foster investment in the deployment of such technologies. Guarantee schemes are popular among developed countries (60 per cent of them have adopted at least one such scheme), but less utilized in developing countries (32 per cent) and LDCs (40 per cent).

Business facilitation of renewable energy projects encompasses measures such as simplifying registration and licensing processes, providing easier access to land, and streamlining town planning authorizations. In addition to these measures, business facilitation may also involve the creation of specific tools to support renewable energy projects such as national-level solar, wind, or geothermal resource maps. Business facilitation instruments are employed in developed (45 per cent) and developing countries (34 per cent), but their use is slightly less prevalent in LDCs, where only 30 per cent of LDCs included them in their promotion policies for renewable energy (see figure II.15).

Non-fiscal incentives in renewable energy policies, by type and



Source: UNCTAD, based on Climate Change Laws of the World database.

Figure II.15.

Note: The graph covers laws adopted during the period 2000–2022, as well as amendments of laws that were adopted before 2000.



Source: UNCTAD.

FITs were the first targeted incentive developed specifically to promote investment in renewable energy (see table II.6). They offer guaranteed payments and have a longer-term perspective, which significantly reduces uncertainty about the return on renewable energy investments. They have led to the establishment of hundreds of MWh from renewable sources across the world. Policymakers have reformed FITs over the years to make them more efficient and more responsive to technology changes and market prices, and to decrease their impact on public finance. While the success of these instruments varies from country to country and on policy design (box II.1), they have been widely implemented (in at least 106 countries) as a means of promoting adoption of renewable energy. FITs have been particularly popular among developed countries, featuring in over 90 per cent of them. Yet, tariff-based instruments do not address the challenge of the high upfront costs associated with renewable energy projects and, depending on their features, can be relatively expensive for countries that have limited fiscal space, which explains why developing countries use FITs less frequently. Less than 50 per cent of developing countries, only 26 per cent of LDCs and only 22 per cent of SIDS have put FITs in place (figure II.16).

Box II.1. Feed-in tariffs: policy examples and key lessons

In 2000, *Germany* introduced the Renewable Energy Act, a FIT policy offering all producers of renewable energy an above-market fixed price for a twenty-years period. The first beneficiaries of this program saw it ended in 2021. The impact on renewable energy production was important: between 2000 and 2021, the share of renewable energy in electricity consumption rose by 35 per cent (ZSW, 2022). But in the late 2000s, as the production costs of photovoltaic systems decreased, the policy started to appear particularly expensive. Germany decided to reform the Renewable Energy Act and, since 2017, only small facilities under 100 kW have kept on benefiting from the FIT, while large renewable energy producers are subject to auctions (Sutton, 2021).

In 2009, *South Africa* established a renewable energy FIT scheme. Initially, the National Energy Regulator of South Africa developed a sector-specific project that ensured rates for 15 years, with tariffs that would decrease annually. To determine the project's feasibility, public hearings were held with prospective investors, who indicated that the incentives were insufficient, resulting in an increase in the tariffs and a lengthening of the guaranteed period to 20 years. Despite these adjustments, the FIT scheme was never put into effect and was replaced by auctions after two years. According to critics, tariff rate uncertainty, bureaucratic delays and conflicting messages from various government bodies resulted in an atmosphere of policy uncertainty that led to the scheme's demise (Pegels, 2011).

Despite a decreasing interest for FITs in the 2010s, several countries continued using them.

The Philippines, for instance, adopted FITs in 2012 with impressive results. Five years after the start of the programme, the country's capacity in solar, biomass and wind energy had been multiplied by eight. This success shows that policy design and implementation are as crucial as rates. Indeed, project developers give a lot of importance to factors such as administrative processing times, grid access and legal security (Lüthi and Prässler, 2011; Lüthi and Wüstenhagen, 2012). The Government of the Philippines followed a list of best practices, by adopting a long-term framework and associating FITs with financial incentives. The extra cost implied by FITs was put on the consumers (Guild, 2019).

Source: UNCTAD.

Another policy tool designed specifically to foster investment in the deployment of renewable energy is the renewable energy auction (see table II.6). Since the 2010s, auctions have boomed in popularity because they are both cost-efficient and adaptable to different economic contexts. They are used in all continents, independently of countries' development levels, and have helped to lower renewable energy prices.

The purchase power agreement and other non-financial incentives resulting from the auctions offer a long-term guarantee on price and sales that incentivizes investors to participate. For policymakers, however, the complexity of auctions lies in their design and organization, which are crucial to their success. The design should include factors such as the auctioned volume, qualification requirements for bidders, auction format and site selection. These factors will depend on a government's policy goals and on country characteristics. It is not uncommon for countries to require multiple auction rounds to achieve an optimal design, as policymakers must bypass several pitfalls when designing an auction, such as undersubscription, underbidding, delays and underbuilding (box II.2).

