

## 2 Towards green growth

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This chapter discusses Egypt's progress in greening its economy on the path to sustainable development. It examines the policy and institutional framework for sustainable growth, then reviews the use of tax policy to pursue environmental objectives and progress in removing subsidies that can encourage environmentally harmful activities. The chapter also analyses investment in environment-related infrastructure, such as that for renewable energy and sustainable transport. The role of international climate and development finance is also discussed.

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## 2.1. Green growth and sustainable development

Advancing towards a green economy has received significant traction in the past couple of years. High-level government officials developed a strong sustainable development policy narrative emphasising the need to seize investment opportunities and innovation. In 2016, Egypt launched a national strategy for a green economy focusing on four areas: agriculture, energy, waste and water. Many other initiatives (e.g. sovereign green bond, Nexus of Water, Food and Energy programme) are implemented to advance Egypt's green transition. Egypt's green growth and sustainable development agendas are advanced in tandem.

### 2.1.1. Progress towards the Sustainable Development Goals

While challenges remain for all Sustainable Development Goals (SDGs), Egypt has made progress in many development areas (Figure 2.1). The country moved up six places in the SDG Index for 2023 and now ranks in the middle field of all assessed countries (position 81 of 166 countries). In the 2022 assessment, the country is moderately improving on Goal 13, "Climate Action". However, further progress will require stronger transformative efforts to place the country on sustainable development pathways. The updated Vision 2030 and associated sectoral policies is a welcome step towards promoting an integrated approach towards sustainable development (Government of Egypt, 2023<sup>[1]</sup>).

Figure 2.1. Egypt made progress towards achieving the SDGs, but challenges remain



Source: Sachs, J.D., Lafortune, G., Fuller, G. (2024). The SDGs and the UN Summit of the Future. Sustainable Development Report 2024. 10.25546/108572; <https://dashboards.sdgindex.org/profiles/egypt-arab-rep>.

Egypt has demonstrated a high political commitment to implement the SDGs of the 2030 Agenda for Sustainable Development and the goals of the African Development Agenda 2063. In 2016, it launched its first national Sustainable Development Strategy: Egypt's Vision 2030, which aligns national priorities with the SDGs and provides a framework for public action. Several ministries have developed their own sectoral strategies to foster sustainable development in specific areas (e.g. agriculture, energy, tourism).

To monitor progress towards implementing the SDGs, the government has already prepared three voluntary national reviews in 2016, 2018 and 2021, as well as a series of localised assessment reports at governorate level. Led by the Sustainable Development Unit of the Ministry of Planning and Economic Development (MPED), Egypt is preparing its fourth review. This will mark an important milestone in reporting progress and plans for scaling action in line with Egypt's updated Vision 2030 (OECD, forthcoming<sup>[2]</sup>).

Egypt has started mainstreaming the SDGs into sectoral action plans. The government has established a dedicated national monitoring and evaluation system and set up a centralised co-ordination body under the auspices of the Prime Minister’s Office. SDG focal points ensure co-ordination at sectoral level and within the 27 governorates. In 2020, the former National Management Institute was reorganised into the National Institute for Governance and Sustainable Development. It aims at fostering human capabilities and SDG knowledge across public and private sectors, civil society and academia through consulting, training and research activities. In addition, about 3 600 young people were trained within the “Be an Ambassador for Sustainable Development” initiative.

