

# SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE



# A LEGAL GUIDE

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This Legal Guide to the Sustainable Development Goals (SDGs) is published by Advocates for International Development (A4ID).

## **Disclaimer**

The information contained within this guide is correct at the date of publication.

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## **About A4ID**

Advocates for International Development (A4ID) was founded in 2006 to see the law and lawyers play their full part in the global eradication of poverty. Today, A4ID is the leading international charity that channels legal expertise globally toward the achievement of the UN Sustainable Development Goals. Through A4ID, the world's top lawyers are able to offer high-quality, free legal support to NGOs, social enterprises, community-based organisations, and developing country governments that are working to advance human dignity, equality, and justice. A4ID also operates as a knowledge and resource hub, exploring how the law can be better used to help achieve the SDGs through a range of courses, publications, and events.



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## Foreword

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### The SDG Legal Initiative

There are now less than six years left to realise the achievement of the UN Sustainable Development Goals (SDGs). Aware of the challenge, Advocates for International Development (A4ID) has been continuing its innovative work towards meeting these targets by harnessing the power of the law and the work of lawyers. A4ID's SDG Legal Initiative has been developed because it is now more important than ever that the global legal community comes together to use their skills to advance positive global change.

The SDG Legal Initiative is a call to action to the global legal profession to work towards the achievement of the SDG Agenda and we have until 2030 to do so. By sharing knowledge and providing opportunities to take practical action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity, A4ID will continue its work with the legal sector to enhance this impact. The SDG Legal Initiative aims to create communities of practice, and to amplify the role of the legal sector in achieving the SDGs.

### Legal Guide to the SDGs

As part of its SDG Legal Initiative, A4ID has developed the world's first Legal Guide to the SDGs. The Legal Guide has been developed as a unique resource. It provides a foundational analysis of the role that law can and should play in the achievement of the SDGs. Developed in collaboration with lawyers, academics, and development practitioners, the Guide is made up of 17 distinct chapters, each focussed on one of the 17 goals. Each chapter provides an overview of the relevant regional, national, and international legal frameworks, highlighting how the law can be applied to promote the implementation of the SDGs. The Guide also offers key insights into the legal challenges and opportunities that lawyers may encounter. It presents clear examples of the actions that lawyers can take to help achieve each goal.

### Role of law in improving Industry, Innovation and Infrastructure

The importance of technology and innovation has become increasingly apparent in building back better after the COVID-19 pandemic and doing so in a manner that overcomes the binary between the economy and the environment. Environmentally sustainable means of production, as embodied by the SDGs, can pave the way for new and improved industries and infrastructures, better able to accommodate today's generation and those still yet to come.

However, innovation requires a delicate balance of proactive policies, permissive laws and incentives, and legal and regulatory frameworks that can guarantee certainty,

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predictability and transparency within commercial markets to invigorate healthy competition. In order to create an environment conducive to new ideas and solutions, the law is a bedrock upon which the industry relies to be able to take on greater risk and push imaginative boundaries in realising the future we want.

**Yasmin Batliwala MBE**

**Chief Executive**

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**“Future strategies for poverty reduction need to be *economically empowered*...”**

**Inclusive and sustainable industrial development [can] harness the full potential of industry’s contribution to the achievement of sustainable development, and lasting prosperity for all. ” - Li Yong, UNIDO Past-Director General**

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# The Sustainable Development Goals

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The UN Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet, and ensure that all people can enjoy peace and prosperity.

Also known as the Agenda 2030, the SDGs were agreed in 2015 by the UN General Assembly (Resolution 70/1). They were adopted by all UN Member States, and 2030 was set as the deadline for achieving them.

Compared to the Millennium Development Goals (MDGs),

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which they succeed, the SDGs cover more ground, with wider ambitions to address inequalities, climate change, economic growth, decent jobs, cities, industrialization, oceans, ecosystems, energy, sustainable consumption and production, peace, and justice. The SDGs are also universal, applying to all countries, whereas the MDGs had only been intended for action in developing countries.

The 17 interdependent goals are broken down into 169 targets. At the global level, progress is monitored and reviewed using a set of 232 indicators. The Addis Ababa Action Agenda provides concrete policies and actions to further support the implementation of the 2030 Agenda. Each year, the UN Secretary General also publishes a report documenting progress towards the targets. In addition, the annual meetings of the High-level Political Forum on Sustainable Development (HLPF) continues to play a central role in reviewing global progress towards the SDGs.

At the national level, even though the SDGs are not legally binding, governments are expected to implement country-led sustainable development strategies, including resource mobilisation and financing strategies, and to develop their own national indicators to assist in monitoring progress made on the goals and targets.

SDG 17 stresses the importance of multi-stakeholder partnerships to achieve the goals. The mobilisation of governments, local authorities, civil society, and the private sector is needed to achieve this aim. Today, progress is being made in many places, but, overall, action to meet the SDGs is not yet advancing at the speed or scale required. This decade must therefore deliver rapid and ambitious action to meet the SDGs by 2030.

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## Key terms

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### SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation.

In the context of SDG 9, the following terms mean:

**‘Resilience’:** The ability of a system, community, or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.<sup>1</sup>

**‘Infrastructure’:** Investments in transport, irrigation, energy, and information and communication technology.<sup>2</sup>

**‘Inclusive industrialisation’:** Industrial development which includes all countries and all peoples, as well as the private sector, civil society organisations, and multinational development institutions, and offers equal opportunities and equitable distribution of the benefits of industrialisation to all stakeholders.<sup>3</sup>

**‘Sustainable industrialisation’:** Industrial development which addresses the need to separate the prosperity generated from industrial activities from excessive natural resource use and negative environmental impacts.<sup>4</sup>





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## Overview of the targets

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Industrialisation has a massive impact on economic growth and job creation, and has been a core priority amongst national policymakers since the 2008 financial crisis.<sup>5</sup> Inclusive and sustainable industrial development encourages sustained improvement to people's living standards, and can build a country's overall resilience to all forms of shock: be it economic crises, climate related disasters, or global catastrophes such as COVID-19.

As part of the industrialisation process, manufacturing is positioned as an important global employer, and has been regarded an 'engine of growth' not only through direct income generation, but as a facilitator to other parts of the economy.<sup>6</sup> However, due, *inter alia*, to tariff and trade tensions between the world's dominant economies, global manufacturing growth was already in decline prior to the pandemic. Since then, during COVID-19, global value chains, as well as global manufacturing and transport industries, have been heavily disrupted due to restrictions in the movement of goods and persons,<sup>7</sup> and recovery post-pandemic has been largely stilted and uneven with manufacturing value added per capita in 2022 not much higher for least developed countries than in 2015.<sup>8</sup> Consequently, the need for innovation and technology transfer<sup>9</sup> as well as diversification within industrial sectors<sup>10</sup> is being called for.

Improving the quality of infrastructure is another key focus in rebuilding and improving access to social, economic, and political goods such as healthcare and education. For example, many developing countries still lack basic infrastructure and facilities to provide effective learning environments; with many schools at the primary and lower secondary levels lacking access to electricity, the internet, computers, and basic drinking water in Sub-Saharan Africa.<sup>11</sup> Indeed, the role of infrastructure on a person's day to day life spans from basic necessities

such as the water we drink, the food we eat, and the way we travel, to the wider opportunities of access offered through digital infrastructure. Indeed, investments in technology are particularly important for closing digital gaps, providing access to the internet including through mobile broadband coverage, and may even be an answer to addressing the serious data gaps in overall SDG reporting.<sup>12</sup>

The following breakdown of each target under SDG 9 provides an insight into the current global situation on industry, innovation, and infrastructure, and reveals the pressures and issues relevant to the achievement of each target.