Auctions have become the main mechanism for increasing renewable energy capacity worldwide, with at least 125 countries holding auctions over the last decade. Three quarters of developed countries and two thirds of developing countries have held renewable energy auctions; the shares are lower for LDCs (52 per cent) and SIDS (33 per cent) (see figure II.16). The complexity of designing and holding auctions may explain the lower prevalence in these countries.

Box II.2. Examples of renewable energy auctions in SIDS and LDCs

Maldives has held several auctions between 2014 and 2022, managing to convince project developers over time. In 2014, an auction aiming to create 1.5 MW of solar capacity attracted only four bidders, resulting in high electricity prices. Six years later, an auction for a 5 MW project attracted 25 project developers, leading to a drop in the price by 50 per cent. In 2022, an 11 MW solar project attracted 63 investors and resulted in one of the lowest tariffs ever achieved in SIDS. Investors have been convinced by the risk mitigation package supported by the World Bank, which includes guarantees, a currency convertibility clause and payment security (Chen, Jain and Stolp, 2023).

Uganda launched its first solar photovoltaic auction in 2014, for a total capacity of four 5 MW facilities. Based on qualification requirements, 7 of the 23 companies that expressed interest were allowed to submit bids. Site selection was left to project developers, with the condition that the power stations would be within 3 km of the grid. Moreover, if the project was located in a set of predefined priority zones, the application would be granted more points in the evaluation. Different penalties were defined for cases of delays and underperformance. This sealed-bid auction was supported by international development partners, which committed to paying part of the electricity price. Consequently, the four winners of the auction had two contracts: a power purchase agreement of 20 years in dollars with the State-owned utility company and a premium payment contract in euros signed with the German Development Bank. Uganda also benefited from European Union support, from the development of standardized documents to the payment of the tender agent that conducting the auction (IRENA, 2018). The winning bid was \$163.7/MWh – lower than the average retail tariff in 2013, but more than double the results achieved in Ethiopia, Namibia, South Africa or Zambia (Kruger, Eberhard and Swartz, 2018).

Zambia was the first African country to take part in the Scaling Solar Programme, which includes multiple guarantees and technical support. Led by the World Bank, this programme aims to develop large solar power plants through auctions. In 2015, the country signed off on two projects representing a total capacity of 88 MW generated through solar photovoltaic power (IRENA, 2019). The Scaling Solar Program has benefited other countries in Central Asia and Sub-Saharan Africa, such as Ethiopia, Madagascar and Senegal. In 2019, Zambia awarded 120 MW of capacity for a solar photovoltaic project. This tender achieved a low-price record for Sub-Saharan Africa. It is worth noting that the auction did not define the location of the operating site, nor did it finance the connection to the grid (Parnell, 2019).

Source: UNCTAD.

A third policy instrument specifically designed to foster investment in renewable energy is the combined use of quotas, also referred to as renewable portfolio standards or renewable purchase obligations, and renewable energy certificates, which are mechanisms to certify the origin of the renewable energy. Companies can then sell these certificates, which should, in theory, provide a bonus in revenue to renewable energy producers. Renewable portfolio standards policies are typically complex to administer. Although they are used by one third of developed countries, their adoption has been more limited in developing countries (21 per cent), LDCs (7 per cent) and SIDS (3 per cent) (see figure II.16).

b. Fossil fuel subsidies: a disincentive to clean energy investment

Fossil fuel subsidies represent a disincentive to clean energy investment. Despite countries' pledges to reduce the use of such subsidies, they have reached a record \$1 trillion, eight times the level of subsidies for renewable energy.

Countries adopt fossil fuel subsidies for a variety of reasons, including job creation, economic growth, energy security, consumer benefits, and political and strategic interests. By artificially lowering the cost of producing and consuming fossil fuels, subsidies make such fuels more appealing to consumers and investors. This, in turn, makes it more challenging for renewable energy sources to compete to attract investment, particularly when they do not receive the same level of support.

Fossil fuel subsidies also create an incumbent advantage, reinforcing the position of fossil fuels in the electricity system (IISD, 2014). While recognizing the economic, social and political complexity of such reform, phasing out these subsidies can help increase investment in renewable energy. In recent years, fossil fuel subsidies represented on average about half a per cent of world GDP, and up to 1 per cent of GDP in developing countries (for some countries, up to 7 per cent of GDP).¹² Phasing them out and redirecting those funds to support renewable energy can therefore make clean energy a more viable option. Finally, reducing these subsidies can also send a clear signal to the market that governments are committed to transitioning to a low-carbon economy and to attracting investment in the renewable energy sector.

Despite reiterated commitments on major international forums to discontinue these inefficient subsidies (including through the SDGs, the G20 and the G7), the global level of support in 2021 remained similar to that of 2010, totaling over \$500 billion.¹³ In 2022, according to IEA estimates, global fossil fuel subsidies doubled from the previous year to an all-time high of \$1 trillion (IEA, 2023a). This is almost eight times the amount of global subsidies granted to renewable power generation technologies in 2017, as estimated by the International Renewable Energy Agency (IRENA) (Taylor, 2020).