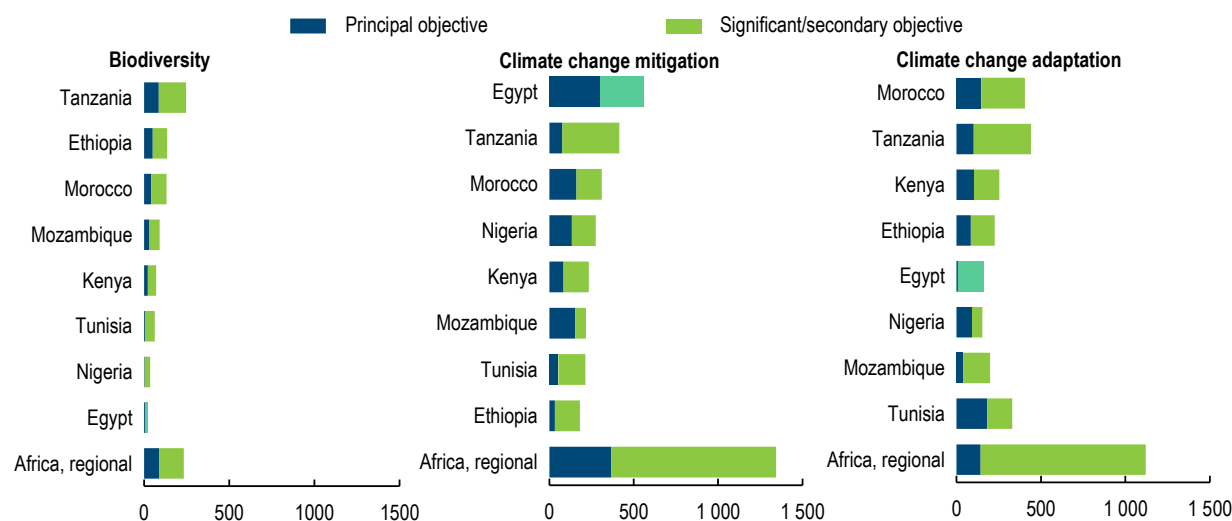
Overall, data availability has greatly improved. Nearly half of all SDG indicators are available, making Egypt one of Africa’s top performers. The Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt’s national statistics institute, has a dedicated Sustainable Development Unit. The government emphasises its commitment to evidence-based policy making (Government of Egypt, 2021<sup>[3]</sup>). As part of the annual planning process led by the Strategic Planning Unit of MPED, Egypt has started using budgetary monitoring to link the SDGs to its budget cycle and track expenditures in support of sustainable development. These efforts need to be further consolidated and scaled up.

### 2.1.2. International climate and development finance

Egypt remains a major recipient country of official development assistance (ODA). Between 2020 and 2023, it received on average USD 7.1 billion in ODA for public sector development. However, only USD 110 million per year was exclusively dedicated to the protection of the environment (Government of Egypt, 2023<sup>[4]</sup>). Other sectors, such as investment in renewables or public transport, contributed to promoting the green transition with environmental co-benefits.

Figure 2.2. Egypt is among the top ten recipient countries of environment-focused ODA in Africa

Riomarkers for biodiversity, climate change mitigation and adaptation, 2020-22 average

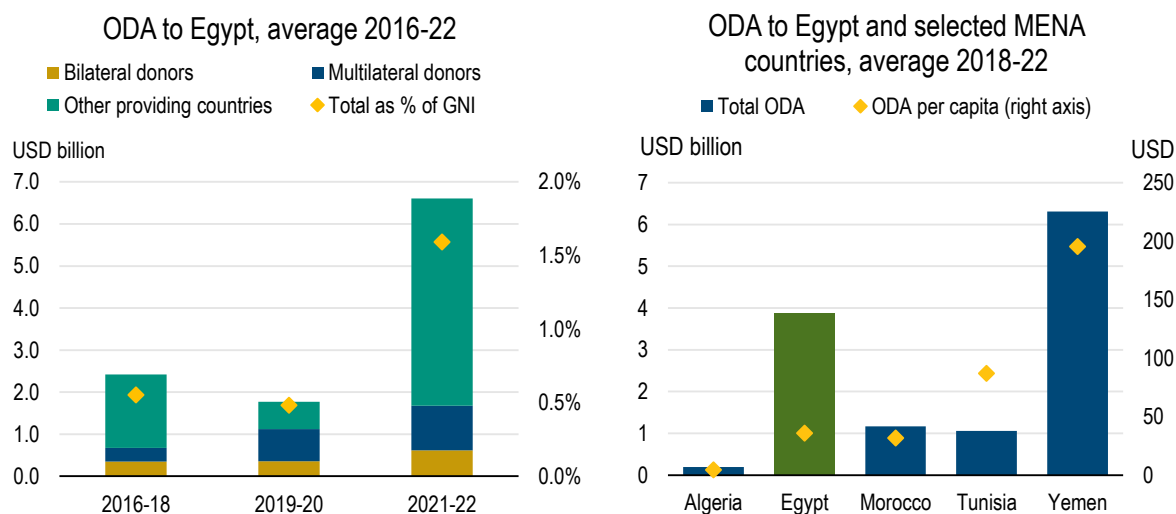


Note: ODA: official development assistance; commitments of bilateral ODA targeting the objectives of the Rio conventions. The same activity can support multiple objectives. Therefore, amounts should not be added as their sum will result in double counting.  
Sources: OECD (2024), "Creditor Reporting System: Aid activities targeting Global Environmental Objectives", OECD International Development Statistics (database), <https://doi.org/10.1787/9c778247-en>.