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TARGET 9-1



**Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.**

The World Economic and Social Survey advocates for additional spending on infrastructure as a way to foster economic growth and to narrow the gap between developing and developed countries.<sup>13</sup> With a surge of infrastructure development projects already taking place, including China's Belt and Road Initiative, it is anticipated that a global investment of around US\$90 trillion in infrastructure is expected over the next 5-10 years.<sup>14</sup>

Because transport drives economic development, progress under SDG 9.1 is measured by two transport-related indicators. The first is the "proportion of the rural population who live within 2 km of an all-season road." This metric brings the necessary focus on affordable and equitable access to infrastructure for all. Rural road connectivity provides farmers and their families easy access to markets, as well as health and education facilities. The rural access index, maintained by the World Bank (the custodian agency for indicator 9.1.1), compares data from 25 mostly developing countries for progress against this indicator. According to latest findings, the index found that almost 300 million out of 520 million rural dwellers still lacked good access to roads in 2018-2019.<sup>15</sup>

The second indicator under SDG 9.1 measures passenger and freight volume by rail, road, and air. Here, geographical disparities have been noted, with Europe, Northern America, Eastern and South-Eastern Asia accounting for most freight transport in 2017.<sup>16</sup> Nonetheless, passenger transport is

critical worldwide, and even more expensive forms of travel such as air transport have been regarded a lifeline for many Landlocked Developing Countries (LLDCs) and Small Island Developing States (SIDS).<sup>17</sup> However, passenger traffic reduced significantly over the pandemic and saw dramatic losses to the airline industry.<sup>18</sup>

Notably, while both these indicators are critical in considering mobility, a wider focus on other forms of infrastructure including technology, water, sanitation, energy, irrigation, and flood protection should not be overlooked and are highly integral to achieving other ambitions under the SDG Agenda.



TARGET 9-2



**Promote inclusive and sustainable industrialisation and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share**

**in least developed countries.**

Manufacturing value added (MVA) per capita, i.e. the relative value of net manufacturing output to the population size, is used to measure a country's level of industrialisation.<sup>19</sup> MVA per capita, as noted above, is highly irregular worldwide, with high income countries witnessing dramatic growth whilst Least Developed Countries (LDCs) have struggled with recovery post-pandemic. Accordingly, Europe and North America witnessed a record high at \$5,052 in 2022, in comparison with LDCs where the figure averaged only \$159.<sup>20</sup> Here, LDCs in Asia are noted to have made considerable progress towards meeting their target of doubling growth, whereas those in Africa still require significant progress to be on track.

Investment and technological assistance are critical to increasing the manufacturing industry's share in the gross domestic product of these countries, which in turn should lead to employment opportunities and financial growth.

However, the role of the manufacturing sector as a global employer has been on the decline in both developing and developed regions, falling from 14.3% of total employment in 2015 to 13.6% in 2021 globally.<sup>21</sup> Here, the impact of the global pandemic is notable, with manufacturing having been one of the sectors most severely affected as a result of global supply chain disruption, reduced workforces, and containment measures.<sup>22</sup>

TARGET 9-3



**Increase the access of small -scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.**

Access to financial services allows small-scale enterprises to grow and expand. Balancing the need for regulation of financial institutions with the promotion of lending and risk taking is critical. Microfinance can be a way to bridge the gap for much needed support of small-scale business in developing countries.

Indeed, the microfinance industry is growing and is a key way to achieve this target: economic growth in the 20 most important microfinance markets increased to 4.8% in 2015, nearly twice the rate of developed countries.<sup>23</sup> Similarly, cooperatives, which are collectives that are owned and run jointly by members, are another way to facilitate small-scale enterprise owners in gaining access to financial and technological services.

The benefits of doing so are multitudinous, as small-scale industries are capable of being run with a small amount of capital, relatively unskilled labour, and using local materials. Accordingly, they play an integral role in job creation especially in developing countries. With regards to SDG 9.3, progress is thus measured by the proportion of small-scale industries in total industry value added, as well as the proportion of small-scale industries with a loan or line of credit.<sup>24</sup>

Unsurprisingly however, small-scale enterprises were the most vulnerable to the economic shocks of COVID-19 and many experienced either declines in operation or complete shutdowns. In rebuilding back after the pandemic, access to financial services and affordable credit will thus be key, with only 15.7% of small-scale enterprises in Sub-Saharan Africa, and 17% in Least Developed Countries (LDCs) enjoying access to these services.<sup>25</sup>





TARGET 9-4



**By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.**

As energy efficiency policies are adopted and cleaner fuels and technologies are developed, the carbon dioxide emissions intensity of manufacturing is decreasing in nearly every region in the world – echoing ambitions under SDG 7 and 13.

Domestic and international sustainable development incentives such as favourable tax treatment, emissions credit, and cash grant programs relating to ‘green’ investment have prompted public awareness and supported progress toward this target. Similarly, the use of decentralised energy supplies,

which allow a significant reduction in the amount of energy lost due to their close proximity to the consumer, has also improved energy efficiency.

While this target encompasses sustainable infrastructure and industries, the only indicator chosen to measure progress is CO2 emission per unit of value added. In this regard, whilst emissions reduced significantly in 2020 by more than 5%, they have since rebounded and continued to grow by more than 6% since.<sup>26</sup>

Furthermore, the environmental impact of construction and operational infrastructure and industries is much broader than this. Expanding infrastructure and fostering industrialisation can have a variety of distinct impacts on land, water, air, and the human environment. Water infrastructure may result in excessive use of water resources or water pollution (leakages, insufficient treatment of sewage, etc.). Road infrastructure

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can fragment habitats or cut off migration routes of animals. Mining can contaminate groundwater resources and produce mining waste and noise pollution caused by explosions. On top of greenhouse gases, energy production from fossil fuels is associated with various emissions (SO<sub>2</sub>, NO<sub>x</sub>, dust). Many environmentally sensitive areas, such as the Arctic, the

Amazon, and the Congo Basin, hold rich deposits of oil, gas, metals, and other valuable natural resources. Developing the infrastructure required to extract these resources – including roads, rail, transmission lines, and dams – can cause severe environmental damage,<sup>27</sup> and should also be considered under the scope of SDG 9's ambitions.

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**“Developing countries need support to build productive capacity and infrastructure to connect with regional and global production supply chains, including by meeting environmental requirements and using digital trade infrastructures.” - UN General Assembly Report, E/2023/XX**

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**TARGET 9-5**  
**Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.**

Global investment in research and development (R&D) grew

from 1.69% in 2015 to 1.93% in 2020,<sup>28</sup>

However, most developing regions fell short of the world average where spending on R&D as a share of GDP ranged from 0.32% in sub-Saharan Africa to 0.9% in Northern Africa and Western Asia, and for LDCs and landlocked developing countries, averaged at 0.27% and 0.20% respectively.<sup>29</sup> Such disparities indicate the continued need for strong policy support for increased financing for R&D in developing regions.