Data on fossil fuel subsidies at the global level show that they are closely tied to the evolution of oil prices, rather than to deliberate policy decisions aimed at their reduction. The correlation is particularly strong for oil, electricity and gas subsidies, but less so for coal subsidies, which have remained stable throughout the period, hovering around \$20 billion per year (see figure II.17).

Global trends mask the differences in the evolution of subsidies offered by developed and developing regions, and by type of fuel. On average, developing countries account for over three quarters of world subsidies on oil, gas and electricity for end-user consumption of fossil fuel origin. In addition, while the correlation with oil prices is very strong for developing countries for all types of fuels except coal, it is weak in developed countries, where subsidies on electricity and gas have remained relatively stable during the period, and subsidies on oil have increased over time, almost doubling in volume between 2010 and 2021. Coal





Source: UNCTAD, based on FossilFuelSubsidytracker.org. *Note:* Data for 2022 estimated from IEA (2023).

subsidies have declined steadily over the past decade in developed regions, dropping from \$18.5 billion in 2010 to \$9.8 billion in 2021, but more than doubled in developing regions, increasing from \$5.6 billion in 2010 to \$13.3 billion in 2021.

Data collected by the Fossil Fuel Subsidy Tracker initiative indicates that such subsidies also increasingly benefit producers rather than consumers. Consumers remain the key beneficiaries, but their share in total subsidies declined by 10 per cent between 2010 and 2020, while the share of producer subsidies doubled (from 7 to 14 per cent). Again, global trends mask significant differences between countries at different levels of development. Notably, in developing countries, consumer subsidies decreased from 97 to 87 per cent of the total between 2010 and 2020, while producer subsidies increased from 3 to 10 per cent in the same period. Conversely, in developed countries, consumer subsidies slightly increased their share of total fossil fuel subsidies from 2010 to 2020 (from 64 to 68 per cent), while producer subsidies remained stable at about 25 per cent.

Although there is universal agreement on the need to reduce or remove fossil fuel subsidies, it remains a complex policy issue, particularly in developing countries, which must overcome multiple competing interests and challenges:

- Dependence on fossil fuels: Many developing countries rely heavily on fossil fuels, both as a source of energy and as a revenue stream. Reducing or removing subsidies could result in a gap in energy supply as well as higher energy costs and a loss of export revenue, which may be difficult for governments to manage.
- Energy for all: Although studies show that fossil fuel subsidies are regressive by nature and benefit the wealthiest the most,¹⁴ subsidies can help make energy more affordable for low-income households. Removing them could lead to an increase in energy poverty, which is a major concern for many developing countries.

- Short-term economic impacts: The International Labour Organization estimates that the transition to net zero brings substantial new opportunities for employment, but the new jobs may be in different locations or require different skill sets, thus calling for policies to minimize hardship and promote skills upgrading. Reducing or removing subsidies may also result in short-term economic impacts, such as job losses in the fossil fuel industry and higher energy costs for consumers and businesses. These impacts may be difficult for governments to manage and may lead to resistance to change.
- Political interests: The removal of subsidies may face opposition from large corporations, which may have significant political influence, as well as a vested interest in maintaining the status quo.

Nonetheless, according to the IEA, achieving net zero by 2050 will require the elimination of all fossil fuel subsidies in the coming years (IEA, 2021). Hence, governments must navigate these challenges carefully and develop a well-thought-out plan for phasing out subsidies in a manner that minimizes negative impacts, is inclusive and supports the transition to a low-carbon economy in a just and cost-effective manner (chapter IV).

c. Summary of key findings

Policies and regulations have a key role to play in de-risking as well as incentivizing investment in the clean energy transition.

Countries that have adopted instruments to promote private investment in the renewable energy sector have used a wide range of tools. Developing countries and LDCs tend to favour traditional promotion instruments, such as tax incentives. In contrast, developed economies tend to use financial incentives as well as more complex and targeted mechanisms to promote investment in renewables (e.g. FITs and green certificates). Auctions have been adopted by countries at all levels of development. These policy tools, summarized in table II.7, present advantages and challenges, and can be adopted and adapted with consideration for the unique challenges faced by each country. Finally, despite reiterated commitments to discontinue inefficient fossil fuel subsidies, the global level of support for fossil fuel has reached record levels and increasingly benefits producers. Fossil fuel subsidies represent a disincentive to investment in renewable and clean energy. The policy implications and recommendations stemming from this analysis are discussed in chapter IV.