The share of development finance directed towards private sector development is growing. It represented USD 10.3 billion for 2020-23 compared to USD 28.5 billion in public sector support (Government of Egypt, 2023<sup>[41]</sup>). According to OECD statistics, Egypt is among the top ten recipient countries of environment-focused ODA in Africa (Figure 2.2); France, EU institutions and Germany are top providers. Egypt received a high share of ODA compared to other countries in the Middle East and North Africa (MENA), representing on average USD 36 per capita per year (2018-22 average) (Figure 2.3). Climate mitigation activities mobilise more funding than adaptation.

Egypt's Ministry of International Co-operation produces annual reports on international partnerships for sustainable development and offers access to geolocalise information of projects by development partners active in Egypt. This information portal should be used to further mainstream development co-operation and avoid duplication. On the sidelines of COP27, Egypt signed over 30 partnership and financial agreements worth close to USD 13.5 billion to support the country's climate action in the coming years (e.g. Nexus of Water, Food and Energy Platform and the Egypt Partnerships Agreements for the Climate Transition).

**Figure 2.3. International development finance to Egypt has increased but is volatile**



Note: GNI: gross national income; ODA: official development assistance; net ODA disbursements from bilateral and multilateral donors. Values are expressed at 2021 constant prices. MENA: Middle East and North Africa; countries include Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, United Arab Emirates and Yemen.

Sources: OECD (2024), Geographical Distribution of Financial Flows to Developing Countries 2024, <https://doi.org/10.1787/fbd9569c-en-fr>.

StatLink  <https://stat.link/gxm8tu>

The level of additional international climate finance remains below the estimated financing requirements in Egypt's updated Nationally Determined Contributions (NDCs). This leaves the country with substantial funding gaps, especially for adaptation measures (Chapter 1). While international climate and development finance is an important public finance source, it remains highly volatile, making coherent foresight planning more difficult. For instance, multilateral and bilateral ODA dropped substantially in 2023 (Government of Egypt, 2023<sup>[41]</sup>), representing only nearly half of available resources in 2022. The government has called upon international partners to revisit the global financial system to prevent a debt crisis in developing countries and emerging economies (Government of Egypt, 2023<sup>[41]</sup>). It seeks a multilateral fund to provide adequate, predictable and sustainable financial resources to help Egypt meet its climate and development commitments.

## 2.2. Institutions, regulations and compliance

### 2.2.1. Legislative and institutional framework

Egypt has a longstanding environmental policy and comprehensive legal framework addressing various aspects of environmental protection and natural resource management. The environmental legislative framework comprises the Environmental Law no. 4 of 1994, amended in 2009 and 2015, and Law no. 102 of 1983 on Natural Protected Areas, as well as many executive regulations. The Environmental Law mainly focuses on coastal and marine pollution, air pollution and environmental disaster issues. It also re-defines and strengthens the roles and responsibilities of Egypt's Environmental Affairs Agency (EEAA), initially launched in 1982, prior to the creation of the Ministry of Environment (MoE) in 1997 (Box 2.1).

The right to a “sound healthy environment” is enshrined in Egypt's Constitution of 2014, which recognises environmental protection as a “national duty”. The Constitution also sets for each citizen the “right to healthy and sufficient food and clean water” (Article 45). Article 46 stipulates that “the State shall take necessary measures to protect and ensure not to harm the environment, ensure a rational use of natural resources so as to achieve sustainable development; and guarantee the right of future generations thereto”. Specific provisions are set for the Suez Canal and the River Nile that guarantee every citizen “The right to enjoy the River Nile” (Article 44). In addition, many sector-specific laws, regulatory tools and strategies consider reduction of negative environmental impacts across sectors.