**TARGET 9-A**  
**Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.**

The impacts of COVID-19 emphasised the importance of technology and innovation transfer for facilitating a more

even recovery and building resilience within all countries to withstand future shock. To encourage these types of support, SDG 9.a measures progress on the basis of total official international support (official development assistance plus other official flows) to infrastructure in the stated regions. In 2020, this level of total official international support reached \$63 billion USD and represented 20% of all aid; primarily focused in the sectors of transport (\$19.7 billion), energy (\$18.3 billion), and banking and financial services (\$18.1 billion).<sup>30</sup>





**Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.**

The share of medium and high-tech manufacturing products in 2019 accounted for 45.1% of total manufacturing; however, ranged from 47.7% in regions such as Northern America and Europe as compared with 21.7% in Sub-Saharan Africa and 10.6% in Least Developed Countries (LDCs). While recovery following the global pandemic in 2020 has been promising, recovery is likely to be uneven regionally and has varied from sector to sector. For example, the automotive sector has witnessed strong production since the pandemic, whereas the pharmaceutical industry faced declines for the very first time in 2022.<sup>31</sup>



**Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.**

Positively, the COVID-19 pandemic saw a surge in increased access to information and communications technology with 95% of the world's population now enjoying access to broadband network connection of 3G or higher. However, the remaining 5% are concentrated in countries in Sub-Saharan Africa, Least Developed Countries (LDCs) and Landlocked Developing Countries (LLDCs), where the gap is thought to be much higher at 17-18%.<sup>32</sup> In addition, and perhaps unsurprisingly, access remains poorer in rural areas, with 26% of rural populations in LDCs unable to access the internet; with 12% having only 2G connection, and the remaining 14% having no form of mobile coverage whatsoever.<sup>33</sup>



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## Key actions lawyers can take

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The final section of this chapter provides more details on how the international legal community can engage in efforts to achieve SDG 9. However, the following short summary

describes some of the key actions lawyers can take to contribute to the sustainable development agenda with regards to industry, innovation and infrastructure.

### Learn and educate

SDG 9's close relationship with public infrastructure building, private sector innovation and general trade and industry makes it a clear starting point for all organisations to engage with. The wide spectrum of lawyers working in-house, in private law firms and in the public sector (as

regards infrastructure), will be better positioned to advise companies, firms, employees, clients, and communities in support of these changes where they are familiar with the SDG targets that are influencing industry growth and trends.

### Integrate

The UN Global Compact offers a coordinated approach for organisations across all sectors to integrate precautionary, innovative and proactive means for making their business operations and services more sustainable and resilient.

With more than 12,000 signatory entities in more than 160

countries, law firms can consider becoming signatories to the compact, committing to align their strategies and operations with universal principles on human rights, environment and anti-corruption, whilst also learning from and contributing to relevant reports and initiatives.

### Act

There are myriad ways that lawyers, as specialist advisors on matters relating to infrastructure, investment, public and private sector financing, cross-border expansion, and even intellectual property can contribute to SDG 9.

For example, law firms and lawyers can engage in transactional work relating to sustainable infrastructure development and finance, or collaborate with MDBs, BDIs

and ECAs on promoting infrastructure investment in lesser developed countries. When structuring large scale projects, they can be pivotal in ensuring that voluntary codes such as the Equator Principles are carefully considered, and that socio-environmental risks are factored into due diligence checks. A number of law firms have even contributed to SDG 9 ambitions through pro bono delivery as explored later in this chapter.

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# Elements of the international legal framework

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## International Covenant on Economic, Social and Cultural Rights

**Adopted by the UN General Assembly:** 16 December 1966

**Entered into force:** 3 January 1976

**Status of ratification (as of June 2023):** 171 Parties

The International Covenant on Economic, Social and Cultural Rights (ICESCR), drawing on the Universal Declaration of Human Rights, affirms a series of human rights and encourages social progress. Legally binding on a large number of States, it indicates a wide consensus on economic, social and cultural

human rights. However, a number of States have signed but not ratified the ICESCR, notably Cuba, Malaysia, Saudi Arabia, and the United States.

Relevant to SDG 9 is Article 15 by which State Parties recognise the right of everyone to enjoy the benefits of scientific progress and its applications.

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## Convention on the Elimination of all Forms of Discrimination against Women

**Adopted by the UN General Assembly:** 18 December 1979

**Entered into force:** 3 September 1981

**Status of ratification (as of June 2023):** 189 Parties

The Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) defines what constitutes discrimination against women and sets forth an agenda to end it.

In relation to SDG 9 targets, States must ensure that women have access, on a basis of equality with men, to financial services (bank loans, mortgages and other forms of financial credit) (Article 13) and ensure that women living in rural areas have access to transport and communication infrastructures (Article 14(2)(h)).







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## International Investment Agreements

International Investment Agreements (IIAs) are divided into two types: bilateral investment treaties (BITs), which represent the great majority of IIAs, and treaties with investment provisions, such as free trade agreements with an investment chapter.

A BIT is an agreement between two countries regarding promotion and protection of investments made by investors from respective countries in each other's territory.

International Investment Agreements usually ensure that foreign investors will be treated the same as domestic companies ('national treatment' clause), that States Parties' investors are given the same type of preferences as other foreign investors ('most favoured nation' clause), guarantee fair and equitable treatment, protect investors from expropriation and guarantee access to investor-state dispute settlement.

One argument given in support of BITs is that States, especially developing countries, enter into them willingly, self-

determining the limitations on their sovereignty in the hope that they will lead to an increase in foreign direct investment, and in turn, may support infrastructure and industrial development. However, evidence on the ability of BIT to attract foreign direct investment is mixed, as is the ability of such investment to contribute to development of sustainable infrastructure projects and to advance inclusive and sustainable industrial development.<sup>34</sup> With respect to industrial development in particular, a number of investment treaties contain restrictions on so-called 'performance requirements' – which can include a range of mandatory and incentive-based tools that governments may otherwise use to try to harness foreign investment for inclusive and sustainable industrial development.

By the end of 2020, a total of 3,360 IIAs had been signed (2,943 BITs and 417 TIPs). However, since 2017, we have witnessed a year-on-year trend of the number of IIA terminations exceeding the number of those newly concluded.<sup>35</sup>

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## The United Nations Framework Convention on Climate Change

**Adopted by the UN General Assembly:** 9 May 1992

**Entered into force:** 21 March 1994

**Status of ratification (as of June 2023):** 198 Parties

The United Nations Framework Convention on Climate Change (UNFCCC) establishes the global objective to “stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system.” The limits on greenhouse gas emissions

are non-binding and the Convention itself does not contain enforcement mechanisms. Instead, the framework illustrates how specific international treaties (called ‘protocols’ or ‘agreements’) may be negotiated by State Parties to designate further measures in fulfilling the goals of the UNFCCC. The relevance of the UNFCCC to SDG 9 arises in light of these additional measures such as The Kyoto Protocol and The Paris Agreement (outlined below).

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## The Kyoto Protocol

**Adopted by the UN General Assembly:** 11 December 1997

**Entered into force:** 16 February 2005

**Status of ratification (as of June 2023):** 192 Parties

In 1997, parties to the UNFCCC concluded the Kyoto Protocol, containing legally binding obligations upon 37 industrialised countries and the European Union to reduce GHG emissions by an average of 5.2% by 2012 as compared to 1990 levels (Article 3 and Annex B). When the Protocol came into force in 2005, it became the first international, legally binding agreement that

set emission reduction targets.

The emission reduction commitments covered the period from 2008 to 2012, with the Doha Amendment extending these obligations with ‘second-round’ targets upon 37 states to 2020.

As of 28 October 2020, 147 parties deposited their instrument of acceptance, therefore meeting the threshold for entry into force and achieving the Doha amendment.<sup>36</sup> Since 2020, the Paris Agreement replaces the Kyoto Protocol.

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**“This is not a simple environmental issue where you can say it is an issue where the scientists are not unanimous. This is about international relations; this is about economy, about trying to create a level playing field for big businesses throughout the world. You have to understand what is at stake and that is why it is serious.” Margot Wallström, EU Commissioner for the Environment**

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## The Paris Agreement

**Adopted by the UN General Assembly:** 12 December 2015

**Entered into force:** 4 November 2016

**Status of ratification (as of June 2023):** 195 Parties

In December 2015, parties to the UNFCCC reached a landmark agreement in Paris in the form of a legally binding agreement. The Paris Agreement has three objectives: i) to limit global warming to less than two degrees Celsius above pre-industrial levels and pursue efforts to limit the rise to 1.5 degrees Celsius, ii) to improve the ability to adapt to climate change and foster climate resilience, and iii) to make finance flows consistent with the above objectives.