Table II.7.	Investment promotion instruments for renewable energy investment: pros and cons			
Policy instrument	Use by developed economies	Use by developing economies	Main pros	Main cons
Tax incentives	00	000	 Can be tailored to meet specific policy goals Familiar to private companies, who know how they work and are used to them 	 Foregone tax revenue Can be difficult to administer and keep track of Limited effectiveness if other factors such as regulatory uncertainty persist
Feed-in tariffs	000	0	 Reduce risks by ensuring revenue stream to investors Encourage deployment of not yet mature technologies by providing guaranteed payments Can promote large and small renewable energy power plants, targeting both large companies and households 	 Limits incentives for producers to compete on cost Can lack flexibility to adapt to changes in technology Can be a burden for public finance if the State supports the cost and can increase electricity cost if consumers support the cost Administrative burden in the long run Limited control over the quantity of energy produced

Table II.7.	Investment promotion instruments for renewable energy investment: pros and cons (Concluded)				
Auctions	000	00	 Cost-effective: help reveal the real price of renewable energy Transparency: reduce the risk of corruption in selecting projects Provide a predictable and stable contracted environment for investors Allow control over the quantity of electricity produced 	 Risk of undersubscription: need a minimum number of bidders to be efficient Participation by smaller companies limited by complex bidding process and qualification requirements Risk of overbidding and delays that may prevent partial or full realization of the project Complex to design and conduct 	
Subsidies or grants	00	00	Address the high upfront cost of renewable energy projectsEasier to administer than feed-in tariffs	 Burden on public finances Resource allocation: risk of inefficient use of funds and risk of political interference in resource allocation 	
Loans	ο	0	Can help address the financing issue	 High cost and risk of default: can be a burden on public finances Risk of political interference in resource allocation 	
Quota-based instruments and renewable energy certificates	00	0	 Set clear targets and send a clear message to investors Create demand and financial incentives for renewable energy producers 	 Market-like mechanism: fluctuating price of green certificates offers fewer guarantees to renewable energy producers Administrative burden: resource-intensive regulation of the market for green certificates Complexity of green certificates: challenging for smaller companies Market: need a sufficient size and time to function properly 	

o Rare oo occasional oo

Source: UNCTAD.

2. International investment agreements and sustainable energy investment

The energy transition adds to the urgency of reform of international investment governance. Most IIAs do not include proactive investment promotion and facilitation provisions that support low-carbon investment. UNCTAD has developed a toolbox for transforming IIAs into instruments that are conducive to the energy transition.

a. The IIA regime and sustainable energy investment

Existing old-generation IIAs are insufficiently attuned to ensure an effective energy transition from high- to low-carbon economies. New IIAs fare relatively better by safeguarding States' right to regulate but remain weak in incorporating specific provisions relevant to sustainable energy investment and the energy transition.

(i) Taking stock of IIAs

Some 3,400 IIAs were concluded between 1959 and 2011, representing over 85 per cent of all IIAs ever signed; about 2,300 of these old-generation IIAs are still in force. Typically, they do not contain explicit provisions to preserve States' regulatory space for a sustainable energy transition. Their substantive treatment standards are formulated in broad and vague ways, with few exceptions or safeguards. Such old-generation IIAs serve as the basis for virtually all existing ISDS claims. As old IIAs significantly outnumber more recent ones, it is critical to address the problems and risks they pose (UNCTAD, 2018). The urgency of making an effective energy transition has generated more attention to the need to reform the IIA regime. In addition to old-generation BITs, the IIAs regime includes plurilateral investment treaties such as the ECT, which governs energy-related investment, trade and transit. The ECT is the most frequently invoked IIA in ISDS cases. It can amplify existing burdens on countries that are trying to shift from traditional fossil fuel projects to renewable energies. A sustainable energy transition requires a deep and comprehensive reform of the ECT. The ECT's investment protection chapter is undergoing a modernization process that was formally initiated in 2020.

IIAs concluded in the last decade fare slightly better with respect to promoting and facilitating renewable energy investment. They more regularly safeguard States' right to regulate and incorporate specific provisions on the protection of the environment, climate action and sustainable development. They generally contain more circumscribed and clarified substantive provisions, often accompanied by narrower access to ISDS (*WIR20*).

Yet, even in recent IIAs, provisions that effectively safeguard regulatory space are still relatively rare (figure II.18). It remains to be seen whether more refined provisions in newer IIAs will significantly shield energy transition measures from ISDS claims or prevent investors with high-carbon investment from invoking ISDS to claim compensation.

Much more remains to be done. The reform of existing IIAs is essential to ensure that they do not prevent States from implementing measures aimed at promoting and facilitating sustainable energy investment, including the transition to low-carbon economies. The reform should minimize States' risk of facing ISDS claims related to phasing out investment that is not aligned with sustainable energy production. It should also recognize the rapidly shifting landscape, which requires flexibility in policymakers seeking to attract renewable energy investment.

Figure II.18. Prevalence of IIA provisions relevant to the energy transition and climate action, 2012–2022 (Per cent of IIAs)



Source: UNCTAD

Note: The survey covered 284 IIAs concluded between 2012 and 2022 for which texts are available. It updates data originally published in UNCTAD (2022b). ^a The percentage concerns only IIAs that include performance requirements provisions, i.e. 94 of the 284 IIAs analysed.