Ongoing work on a new Environment Law provides an excellent opportunity to set a unifying legal framework for environmental protection and climate action to support achievement of Egypt's national and international commitments, alongside private sector investment. The new law will cover climate action, biodiversity and pollution management. The process, to take place within the next three years, will gain from involving relevant sectoral ministries at an early stage to build consensus and foster a whole-of-government approach to environmental issues. This could also further enhance capacity to enforce provisions of the environmental law and its executive regulations.

#### *National government and horizontal co-ordination*

MoE, together with EEAA, its executive arm, promotes and protects the environment through a whole-of-government approach. It formulates environmental policies; prepares environmental protection plans, including pilot projects; and promotes environmental relations between Egypt and other states, as well as with regional and international organisations (Ministry of Environment, 2023<sup>[5]</sup>). The ministry's policy statement comprises key directives, including national and international partnerships, enforcement of environmental legislation, use of market-based instruments in the field of environmental protection, and support for integrated environmental management systems, capacity building and transfer of environmentally friendly technologies. Thematic priorities include recycling waste, air pollution, water pollution, energy savings, protected areas, e-government, climate change and adaptation challenges.

Egypt made progress in adapting a whole-of-government approach to environmental management and sustainable development. To date, environmental considerations are increasingly integrated into many sectoral policies and implemented by different government bodies (e.g. Ministry of International Co-operation, Ministry of Local Development, Ministry of Trade and Industry, Ministry of Tourism, Ministry of Agriculture and Land Reclamation, Ministry of Water Resources and Irrigation, Ministry of Health and Population). MoE has played a pivotal role in supporting co-ordination and mainstreaming environmental considerations at local level, thanks to increased co-operation with the Ministry of Local Development. Policy coherence needs to be further improved by better aligning environmental and sectoral policies.

### Box 2.1. Egypt's Ministry of Environment: "Turning environmental problems into opportunities"

#### A changing narrative for a complex sector

Preserving natural resources and biodiversity was the starting point of Egypt's efforts to protect the environment in the early 1980s. The government approved its first law on natural protected areas in 1983. It created a small technical office to monitor implementation of environmental protection programmes. Egypt's Environmental Law no. 4 of 1994 outlines regulations pertaining to land, air and water pollution and endows Egypt's Environmental Affairs Agency (EEAA) with the powers to enforce these requirements.

In 1997, Egypt created the Ministry of State for Environmental Affairs to cover waste management alongside sustainable management of natural resources. Climate issues were not yet addressed. Moreover, the ministry continued to rely heavily on EEAA for implementation and monitoring of environmental activities. The genesis of different environmental institutions explains why, to date, EEAA still plays a key role in the approval of many environmental decisions. In the early years of the ministry, many development partners provided capacity-building support.

In the early 2000s, many civil servants left the EEAA. This contributed to spreading environmental knowledge across other institutions but also increased the need for renewal of expertise within the ministry. Overall, environmental issues were still considered as a burden for investment. In 2014, Egypt started turning more strongly to solutions within the African continent. It notably hosted the African Ministerial Conference on the Environment.

The year 2015 marked a milestone for environmental affairs at the global level, with the adoption of the Paris Agreement and the entry into force of Agenda 2030 for Sustainable Development. Egypt's environmental narrative evolved progressively and broadened its focus. The ministry began promoting the environment as a tool for development rather than a barrier. Line ministries started becoming more aware about climate and environmental issues.

In 2018, the government decided to change the narrative around the environment sector to link it explicitly to economic growth. The MoE wanted to promote economic opportunities related to addressing environmental challenges. The government introduced incentives to encourage less polluting behaviour rather than focusing on fines only. For instance, instead of burning rice straws on the fields (leading to the seasonal black cloud phenomenon), farmers now have additional opportunities to sell them. These activities contributed to creating a more positive image of the environment sector and reconciling economic development with environmental protection.