State Parties are responsible for more than 88% of global greenhouse gas emissions, and are committed under the

agreement to determine (on a legally binding basis) its Nationally Determined Contribution (NDC) to the overarching aim. To this end, each State Party must submit a report every five years to the UNFCCC Secretariat upon which realisation of their obligation is determined as an obligation of conduct, rather than of result. As such, there is no enforcement mechanism to ensure that a State will set a meaningful target nor that they will attain it.

SDG 9 is consistent with the Paris Agreement as it calls to upgrade infrastructure and retrofit industries to make them sustainable. SDG 9 and the Paris Agreement both recognise the 'special circumstances' of developing countries. Concretely, in Article 4, Parties commit to reach global peaking of greenhouse gas emissions as soon as possible, 'recognising that peaking will take longer for developing country Parties.'<sup>32</sup>



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## Soft law and declarations

### Equator Principles (2003)

The Equator Principles (EPs) are a risk management framework, adopted by financial institutions, for determining, assessing and managing environmental and social risk in projects. The EPs are primarily intended to provide a minimum standard for due diligence and monitoring to support responsible risk decision-making. They apply globally to all industry sectors and to four financial products, namely Project Finance Advisory Services, Project Finance, Project-Related Corporate Loans and Bridge Loans. Implementation of the EP requires that

the adverse impacts on the natural environment and/or local communities of large-scale development projects are taken into account. Financial institutions that have adopted the EPs assess the negative impacts of these projects and establish compliance with the principles as a condition of lending. Currently 136 Equator Principles Financial Institutions (EPFIs) in 38 countries have officially adopted the EPs, covering the majority of international project finance debt within developed and emerging markets.<sup>38</sup>

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### UN Declaration of the Rights of Indigenous Peoples (2007)

Adopted following two decades of negotiations, the UN Declaration of the Rights of Indigenous Peoples provides a universal framework to guarantee a minimum standard of well-being for indigenous people around the world.

In relation to infrastructure, the Declaration provides, under Article 32, that States should conduct consultation and seek

cooperation with the indigenous peoples concerned with infrastructure developments in order to gain their free and informed consent before approving any project that might affect their lands or natural resources and should take effective measures to mitigate the adverse impacts of such projects.

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### Lima Declaration: Towards inclusive and sustainable industrial development (2013)

Adopted at the General Conference of the United Nations Industrial Development Organisation (UNIDO), the Lima Declaration affirms that poverty eradication can only be achieved through inclusive and sustainable industrial growth.

Member States of UNIDO commit to strengthen international cooperation for industrial development, via foreign direct investment, knowledge and technology transfer,

appropriate financial mechanisms, and new multi-stakeholder partnerships; and call upon UNIDO to serve as a global facilitator of knowledge and advice on industrial policies and strategies.<sup>39</sup>

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## Addis Ababa Action Agenda (2015)

Adopted at the Third International Conference on Financing for Development and subsequently endorsed by the UN General Assembly in its resolution 69/313 of 27 July 2015, the Addis Ababa Action Agenda provides a global framework for financing the 2030 Agenda for Sustainable Development by aligning financing flows and policies with priorities set up in the SDGs.<sup>40</sup>

In this Declaration, UN Member States commit to increase public investment in infrastructure and to invest in promoting

inclusive and sustainable industrial development.

Concretely, States agreed to establish a 'Global Infrastructure Forum' to bring together multilateral and national development banks, UN agencies, development partners and the private sector in order to improve alignment and coordination among infrastructure initiatives. Since 2016, a different multilateral development bank has hosted the event every year.<sup>41</sup>





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## Regional and legal policy frameworks

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### Asia

#### Asian Development Bank (ADB)

ADB is an international development finance institution whose main goal is to reduce poverty in Asia and the Pacific through environmentally sustainable growth. This goal is pursued through the provision of various forms of financial assistance to developing countries through loans, technical assistance, grants, guarantees and equity investments. The SDGs are core to ADB's mission and upon launching its Strategy 2030 in 2018 (setting the course for ADB's efforts to respond effectively to the APAC region's changing needs), ADB aligned its strategy and seven operational priorities with all 17 SDGs.<sup>42</sup> ADB's corporate results framework also aligns with the SDGs.

ADB works with its developing member countries and private sector clients on integrating environmental sustainability into

national development priorities and corporate sustainability goals, while financing critical programs and projects. ADB's environment work is guided by Strategy 2030, especially the Operational Plan for Priority 3 on 'Tackling Climate Change, Building Climate and Disaster Resilience, and Enhancing Environmental Sustainability', which includes three interlinked sub-pillars: (i) increasing climate change mitigation; (ii) building climate and disaster resilience; and (iii) enhancing environmental sustainability. Under this third pillar, ADB focuses on: air and water pollution management; natural capital and healthy oceans; water-food-energy security nexus; and cross-cutting issues (e.g.: governance, green business and gender).<sup>43</sup>



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## Asian Infrastructure Investment Bank (AIIB) (2015)

The AIIB is a multilateral development bank with the goal of initiating social and economic outcomes in Asia by investing in sustainable infrastructure and other productive sectors in Asia and beyond. To date, sixty-four projects have been approved with the aim of better connecting people, markets and services.<sup>44</sup>

The AIIB is governed by an Environmental and Social Framework (ESF) which includes mandatory environmental and social requirements and standards in line with the SDGs.<sup>45</sup>

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**“Peace and development remain the call of our times. For countries to develop together, infrastructure connectivity serves as an important physical foundation... Let us aim at development for all and make the AIIB a new type of multilateral development bank that promotes development across the world.”**  
**- Xi Jinping, President of China**

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The AIIB has recently published a policy memo ‘Filling the sustainable infrastructure gap in Asia: AIIB as a catalyst and orchestrator’ which affirmed the bank’s commitment to accelerating sustainable infrastructure investment in Asia to meet the targets laid out in the 2030 Agenda. The memo highlights that it is anticipated that Asia will require \$1.7 trillion of infrastructure investments per year, or \$26 trillion through to 2030, to meet its development goals.<sup>46</sup>

The ESF sets out that the AIIB promotes sustainable infrastructure and innovation by promoting conservation of water, energy and sustainable land use management as well as encouraging innovation through growth of low carbon technologies, sustainable urban development and cleaner production.

However, analysis of the AIIB sustainable energy strategy paints a mixed picture. Analysts suggest that more ambitious internationally cooperative and transformative policy frameworks and a stronger shift in investments from unsustainable ‘brown’ (fossil fuels) to sustainable ‘green’ (renewable energies) investments is still needed in order for AIIB’s energy sector strategy to account for climate change.<sup>47</sup>

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## Legal and Institutional Framework for PPPs (ASEAN RMID)

The Association of Southeast Asian Nations (ASEAN) Risk Mitigation Instruments Database (RMID) discusses the legal and institutional framework for public-private partnerships (PPPs), noting that while there has been an improvement in the legal framework for investment protection, there remain challenges and notable differences between member countries in terms of the levels of sophistication of national frameworks.

Whilst nations such as Brunei Darussalam and Singapore have comprehensive and robust legal frameworks protecting investment and promoting infrastructure development, other nations (such as Myanmar and Vietnam) require increased reform efforts.<sup>48</sup> However, the reform efforts being undertaken by member nations are gradually paving the way for a harmonised legal landscape that promotes sustainable infrastructure development across Southeast Asia.