(ii) Proactive policy measures in IIAs in support of sustainable energy investment

Few new-generation IIAs (mostly broader economic agreements with investment provisions) include matters of relevance to the sustainable energy transition. These matters include general provisions on promoting and facilitating sustainable investment, cooperation on climate action, express recognition of the right to regulate for climate change and implementation of climate action treaties. Such provisions can come in the form of broad preambular references or be more specific in supporting the energy transition.

Old-generation IIAs and even most newer ones continue to lack detailed binding provisions for proactively promoting and facilitating investment and for encouraging the technology transfer needed to switch from high- to low-carbon energy production. Some notable exceptions exist: The AfCFTA Investment Protocol explicitly includes provisions for promoting and facilitating renewable energy investment. The Japan–United Kingdom Comprehensive Economic Partnership Agreement includes provisions facilitating investment of particular relevance to climate change mitigation, such as investment related to renewable energy and energy-efficient goods and services. The Moldova–United Kingdom Trade and Cooperation Agreement is an example that includes provisions promoting the diffusion of safe and sustainable low-carbon and adaptation technologies.

Similarly, the Investment Cooperation and Facilitation Agreements spearheaded by Brazil as well as the recent Angola–EU Sustainable Investment Facilitation Agreement fare much better in supporting the energy transition. They do not refer to energy investment as such but contain clauses relating to sustainable development, environmental protection, investment promotion and facilitation, as well as corporate social responsibility.

Some new-generation IIAs also include specific procedures and mechanisms to implement States' climate action policies through inter-State cooperation. For example, they establish joint committees, joint dialogues, climate action consultations and panels of experts. The United States–Mexico–Canada Agreement is a case in point.

If IIAs are to be an effective tool to aid countries in the sustainable energy transition, far more is needed. Reliance on the nascent approach of including proactive promotion and facilitation elements for sustainable investment in IIAs needs to be significantly expanded. The same is needed with regard to provisions on corporate social responsibility and technology transfer, including associated know-how that is crucial to supporting a sustainable energy transition.

b. Energy-related ISDS

Many ISDS cases have related to measures or sectors of direct relevance to climate action. Investors in the fossil fuel sector have been frequent claimants, initiating at least 219 ISDS cases against different types of State conduct. The last decade has also seen the emergence and proliferation of ISDS cases brought by investors in the renewable energy sector, with 119 known cases. Many of these cases challenged Governments' legislative changes involving reductions in feed-in-tariffs for renewable energy production.

The 2022 Intergovernmental Panel on Climate Change (IPCC) report highlighted the risks of ISDS being used to challenge climate policies (IPCC, 2022). At this point, it is clear that these risks do not exist only in the abstract. Many IIA-based ISDS cases have related to the energy sector (UNCTAD, 2022d). ISDS cases in two areas are particularly relevant to the sustainable energy transition: (i) fossil fuels and (ii) renewable energy.

Energy-related ISDS cases show that IIAs may raise the costs of adapting energy-related regulatory frameworks in host States. States need flexibility for the necessary regulatory

experiments that support the transition to low-carbon economies. While investors seek stability and guarantee of returns, States should not be unduly hindered in phasing out unsustainable investment and experimenting with incentive schemes in the renewable energy sector, including by adopting and later changing or abrogating such schemes.

Fossil fuel investors have been frequent ISDS claimants, initiating over 15 per cent (219) of all known treaty-based cases against different types of State conduct (box II.3).

In addition to fossil fuel cases, at least 119 ISDS proceedings arose in relation to the renewable energy sector. Many of these cases challenged legislative initiatives involving reductions in feed-in-tariffs for renewable energy production (box II.4).

Box II.3. Fossil fuel-related ISDS cases based on IIAs

At least 219 IIA-based ISDS cases have been brought in relation to fossil fuels. These arbitral proceedings involve investment in the following economic activities:^a

- Mining of coal and lignite
- Extraction of crude petroleum and natural gas
- Power generation from coal, oil and gas
- Transportation and storage of fossil fuels

Not all these underlying disputes involved challenges of measures that were related to climate action or the protection of the environment. For example, fossil fuel investors alleged the violation of IIAs with respect to changes in regulatory frameworks applicable to the investment and the denial or revocation of permits on other than environmental grounds. Nonetheless, as fossil fuel investors have frequently resorted to ISDS, they can also be expected to use existing arbitral mechanisms to challenge climate action measures aimed at restricting or phasing out fossil fuels.

A recent high-profile example is the *RWE v*. Netherlands case. The case resulted from the Dutch Government's decision to ban the burning of coal for electricity generation by 2030 in compliance with the country's Paris Agreement commitments. The case is currently pending, with the proceedings being suspended since October 2022. It nevertheless demonstrates the risks that States face when implementing regulations for phasing out fossil fuels.