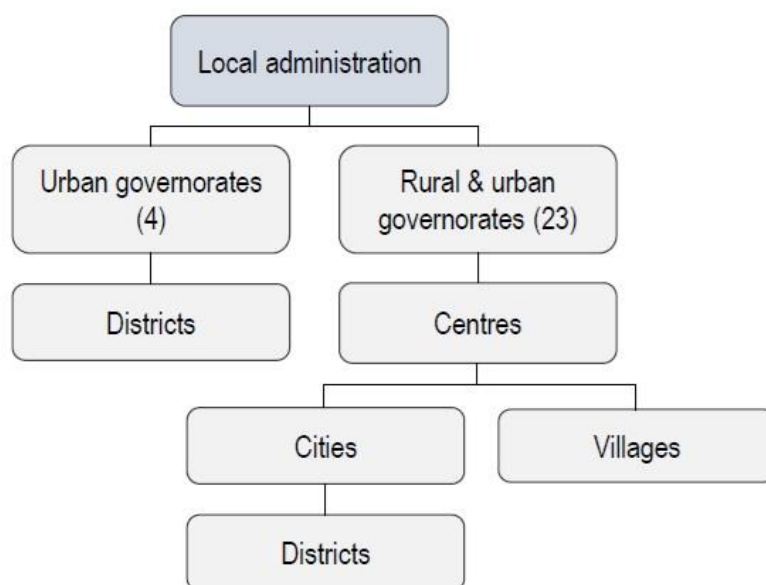
In 2019, work on climate was leveraged at the level of the Prime Minister within the National Council for Climate Change. This provided an opportunity to further develop environmental awareness across sectors during the lead-up to COP27. The government developed its first National Climate Change Strategy, two updated NDCs and is working on a National Adaptation Plan and a new Environmental Law. The MoE has come a long way and its capacity has been strengthened significantly over the past decades.

Source: Policy Mission, Government of Egypt (2024).

### Local government and vertical co-ordination

Egypt's highly centralised governance system extends to environmental policy. A hierarchical, pyramidal structure dominates the local administration system, which is composed of three levels of subnational governments: i) governorates (al-Muhafaza), including urban and urban/rural governorates; ii) centres (Markaz) and districts (Hayy); iii) cities (Madina) and villages (Qariya) (Figure 2.4). In total, the country counts 27 governorates, including four urban governorates (Cairo, Alexandria, Suez and Port Said). Egypt is divided into economic regions, which do not have any administrative or political function.

**Figure 2.4. Egypt's local administration system**



Source: Hemaily et al. (2022), Local Revenue Development in Egypt. The Public Policy Hub, The American University in Cairo, <https://fount.aucegypt.edu/cgi/viewcontent.cgi?article=1102&context=studentxt>.

The governorate is legally represented by a governor, who is appointed by the President of the Republic and takes part in the Council of Governors, headed by the Prime Minister. The governor has the highest executive authority in the governorate and is responsible for implementing policies. Each line ministry also has a representative at governorate level who acts as focal point for the central government. They are responsible to the minister for the execution of sectoral policy.

Each local unit operates with two councils, namely the Elected People's Council and the appointed Local Executive Council. However, municipal elections have been repeatedly postponed for the past decade. Nearly all taxes and fees are collected at national level, leaving local authorities with close to no financial autonomy. One of the MoE's objectives is to develop the capacity of Environmental Management Units at governorate level. However, they are usually not involved in strategic planning and mainly participate in implementation processes.

Heavy reliance on centralised decision making increases the risk of disconnect between policies and actual responsiveness to local needs (Tobbala, 2019<sup>[6]</sup>). In a more decentralised system, citizens can more easily hold local government officials accountable for decisions that affect their daily lives. In many OECD countries, they participate in finding solutions to local problems and contribute to accelerating the green transition.

## 2.2.2. Setting of regulatory requirements

### *Environmental impact assessment*

Environmental impact assessment (EIA) was introduced 30 years ago, but its effectiveness is still constrained by weak technical and financial capacity; limited consideration of cumulative effects or alternatives; and insufficient enforcement. Public participation also needs to be enhanced. The Environmental Law no. 4 of 1994 makes a full EIA mandatory for high-risk projects. Drawing on sector-specific EIA guidelines, the Central Environmental Impact Assessment Department within EEAA supervises the screening process, reviews and validates EIA reports, and issues an opinion on proposals for mitigation measures. Relevant sectoral ministries act as competent administrative authorities and have executive powers in the EIA process.