### African Development Bank (AfDB)

The AfDB is a development finance institution, established with the overarching objective to spur sustainable economic development and social progress on the continent of Africa (i.e.: in its regional member countries (RMCs)), thus contributing to poverty reduction. This is achieved by: mobilising and allocating resources for investment in RMCs; and providing policy advice and technical assistance to support development efforts. The AfDB recognises that achieving sustainable development outcomes in Africa requires greater assistance to its RMCs in the diligent examination of proposed development actions to manage their potential adverse ESG risks and impacts. It is for this reason that AfDB developed its Integrated Safeguard System<sup>49</sup> – a cornerstone of its Ten Year Strategy (2013-2022) to facilitate growth that is socially inclusive and environmentally sustainable.

Established by the AfDB in 2015, Africa50 is designed as an infrastructure investment platform to catalyse public sector capital and mobilise private sector funding. Shareholders are 27 African States, two central banks and the African Development Bank. Africa50 mobilises funds from its

sovereign shareholders and from private investors for regional and national infrastructure projects, mostly in the energy and transport sectors.<sup>50</sup>



### New Partnership for Africa's Development: African Science, Technology and Innovation Indicators Initiative (ASTII) (2007)

ASTII was founded in 2007 following the first African Ministerial Conference on Science and Technology, and is intended to act as a learning mechanism, providing 19 African Union Member States with the tools and opportunities to engage in mutual learning and sharing to improve the measurement of science,

technology and innovation (STI).<sup>51</sup> SDG 9's targets lie at the heart of ASTII, which specifically aims to develop and promote internationally compatible STI indicators and to inform African countries on the state of STI in Africa.

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## Africa Mining Vision (2009)

The Africa Mining Vision (AMV) was adopted in 2009 following a decision by the African Union's Ministers responsible for Mineral Resources Development. It is intended to provide the basis for an alternative policy framework to address the reality that Africa's mineral wealth, as in the days of colonialism, still primarily benefits outside interests. The AMV seeks to ensure that mining contributes better to local development by making sure workers and communities see real benefits from large-scale industrial mining and that their environment is protected.

Achieving these goals requires paying attention to all stages of the value chain of non-renewable mineral resources, from

contracts and licenses for exploration and production to integrating mining with sustainable development plans. To date the Initiative has developed two Innovation Outlooks in 2010 and 2014, which measure the progress made by African countries in developing product, marketing, process and services innovations.

African member governments are expected to adopt, after consultations at the national level, specific plans for implementation called Country Mining Visions. The Country Mining Vision Guidebook lays out clearly defined agendas to address key issues, including fiscal regime and revenue management.<sup>52</sup>

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## Programme for Infrastructure Development in Africa (2010)

The Programme for Infrastructure Development in Africa (PIDA) is an initiative of the African Union for mobilising resources to implement cross-border infrastructure projects on the continent.

The programme focuses on four main sectors, namely energy, transport, transboundary water and information and communication technologies (ICT).<sup>53</sup>

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## The African Centre of Excellence for Infrastructure Regulation (ACEIR)

The ACEIR comprises regulatory practitioners, researchers and professors from global universities and research institutes. A soft launch of the ACEIR was held in Lusaka, Zambia in 2016, followed by further stakeholder consultation to raise awareness of ACEIR.

ACEIR will primarily work within the fields of economics, engineering, public administration, political science and law,

focusing on energy, communications, transport and water. ACEIR will aim to develop and implement African models of regulation in these industries, will conduct cross-sectoral research and design, and shall implement capacity-building programmes for regulators, government ministry officials and operators. It will also organise high-level policy dialogues between governments, regulators and operators.<sup>54</sup>



## European Union

### Environmental Impact Assessment Directive (1985 – 2014)

Considering and accounting for environmental impact forms part of developing sustainable and resilient infrastructure. The original Environmental Impact Assessment (EIA) Directive (85/337) concerning the assessment of the effects of certain public and private projects on the environment, came into force in 1985, and has since been the subject of three amending directives. In March 2014, the European Parliament and the Council of Ministers adopted a new EIA Directive (2014/52/EU) intending to simplify the rules and reduce the administrative burden as well as improving the level of environmental protection. Entering into force in May 2014, the Directive had to be transposed into national legislation by May 2017.<sup>55</sup>

The Directive sets out public and private projects in the EU

for which the environmental impact assessment is either mandatory (e.g.: long-distance express roads or airports) or left at the discretion of Member States. The procedure is essentially as follows: the developer must provide information on the project's impact on several factors (for instance, human health, biodiversity, water, air and climate); the EIA report is then made available to the environmental authorities and the public, and the competent authority decides whether to authorise the project or not, taking into consideration the results of public consultations. The results can then be challenged before the courts. The revised Directive pays greater attention to challenges that have emerged since 1985, like resource efficiency, climate change and disaster prevention.



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## Priorities for EU Hydrogen Legislation (2021)

Accelerating hydrogen uptake and growing the European hydrogen economy is central to the European Green Deal; as hydrogen is seen as a key part of the global energy transition to cleaner sources of power.<sup>56</sup> Numerous documents / statements have been made guiding future EU hydrogen legislation.

For example, a report on priorities for the EU Hydrogen Legislation was drafted by the group Gas for Climate<sup>57</sup> and highlights the key role hydrogen will play in the transition

to a net-zero emission European energy system. By using existing pipelines and other key infrastructure, the Report notes that the creation of an initial European-wide legislative framework for hydrogen will enable investments to the sector and promote / enable the emergence of a dedicated hydrogen infrastructure framework. Creating and facilitating a cross-border hydrogen market across EU member states is a key aspect of the Report.<sup>58</sup>

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## OECD

### Recommendation of the Council on the Governance of Infrastructure (the Recommendation) (2021)

The Recommendation aims to build on and update the “OECD Framework for the Governance of Infrastructure: Getting Infrastructure Right” (the Framework)<sup>59</sup>, and provides a tool to assist governments to invest in infrastructure projects in a manner that is affordable, cost effective and trusted by citizens, investors and other stakeholders.

The Recommendation builds on work conducted over the past 15 years by the OECD, which has been supporting governments in their infrastructure development by providing good practices, opportunities and facilitating the sharing of knowledge between policy makers.<sup>60</sup> The Framework is recognised by national governments and other international organisations as comprehensive in scope, and is viewed at the forefront of infrastructure governance. The Recommendation, together with the Framework, aims to present an approach that covers the entire life cycle of projects, particularly focusing

on regional, social, gender, resilience and environmental perspectives. The Recommendation also recognises that infrastructure governance will be crucial to ensuring that public investments contribute to a sustainable recovery following the COVID-19 pandemic, while strengthening infrastructure resilience.

In this way, the Recommendation serves as a forum for exchanging information related to infrastructure governance and aims to foster multi-stakeholder and interdisciplinary dialogue. To achieve this, the OECD is developing a set of infrastructure governance indicators that will measure tools, processes, decision-making processes and interaction of the OECD member nations. Tools to support the implementation of the Recommendation are also in the process of being developed.<sup>61</sup>

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## Examples of relevant national legislation and case studies

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### Canada

#### First Nations Infrastructure Fund

Created in 2007-2008, the First Nations Infrastructure Fund (FNIF) supports infrastructure projects on reserve lands submitted by First Nations communities. The FNIF is an effort to involve marginalised communities in the identification

and design of infrastructure projects in order to take into consideration local needs and priorities. However, there is general consensus that current funding is insufficient to meet on-reserve infrastructure needs.<sup>62</sup>

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### Kenya

#### M-PESA

M-PESA, a mobile phone-based money transfer, financing and microfinancing service was first set up in Kenya to address one of the biggest global barriers to equal opportunities: the lack of access to financial services. Representing a major impediment to income opportunities and economic welfare, these barriers especially affect the poor, women and youth, rural populations, migrants and those engaged in the informal economy, as well as SMEs and microenterprises.