Source: UNCTAD.

^a Building on the definition used in IISD (2021), fossil fuel ISDS cases relate to investment activities in the extraction, processing, distribution, supply, transportation and storage of coal, oil and gas, as well as the power generation from these fuels.

Box II.4. Renewable energy–related ISDS cases based on IIAs

During the last decade, ISDS cases brought by investors in the renewable energy sector have proliferated, totaling at least 119. Many of these cases challenged legislative changes involving reductions in feed-in-tariffs for renewable energy production. The cases primarily concerned investment in solar photovoltaic power generation. A small number related to wind and hydroelectric power. Spain was the respondent State in about 45 per cent of cases, which typically related to the same set of legislative and regulatory measures.

The proceedings mainly concern evolving incentives to promote investment in renewable energy. Unsustainable State expenditures and budget deficits, as well as advances in technology for renewable energy, generally meant that incentives were lowered, prompting challenges by investors.

The vast majority of these cases were initiated on basis of the Energy Charter Treaty (1994) by claimants from developed regions against other developed countries. About 40 per cent of the ISDS cases are currently pending. Among those concluded, about 45 per cent were decided in favour of the investor (with damages awarded), and 35 per cent were decided in favour of the State. The remaining cases have been discontinued, settled or decided in favour of neither party, or the outcome is unknown. Investors in renewable energy cases have, thus, been more successful than the global average for investors in all ISDS cases (28 per cent of all cases have been decided in favour of the investor).

Source: UNCTAD.

Past ISDS cases related to the sustainable energy transition provide some insights. Investors in both fossil fuels and renewable energy frequently rely on investment arbitration, together accounting for about 25 per cent of total ISDS cases. Moreover, challenges to government conduct take aim at measures undertaken by both developed and developing countries. As in other sectors, the overwhelming majority of energy-related ISDS cases relied on old-generation IIAs.

ISDS is costly. In general, the disputing parties – including the respondent States – incur significant expenditures for the arbitrators' work, the administration of proceedings and legal representation, all of which usually amount to several million dollars or more per case. Spain, for example, the major respondent in the renewable energy cases, is reported to owe $\in 1.2$ billion in damages and $\in 101$ million in legal and arbitration fees (Mehranvar and Sasmal, 2022). In addition, claimants and respondent States face several years of uncertainty while ISDS proceedings concerning the challenged measures continue.

c. IIA toolbox for promoting sustainable energy investment

UNCTAD has developed a toolbox to ensure that IIAs actively support and do not impede the energy transition.

Various options exist to transform IIAs into tools that promote and facilitate sustainable energy investment and climate objectives more generally. IIA reform actions should pursue a dual goal: (i) ensure that all provisions in IIAs appropriately safeguard the right and duty of States to regulate in the public interest, including in areas where frequent regulatory change is necessary such as energy investment, and (ii) enhance the ability of IIAs to positively contribute to the sustainable energy transition. The first goal secures that IIAs do not impede the transition to low-carbon economies. The second goal ensures that they effectively accelerate the transition. In implementing this second goal, attention should be paid to the objective of ensuring access to affordable, reliable, sustainable and modern energy for all (SDG 7).

UNCTAD has developed a toolbox with a focus on four related action areas (table II.8). These four areas relate to the promotion and facilitation of sustainable energy investment, technology transfer, the right to regulate for climate action and the energy transition as well as corporate social responsibility. For each action area, different policy options, accompanied by explanations, are indicated. There are synergies between many of these options, and they can all be adopted in IIAs in accordance with countries' national development objectives.

d. Putting into action the IIA toolbox for promoting sustainable energy investment

Renegotiation, amendment and termination of existing treaties are the predominant options for ensuring that international investment obligations contribute positively to the energy transition.

Countries have numerous options for modernizing their stock of IIAs. As old-generation IIAs significantly outnumber new-generation ones, it is critical to address the problems and risks they pose. In 2017, UNCTAD presented countries with 10 IIA reform actions for old-generation IIAs, including joint interpretation, amendment, replacement and termination (*WIR17*).

The new IIA toolbox for promoting sustainable energy investment could primarily be put into place by amending or renegotiating existing treaties. Approaching a treaty afresh enables the parties to achieve a high degree of change and to be rigorous and conceptual in designing an IIA that reflects their contemporary shared vision. When new IIAs are concluded to replace old ones, countries may wish to formulate appropriate transition clauses and will need to be mindful of termination provisions and survival clauses in the earlier treaty (UNCTAD, 2018). The entry into force of new IIAs may take a significant amount of time. It may therefore be preferable to ensure that transitional arrangements are provisionally applied as of the date of signature of the new agreement. These transitional arrangements should (i) unequivocally disable the survival clause in the previous IIA and (ii) explicitly terminate all of its provisions. This can be done, for example, in the treaty text of the new IIA and/or a side letter.