The screening allows classifying projects in three categories according to severity of environmental impacts: Category A: projects with minor environmental impacts; Category B: projects that may result in substantial environmental impacts; and Category C: projects with highly adverse impacts and for which a complete EIA is mandatory. A new category, “B-scoped class”, has been introduced to cover a growing gap between projects that fall between B and C categories. Oil and gas exploration projects are mostly classified in the B or C categories (Government of Egypt, 2023<sup>[7]</sup>). Category A projects must provide information on environmental effects and mitigation measures. However, the information provided is rather basic (MER, 2019<sup>[8]</sup>). Category B and C projects require an EIA report, which is far more detailed for Category C projects.

The administrative process for EIA approval has been improved. More streamlined procedures considerably shorten review periods. A committee facilitates collection of missing data for EIAs and meets weekly to review EIA reports to quickly express an opinion (Government of Egypt, 2023<sup>[9]</sup>). In addition, EEAA co-ordinates with the Ministry of Tourism to approve requirements of environmental standards for resorts. However, EIAs do not yet sufficiently consider cumulative impacts of tourism on biodiversity and natural resources. This requires strategic environmental assessment (SEA) to better address and connect them to high-level decision making (Ibrahim and Hegazy, 2015<sup>[10]</sup>).

Egypt does not have any legal provisions for SEA and has rather limited experience in this area (MER, 2019<sup>[8]</sup>). In 2019, the government used SEA as a tool to improve tourism planning and development in relation to biodiversity conservation in the Red Sea area. For example, in 2021, the “Mainstreaming Biodiversity into Tourism Development” project, supported by the Ministry of Housing, Utilities and Urban Communities (MHUUC), led to the development of a sustainable and environmentally friendly master plan for the expansion of the city of Saint Katherine, in the South Sinai Governorate (Enviroics, 2021<sup>[11]</sup>). However, EIAs of Category A and Category B projects are often undertaken at a late stage of the planning process, which makes it difficult to consider alternative options. It is equally important to monitor estimated environmental impacts and compare them with real-world outcomes over time.

Public participation in the EIA review process needs to be further enhanced. Public hearing is only mandatory for Category C projects (MER, 2019<sup>[8]</sup>), and should be expanded to other categories. In 2024, EEAA started publishing online executive summaries of EIA reports for highly polluting projects, offering opportunities for citizens to provide comments (EEAA, 2024<sup>[12]</sup>). These efforts to increase transparency go in the right direction and should be pursued.

Egypt continues to suffer from a lack of human, financial and technical resources to produce solid, evidence-based EIA reports. Environmental expertise needs to be further built through training and capacity building at all levels (e.g. structures and roles, research, staff and facilities, skills, tools). Many development partners also conduct their own social and environmental impact assessments for major development projects, typically using participatory approaches to foster stakeholder engagement at an early stage. Early involvement is crucial and increased local capacity could also help better inform EIAs.



## Permitting

In a bid to support development of local industries, the Investment Law no. 15 of 2017 introduced a Golden Licence to all projects aiming at promoting local manufacturing. The Golden Licence was initially limited to companies that worked on strategic or national projects. It was then expanded to other companies, including those established prior to the entry into force of the Investment Law (Decree No. 2300 of 2022).

In 2022, the government added new measures to accelerate issuance of licences for industrial facilities. It transferred the responsibility for issuing new licences from relevant administrative units at governorate level to the Industrial Development Authority (IDA). EEAA remains responsible for issuing an environmental opinion and related environmental permits, which are mandatory within the licensing procedure. The review process was shortened to 20 business days for licences that require prior approvals (15% of the total industrial activities). It dropped to seven business days for licences obtained through the notification system (85%), which applies to industries with limited hazards to the environment. In addition, a dedicated unit within the Cabinet follows up on licences of investors listed in the Ministry of Trade and Industry's database. The Cabinet was also mandated to explore opportunities to transfer the affiliation of regulating entities operating in the utility sectors to guarantee independence. The new measures contributed greatly to accelerating the start-up phase of new businesses. Between October 2022 and February 2023, IDA issued 126 licences for high-risk industrial facilities (Government of Egypt, 2023<sup>[13]</sup>).