With M-PESA having improved access to financial services, especially for women and youth in Kenya, the service has since expanded to Tanzania, Mozambique, Democratic Republic of Congo, Lesotho, Ghana, Egypt, Afghanistan and South Africa – contributing to financial inclusion across Africa.<sup>63</sup> The technology now allows for new payment systems, networks and mobile money schemes which can capitalise on mobile telephony uptake and offer financial services for lower infrastructural costs at increased coverage.

In addition, the initiative has given rise to a series of new legislative and regulatory frameworks in Kenya. At the time M-PESA was developed in 2005 and later launched in 2007, there had been no specific regulatory framework governing mobile money transfer and payment systems in Kenya, with the only operating legislation being the overarching Kenya Information Communication Act of 1998. As innovation in mobile money transfer and payment developed however, the Central Bank of Kenya introduced various regulations and policies which guided the industry. Now, M-PESA and other mobile money transactions are principally regulated under the National Payment System Act of 2011<sup>64</sup> and the National Payment System Regulations of 2014. Different aspects of the platform are further governed under various forms of legislation such as Capital Markets Authority Act, Competition Act, Companies Act, Data Protection Act and the Constitution of Kenya.

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## United States

### Infrastructure Investments and Jobs Act (IIJA)

On November 15 2021, the United States signed into law the Infrastructure Investments and Jobs Act (IIJA), a bipartisan piece of legislation that aims to provide \$973 billion over 5 years from FY 2022 until the end of FY2026. This includes new investments of approximately \$550 billion in power and energy, environmental remediation, broadband, resilience, transport and water.

The IIJA also aims to provide supplemental appropriations to numerous federal agencies, including the Departments of Commerce, Agriculture, Homeland Security, Transportation,

Environmental Protection Agency, Energy and Health & Human Services.<sup>65</sup>

The investments under the IIJA are intended to create around 2 million jobs per year over the course of the next decade, increasing the labour force and sustainably growing the US economy. The IIJA hopes to make the largest federal investment in public transit, clean drinking water and wastewater infrastructure, high-speed internet, clean energy, passenger rail and bridges.<sup>66</sup>





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## South Africa

### Infrastructure South Africa (ISA)

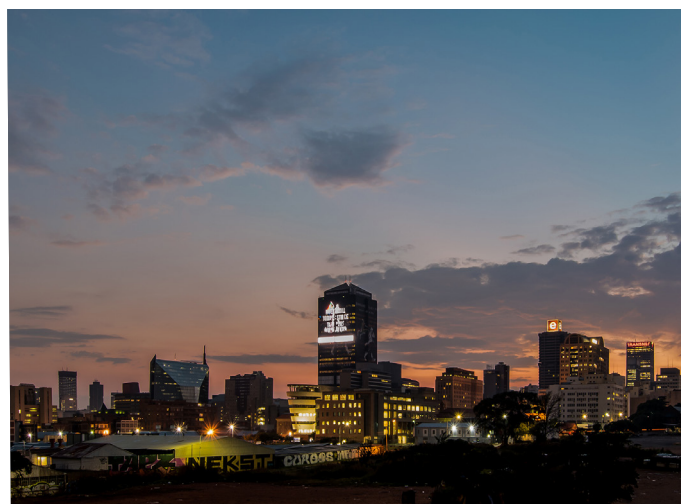
South Africa has, in recent times, made some headway in promoting sustainable infrastructure development. In 2020, the government set up Infrastructure South Africa (ISA), a new body that will lead revised institutional arrangements for infrastructure development in the country. Following the establishment of the National Infrastructure Plan in 2012 and the New Growth Path, the Presidential Infrastructure Coordinating Committee was also established (PICC) to develop a National Infrastructure Plan (NIP). Under their guidance, various strategic integrated projects (SIPS) have come to fruition, aiding in accelerating economic growth.<sup>67</sup>

At a recent Sustainable Infrastructure Development Symposium of South Africa (SIDSSA), information was provided on ISA's progress at bringing projects through to bankability and securing funding for pipeline projects, as well as providing access to clean water, affordable electricity and adequate housing. The SIDSSA centred on the themes of transformational infrastructure, expanding economic opportunities and improving business competitiveness. Further information on the NIP 2050 was provided, as well as an announcement for future legislative reforms to remedy fragmentation across the policy and legal frameworks relating to infrastructure development and procurement in South Africa.<sup>68</sup> The NIP allows for an initial focus on delivering transport, water energy and digital communications infrastructure development by 2050.<sup>69</sup>

To strengthen innovation and technological development, the country further established the Presidential Commission on the Fourth Industrial Revolution (4IR) in 2019. The commission will coordinate the development of South Africa's

national response action plan to deal with the 4IR, advise on strategies to enhance South Africa's global competitiveness, make recommendations on enabling infrastructure for the country to participate in the digital economy, and mobilise resources to support 4IR interventions, amongst others.<sup>70</sup> The commission released a report with recommendations on 23 October 2020, including the need to invest in human capital development, establish an Artificial Intelligence Institute, build 4IR infrastructure and review and amend (or create) policy and legislation.<sup>71</sup>

Initiatives such as the Intsimbi Future Production Technologies Initiative (IFPTI), launched in 2018, form part of South Africa's 4IR response. The IFPTI marks an expansion of the previous pilot National Tooling Initiative programme into a full-fledged 4IR programme which will include, amongst others, training in robotics, mechatronics and industrial maintenance.<sup>72</sup>



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# Insights for the Legal Profession

## a) Examples of Relevant Cases and Legal Proceedings

### Kenya

#### **Baadi & others v. A-G & others (Lamu Port Case) (2018) High Court of Kenya, Petition 22 of 2012**

In recent years, human rights laws have shaped the dialogue concerning sustainable infrastructure and development, with human rights advocates working diligently to promote awareness and accountability within infrastructure projects, as was the case with the Lamu Port - South Sudan-Ethiopia Transport Corridor project (the 'LAPSSET Project').

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**“The LAPSSET Project Proponents have not put in place adequate mitigation measures consistent with the principle of sustainable development... this failure creates a verifiable and imminent risk to the violation of the right to a clean and healthy environment” - High Court of Kenya**

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The LAPSSET Project was an ambitious infrastructure program involving the construction of a port in Lamu (Kenya) connected through a railway line, a road and an oil pipeline to the capitals of South Sudan and Ethiopia, as well as a dam, three international airports and three resort cities.

Residents of Lamu, supported by local and international

NGOs, filed a complaint before the High Court of Kenya arguing that the legal procedure on public participation had not been respected and that their rights to information, to a clean and healthy environment and to culture had been violated.<sup>73</sup>

The Court found that the project proponents had failed to carry out strategic environmental assessment; that public participation in the design and implementation of the project was insufficient; that preliminary studies were not made available to the population, violating their right to information; that the project proponents had not put in place adequate mitigation measures to minimise adverse environmental impacts; that the government had failed to compensate local fishermen for the limitation of their traditional fishing rights; and that the failure by the government to design a management plan to preserve Lamu Island as a UNESCO World Heritage site constituted of violation of Lamu residents' right to culture.