Terminating an IIA is another reform option, including termination on a unilateral basis. The latter can be pursued alongside attempts to renegotiate an old-generation IIA. While the existence of survival clauses may have a deterrent effect on consideration of this option, many terminated BITs have or will in the next two to five years reach the end of the period of survival clause application.

UNCTAD's World Investment Forum, to be held from 16 to 20 October 2023, will also present concrete solutions for the reform of the IIA regime to increase investment in sustainable energy and to tackle the global climate crisis. The forum will take place ahead of the annual climate summit (COP28) and as such will enable IIA policymakers and other stakeholders to find solutions and reach consensus on priority issues that could feed into COP28 negotiations.

Table II.8. IIA toolbox for promoting sustainable energy investment					
Action area	Policy options	Explanation			
Promoting and facilitating sustainable energy investment	Incorporate IIA provisions that aim at actively promoting and facilitating sustainable energy investment.	Climate action policies will require significant new investment from both the public and the private sectors. Promotion and facilitation of sustainable investment appears only in a small number of existing IIAs. Novel IIA clauses can commit parties to promoting and facilitating investment in low-carbon energy production, including through the removal of obstacles that technologies and services such as renewable energy production may face. Such measures can include, for example, requirements to publish laws and regulations. In addition, parties could commit to implementing facilitation measures such as one-stop shops. Such promotion and facilitation measures do not need to be subject to investor–State arbitration to contribute to the goal of access to energy for all.			
	Provide for preferential treatment of sustainable energy investment.	Low-carbon energy investors could benefit from preferential treatment through, for example, the adoption of fast-track procedures for approval of permits or licences. The specific focus on sustainable energy investment lowers the burden on State parties to implement such measures while ensuring an IIA contributes positively to the energy transition. Any preferential treatment granted to sustainable energy investment does not need to be enforceable in investor–State arbitration.			
	Establish institutional mechanisms for cooperation on R&D of sustainable technologies.	The transition to a green economy will require investment in R&D, implementation of new technologies and establishment of infrastructure necessary for the sustainable use of such technologies. Treaty parties may want to create mechanisms for continuous cooperation on R&D of sustainable technologies. An IIA could thereby include provisions fostering joint initiatives through, for example, a work programme involving relevant government agencies of the contracting parties and other stakeholders.			
	Commit to technical assistance on the adoption of investment facilitation measures for sustainable energy.	In the case of treaty parties that are at different levels of development, one party may want to commit to providing technical assistance in the adoption of investment facilitation measures for sustainable energy production. Home and host States will be the ultimate beneficiaries of such commitments, which aim to ensure access to energy for all.			