Accordingly, whilst the High Court did not challenge the implementation of the project itself, it did order project proponents and the government to remedy the observed violations highlighting the importance of inclusive approaches to industrialisation. In addition, the local fishermen were awarded 1.7 billion Kenyan shillings (approximately £13 million) in compensation.<sup>74</sup>

## Canada

### **Mobil Investments Canada Inc. and Murphy Oil Corporation v. Canada, ICSID Case No. ARB(AF)/07/4**

Adopted in 2004 by the Canadian Newfoundland and Labrador Offshore Petroleum Board, the Guidelines for Research and Development Expenditures (the '2004 Guidelines') required oil and gas companies to support research and development (R&D) and education and training expenditure (E&T) in one of Canada's poorest provinces: Newfoundland and Labrador. The guidelines applied to domestic and foreign oil extraction firms alike.

However, Mobil Investments Canada Inc., Murphy Oil Corporation and other investors in offshore petroleum projects argued that by requiring them to invest millions of dollars per year for R&D and E&T in the province of Newfoundland and Labrador, the 2004 Guidelines had caused a damage of approximately \$66 million to their oil investments in the province. The claim was brought under The North American

Free Trade Agreement (NAFTA), noting that Article 1106 strictly limits performance requirements that a host country can impose on investors.

The arbitral tribunal was therefore asked to consider whether Canada had imposed on investors impermissible performance requirements within the meaning of Article 1106(1)(c). The majority of the Tribunal found a breach of Article 1106 and awarded \$13.9 million CAD to Mobil Investments Canada Inc and \$3.4 million CAD to Murphy Oil Corporation in damages plus interest. The case highlights the innate tensions and conflicts of interest in seeking to develop inclusive and sustainable industrialisation, in which investor interests must still be well-balanced against the interests of wider development policies.



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## Spain, Italy and the Czech Republic

### Various investor-state arbitrations against Spain, Italy and the Czech Republic arising out of renewable energy regime.

When encouraging sustainable infrastructure development, the rights of investors and host countries must be well-balanced, well-considered and pragmatic in order to create feasible solutions. In the early 2000s, a number of European countries, such as Spain, Italy and the Czech Republic, sought to create incentive programs to attract investments in renewable energy to promote sustainable infrastructure creation. However, the incentives placed economic strain on national economies, leading some countries to implement changes to the regimes. This gave rise to a considerable number of arbitrations by investors, with one study finding as many as 28 arbitration awards having been made as of February 2020.<sup>75</sup>

A key issue in many of the arbitrations was whether the state had frustrated the legitimate expectations of the investor by changing the regime, and in so doing, denied the investor fair and equitable treatment. The outcome in each arbitration turned on the specific facts of the case, such as whether the state had provided a specific commitment to the investor or whether the investor's expectations were reasonable in the circumstances. In a significant number of cases however the state was ordered to pay compensation to the investor,<sup>76</sup> demonstrating the importance of risk management strategies and forecasting when developing policy and legislative incentives towards SDG 9.





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## b) Legal context and challenges

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SDG 9 recognises industrialisation as one of the main drivers of sustained economic growth. Indeed, some of the biggest development gains in history, such as in East Asia, have been associated with a strategy of export-led industrialisation. On the other hand, the share of manufacturing in gross world production and in global employment is diminishing, with some seeing it as a sign of premature deindustrialisation in developing countries.

According to UNIDO, however, inclusive and sustainable industrial development (ISID) is more relevant than ever in our era of globalisation, as affirmed by SDG 9 and the Lima Declaration,<sup>77</sup> and even more so in rebuilding resilience

after COVID-19.<sup>78</sup> In this respect, industrialisation is noted for its economic diversification for rural economies, building resilience in the context of future risks such as climate change, by removing overreliance on single commodities. However, the creation of non-competitive industries can also have adverse economic consequences.<sup>79</sup>

In the case of infrastructure development, successfully implementing ISID will require harnessing technology, innovation and capital. Here, human rights advocacy can be a useful tool for establishing protocols and programmes to protect the interests and rights of underrepresented groups as part of this process.

## Funding

One of the challenges to the successful implementation of SDG 9, particularly in developing countries, is procuring the funding necessary to develop infrastructure and invest in innovation.

Traditionally, State and local governments were responsible for the funding and implementation of infrastructure projects, primarily through tax revenues. However, with the post-WWII reconstruction effort, new institutions were established to support infrastructure finance and development.

Today, multilateral development banks (MDBs), bilateral development institutions (BDIs) and export credit agencies (ECAs) complement limited government resources, especially in emerging and developing economies, to scale up investment in infrastructure. In recent decades, the private sector has also played an increasingly influential role in the development of infrastructure. However, private finance tends to go towards sectors and countries with strong investment fundamentals; with a lack of rule-of-law protections being a key reason why foreign investors rely on arbitration provisions in their investment contracts.

Multilateral Development Banks often complement governments and private actors in financing sustainable infrastructure investments. As private creditors tend to favour short-term financing in order to reduce risk, development banks can address the unmet demand for long-term financing in developing countries.<sup>80</sup> Here, the potential to provide both funds and technical expertise for project design and implementation arise. The United Nations Inter-agency Task Force on Financing for Development monitors progress on the Addis Ababa Action Agenda and advises governments on financing for sustainable development.<sup>81</sup>



MDBs have pledged to prioritise low-carbon and resilient infrastructures; however, analysis shows that they have continued to support fossil-based projects and are not 'greening' their investment portfolio fast enough to meet targets.<sup>82</sup> There has nevertheless been progress in the right direction – for example, the Asian Development Bank confirmed in October 2021 that it will not provide any support for extraction and power projects in the coal and oil sectors, but will continue to allow some natural gas financing as it seeks to help transition the Asia Pacific toward renewable energy.<sup>83</sup>



## Domestic legal framework

When funds are sought to invest in projects in developing nations, a lack of established legal structures can dissuade investors. Specifically, concerns that domestic laws and institutions lack the necessary protocols and structures to mitigate losses and resolve potential disputes, can, in some cases, work as a deterrent to investment. This is particularly troublesome given the level of growth needed in developing nations.

One way to resolve these issues is to support in the development of tried and tested domestic legal frameworks

to protect creditors' and debtors' rights. Although there are a few noteworthy multinational regulations and treaties that foster international administration of bankruptcy estates and creditors' interests (for example, the European Union Insolvency Regulation, UNCITRAL Model Law on Cross-Border Insolvency, and the Cape Town Convention), a wide variance of rights of creditors across jurisdictions, and in developing nations in particular, continues to give rise to unpredictability and impede risk-adverse investors' appetite to invest.

## Political instability

Political instability is another hurdle to overseas investment in developing regions. Here, political risk insurance (PRI) is one legal structure that can help to overcome barriers; compensating investors for losses resulting from unpredictable political events, including regulatory expropriations or breach of contract that might occur during the relationship. By reducing risk, PRI enables companies to benefit from commercially attractive opportunities.

The United Nations Multilateral Investment Guarantee Agency (MIGA), which provides political risk insurance for projects in a broad range of sectors in developing countries, announced in November 2021 that it would be launching the Renewable Energy Catalyst Multi-Donor Trust Fund to support renewable energy projects in developing countries.<sup>84</sup>



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## International investment agreements (IIAs)

The stated purpose of IIAs is to encourage economic development and promote foreign investment by alleviating concerns about normative and political instability, especially in developing countries.

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**“In operation, [regulatory chill] is generally a subtle creature and is difficult to detect. And yet, it has the potential to frustrate initiatives designed to implement national and global environmental objectives.” - Professor Kate Miles, University of Cambridge<sup>85</sup>**

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On the one hand, some have argued that IIAs, by removing disputes from a given country’s judicial system, can reduce scrutiny and remediation of projects that go badly for a host country. On the other hand, many persuasively argue that without the set of protections that IIAs offer against expropriation and damages in jurisdictions where the rule of law is wanting (see SDG 16.3), many important investments, including in basic infrastructure projects, simply would not take place.