Table II.8.	e II.8. IIA toolbox for promoting sustainable energy investment (Conclued)	
Technology transfer and diffusion	Encourage transfer of low-carbon and sustainable technologies, including related know-how.	Article 4.1(c) of the United Nations Framework Convention on Climate Change requires States to "[p]romote and cooperate in the development, application and diffusion, including transfer, of technologies". Transfer and diffusion of technology is particularly crucial for energy generation, transmission and distribution in developing countries to ensure access to affordable, reliable, sustainable and modern energy for all (SDG 7). IlAs can serve as a tool to implement this commitment. This can be done by explicitly including provisions on the transfer of low-carbon technologies and related know-how.
	Make efforts to create an enabling environment for receiving technology.	Lack of the necessary physical and legal infrastructure can impede the operationalization of new technologies. The receiving State's efforts to create an enabling environment may be combined with commitments by the other treaty party or parties to provide technical assistance, especially where the treaty parties are at different levels of economic development.
	Allow certain kinds of performance requirements relevant to the energy transition.	The transfer of technology may require flexibility to use certain performance requirements, in line with national development strategies, SDG action plans and international obligations. IIAs that prohibit the imposition of performance requirements can constrain the array of measures available to States to create a conducive environment for the transition to low-carbon energy. For IIAs that do not contain any provision on performance requirements, the way forward may be to continue to not include such provisions or, at a minimum, to ensure that appropriate carve-outs relating to climate action exist.
	Ensure that the protection of IP rights does not unduly impede the diffusion of technology.	Protection of IP rights will be conducive to the energy transition only if it facilitates rather than impedes the diffusion of technology. Unduly restrictive protection may limit achievement of this goal. This means that treaty parties should ensure that all TRIPS flexibilities can effectively be relied upon, including under IIAs and in ISDS cases. If necessary, the parties should consider additional flexibilities.
Right to regulate for climate action and the energy transition	Refine the content of investment protection standards and reform ISDS with regard to energy investments.	Refining the content of investment protection standards and reforming ISDS are the most important reform actions States can undertake. UNCTAD's IIA Reform Accelerator provides model language and reform options for eight of the most relevant IIA clauses (UNCTAD, 2020). Reformed provisions should define and circumscribe the specific types of State conduct against which sustainable investors and investments are protected. In addition, States may limit or omit ISDS in their IIAs. Measures related to all or certain types of energy investments can be carved out from the treaty or, alternatively, from being challenged in ISDS proceedings. This can be achieved, for example, through a carve-out for fossil fuels, bearing in mind countries' development objectives.
	Acknowledge the need for regulatory flexibility.	The extensive interpretation of IIA clauses, including the arbitral practice of interpreting the fair and equal treatment clause to protect investor expectations, has proven to add high costs for governments' modification or withdrawal of renewables incentives and entails high risks for the phasing out of high-carbon energy production. Treaty parties should explicitly acknowledge that climate change mitigation and adaptation, including the energy transition, takes place in a rapidly evolving policymaking environment. This implies a greater need for regulatory flexibility, including adjustments to as well as introduction or abrogation of existing rules, regulations and incentive programmes in all relevant areas.
	Include general exceptions related to climate change and the energy transition.	General exceptions related to the energy transition can be in the style of Article XX on General Exceptions of the WTO General Agreement on Trade and Tariffs, with appropriate refinements given recent arbitral findings with respect to such clauses. Whereas an exception for environmental protection as found in some new-generation IIAs generally covers climate change measures, parties may nevertheless wish to explicitly refer to climate change to avoid misinterpretations by arbitral tribunals.
	Clarify provisions on compensation and damages (where applicable).	If an IIA provides for substantive protection standards enforceable in ISDS proceedings, to ensure that it does not unduly limit the parties' ability to regulate for climate action and the energy transition, provisions on damages could be clarified. For example, States may wish to limit compensation in the rapidly developing energy environment to sunk costs as opposed to valuations based on projected future cash flow.
Corporate social responsibility	Include binding obligations related to corporate social responsibility.	The private sector is vital for innovating, developing, transferring and diffusing technology necessary in the energy transition. As beneficiaries of IIA protection standards, energy investors should concomitantly be required to comply with obligations relating to human rights, labour, environmental and anti-corruption standards. Investment treaties should serve as tools to further compliance with best international practices of corporate social responsibility and good corporate governance.
	Specifically oblige energy investors to comply with requirements for sustainable investment.	This policy option recognizes that for investors that want to avail themselves of IIA benefits, voluntary standards should be turned into mandatory ones (e.g. by requiring environmental impact assessments and maintenance of environmental management systems). In that way, sustainable investment standards can complement efforts to rebalance the rights and obligations of States and investors and ensure that IIAs positively contribute to an enabling environment for the energy transition.

Source: UNCTAD.

NOTES

- ¹ These countries are Australia, Austria, Canada, China, Czechia, Denmark, Finland, France, Germany, Hungary, Iceland, India, Israel, Italy, Japan, the Lao People's Democratic Republic, Latvia, Lithuania, Malta, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Poland, Portugal, the Republic of Korea, Romania, the Russian Federation, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Thailand, the United Kingdom and the United States of America.
- ² Belgium, Croatia, Estonia, Greece, Ireland, Luxembourg, Sweden and Switzerland.
- ³ For details see European Commission (2022). "Communication from the Commission to the European Parliament, the Council, the European Economic and Social committee and the Committee of the regions, Commission work programme 2023". COM (2022) 548 final. Strasbourg and The White House (2022). Biden-Harris Administration's National Security Strategy. October 2022. Washington.
- ⁴ Decreto-Leggi Normattiva, n. 21, 21 March 2022.
- ⁵ Boletín oficial del Estado, No. 311, 28 December 2022.
- ⁶ Direction générale du Trésor. https://www.tresor.economie.gouv.fr/Articles/2022/09/08/publication-des-lignesdirectrices-relatives-au-controle-des-investissements-etrangers-en-france. September 2022.
- ⁷ The total number of IIAs is revised in an ongoing manner as a result of retroactive adjustments to UNCTAD's IIA Navigator.
- ⁸ For more information on this agreement, see https://finance.ec.europa.eu/publications/eu-member-states-signagreement-termination-intra-eu-bilateral-investment-treaties_en.
- ⁹ On the basis of newly revealed information, the numbers of known cases for 2020 and 2021 were adjusted to 77 each.
- ¹⁰ Under Annex 14-C of the USMCA, parties consent to the submission of so-called "legacy investment claims" under NAFTA until three years after the termination of NAFTA, i.e. 1 July 2023.
- ¹¹ These are based on the review of 798 renewable energy policies and laws, covering 192 economies (see chapter IV). These 212 laws and policies were selected because they include at least one type of investment promotion tool as defined in Table II.6.
- ¹² UNCTAD computations, based on data from FossilFuelSubsidytracker.org.
- ¹³ According to the IMF, this figure rises to almost \$6 trillion (or 6.8 per cent of world GDP), if the hidden costs of fossil fuels, including their impact on air pollution and global warming, are taken into account (Parry, Black and Vernon, 2021).
- ¹⁴ See, for instance, Moayed, Guggenheim and von Chamier (2021) or World Bank (2012).