One barrier to creating sustainable IIAs however, is the general dependency on arbitral tribunals to resolve disputes where host governments do not adhere to the terms of an underlying IIA. This is because arbitral procedures can be costly for developing nations,<sup>86</sup> and can therefore lead to the regulatory progress being dampened across all areas that impact foreign investors because government officials

are aware of, and seriously concerned about, the risk of an investor-state dispute arising. This has been referred to as a “regulatory chill”, prioritising this risk over the development of efficient regulation in the public interest.<sup>87</sup> In particular, regulatory chill may lead developing countries to lower social and environmental standards or fail to raise them for fear that internationally mobile capital will move to countries with lower standards. The effect of this is that otherwise welfare-enhancing policies are not introduced at all or that there is a need to pay compensation (on the basis of an IIA) for the introduction of regulations in the common interest.<sup>88</sup>





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## c) So, what can lawyers do?

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This section highlights several areas for action, encouraging the profession to use its expertise and influence to contribute

to the objective of building resilient infrastructure, promoting sustainable and inclusive industrialisation and fostering

### Learn and Educate

In order to achieve SDG 9, new policies and regulatory frameworks are needed to incentivise changes in investments towards resilient infrastructures and sustainable and inclusive industries in developing and developed countries. The wide spectrum of lawyers working in-house, in private law firms and in the public sector as regards infrastructure, will be better positioned to advise their companies, firms, employees, clients, and communities in support of these changes where they are familiar with the SDGs and the collective blueprint for a better planet.<sup>89</sup>

Lawyers and law firms can attend and host conferences on related topics and different stakeholder interests, and review and disseminate information related to public hearings on

proposed policies advancing the SDGs. In addition, lawyers can exchange information with peer law firms and colleagues, universities, organisations and others on different strategies being pursued in other jurisdictions, while discussing potential improvements to the current regime with lawmakers.

Lawyers can also learn more about and participate actively in initiatives relating to infrastructure programs. For example, the International Chamber of Commerce (ICC) created the Belt and Road Commission to drive the development of ICC's existing procedures and infrastructure to support Belt and Road disputes. An effective framework for the resolution of infrastructure disputes would promote a conducive environment for infrastructure investment.<sup>90</sup>

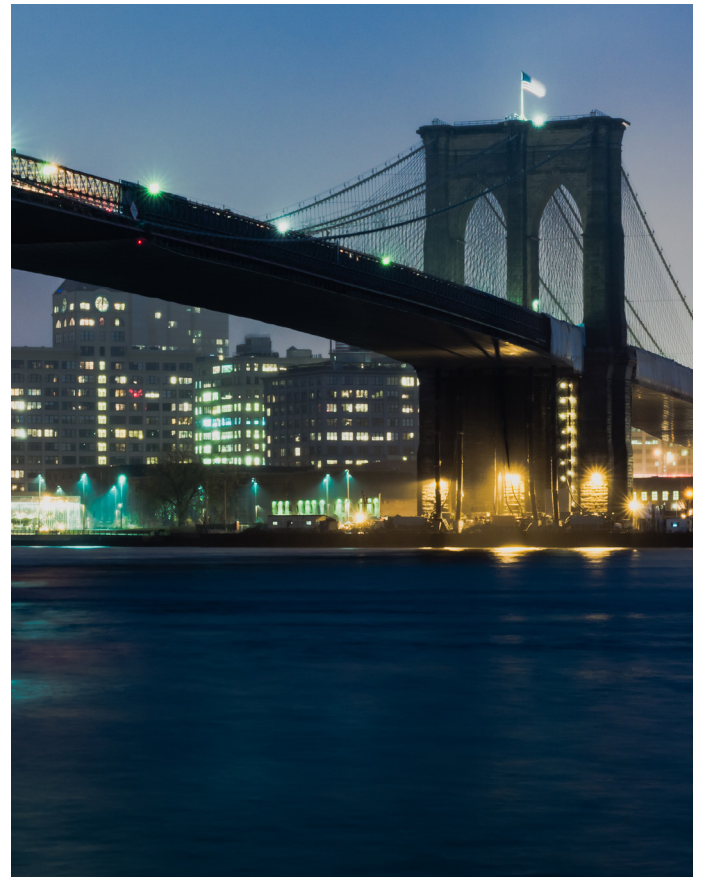
## Inegrate

Law firms can consider becoming a signatory to the United Nations Global Compact, the world's largest corporate sustainability initiative. The mission of the Global Compact is to mobilise a global movement of sustainable companies and stakeholders to create a better world. With more than 12,000 signatory entities in more than 160 countries, the compact calls upon all corporations to align strategies and operations with universal principles on human rights, environment and anti-corruption, and take actions that advance societal goals.

Many of the Ten Principles adopted by the UN Global Compact's members are closely connected to SDG 9, including: Principle 7 – Businesses should support a precautionary approach to environmental challenges; Principle 8 – Businesses should undertake initiatives to promote greater environmental responsibility, and Principle 9 – Businesses should encourage the development and diffusion of environmentally friendly technologies. Guidelines that have been published by UN Global Compact include guidance for companies to define their company vision, policies and strategies to establish sustainable production and consumption programmes. Furthermore, mining, manufacturing and construction industries, which are instrumental to infrastructure and SDG 9, have been highlighted as the most hazardous workplaces. Herein, the UN Global Compact's Guide to Corporate Social Responsibility highlights a need for companies everywhere, and especially in these sectors, to look deeper into their operations and value chain to ensure that labour standards are upheld to improve industrial relations and build more resilient economies and communities.<sup>91</sup>

On the topic of innovation, the UN Global Compact has also produced a 'Tech4Good: Scaling up social transformation in the fourth industrial revolution' report, illustrating how

digital infrastructure and ecosystems can drive social change. The economically marginalised in society may not have the capability to absorb innovations that big businesses create because of constrained infrastructure and purchasing power. The report therefore highlights the role that civil society, especially entrepreneurs, can play in creating markets to increase access to digital infrastructure for the masses; entrepreneurs who will require legal support and frameworks to develop.<sup>92</sup>



## Act

Law firms and lawyers can engage in transactional work relating to sustainable infrastructure development and finance or participate in infrastructure development transactions in developing countries and promote opportunities for such projects with developers and potential financiers. They can also collaborate with MDBs, BDIs and ECAs on promoting infrastructure investment in lesser developed countries, and work with microfinance clients to seek out investment opportunities, assisting with jurisdictional risk analysis and advising on risk mitigation strategies.

When advising financial institutions, who fund infrastructure or industrial projects, lawyers should familiarise themselves with, and raise where relevant, voluntary codes developed to encourage consideration of environmental and social issues in project financing, such as the Equator Principles (EPs). When advising private investors, lawyers should also highlight the risks and opportunities related to social and environmental considerations.

Besides advocating for environmental- and social-governance principles to be considered by their business clients, law firms can also help develop and improve such principles.

Of course, SDG 9 also presents a compelling opportunity for law firms, corporate legal departments and other lawyers to expand their pro bono legal activities domestically and abroad. This has already been noted in pro bono projects where law firms have:

- Supported non-profit and for-profit organisations in promoting microfinance in order to give access to financial services to small-scale industries and entrepreneurs;

- Supported non-governmental organisations in advocating for the attainment of SDG 9 from a legal perspective, such as by looking at legislative formation, mission-related activities, and document review;

- Collaborated with corporate clients on corporate social responsibility activities;

- Participated in legal empowerment programmes for local communities in response to infrastructure projects;

- Supported the drafting of legal frameworks that can help promote innovation, infrastructure and industrial developments; and

- Assisted in the representation of individuals and communities in disputes regarding the provision of inclusive and sustainable infrastructure.



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