As elsewhere, shorter timeframes risk undermining the quality of the environmental permitting process, especially for high-risk industrial facilities. Administrative capacity and technical expertise of the permitting authorities need to be enhanced. This requires, among others, training and upskilling of staff to improve understanding of environmental and sustainability issues (e.g. best available techniques guidance). The government intends to better integrate digital information-sharing between the two government entities. It will be paramount to enhance linkages with environmental enforcement agencies.

The government also introduced measures to legalise unlicensed factories and facilities, also called informal economic projects (IEPs). Law no. 19 of 2023 mandates IDA to grant one-year provisional operation permits to unlicensed factories. The Trade and Industry Minister can renew permits for two additional periods based on a proposal by IDA. In turn, industrial facilities are required to submit relevant documentation and commit to environmental requirements and protection measures. The move intends to legalise unlicensed factories while controlling their environmental impacts.

The example of IEPs shows the need to enhance regulatory enforcement through regular inspections before infringements occur. On the one hand, the regulatory framework must apply to all industrial facilities. Therefore, the legalisation process makes sense and contributes to formalising IEPs. On the other, if illegal industrial activities are possible without sanctions, it may encourage others to start businesses without permits while waiting for the next regularisation round (like the recurrent problem of encroachment on agriculture). Therefore, these regularisation measures need to remain exceptional and combined with tighter controls to enforce accountability. The Environmental Law no. 4 of 1994 foresees punishments of up to EGY 1 million on businesses that do not follow the rule of submitting the EIA report before starting a project. In practice, they were, however, not enforced.<sup>1</sup>

Reducing obstacles for startups and simplifying permitting and licensing rules for new businesses with minor environmental risks is key to reducing the root causes of unlicensed companies. In this regard, the 2020 Law on Micro, Small and Medium-sized Enterprises (MSME) represents a major step towards a more business-friendly environment for small economic players. The law clearly defines MSME enterprises and the informal sector of economy,<sup>2</sup> while offering tax incentives and other benefits. It establishes a MSME Authority, a one-stop shop that oversees all procedures for MSME, entrepreneurships and IEPs, including the licensing process and the facilities for securing land and operations.<sup>3</sup> The law also includes provisions to reduce bureaucracy.<sup>3</sup>

### 2.2.3. Compliance assurance

#### *Compliance promotion*

While Egypt does not have a dedicated compliance assistance and promotion programme, the government implemented several workshops and campaigns to promote compliance. However, the budget for such activities is limited. A stronger focus on compliance promotion, particularly for MSMEs, could help businesses achieve compliance more efficiently while saving compliance assurance costs for regulating authorities. Given the large number of small economic players, it makes sense to improve understanding of the regulatory framework and facilitate compliance through dedicated compliance assistance units. This approach has proven to be useful in several OECD countries.

Over several decades, the Environmental Pollution Abatement Programme, supported by multiple development partners and banks, aimed to help Egyptian industry comply with environmental regulations. Among other services, the programme provided economic incentives to encourage industrial establishments to improve their respective environmental performance. It offered companies an attractive financing package on concessional terms (80% as a commercial loan and 20% as a grant). Companies could gain the 20% grant for good environmental performance following an EEAA assessment. These benefits have contributed to reducing pollution levels of participating companies while enhancing EEAA's enforcement capacity (UNDP, 2021<sup>[14]</sup>). As these activities are donor-driven, the government should consider increasing the public budget to maintain such programmes.

#### *Compliance monitoring and enforcement*

The EEAA plays a key role in environmental monitoring and enforcement using a combination of “carrot-and-stick” approaches. The agency has a central department for environmental inspections and compliance and 17 regional branches for inspections across the territory. Environmental audits can be voluntary or mandatory to follow up on violations. Category B and C projects usually have environmental management plans that require self-monitoring. Detailed guidelines for inspections were prepared in the early 2000s. The inspection procedures are also clearly outlined on the EEAA website, explaining the rights and obligations of investors/companies. However, inspection results are not disclosed. Regular performance assessment (e.g. annual report of inspection outcomes, including the number of inspections; compliance rates; pollution incidents; measures of recidivism and duration) could help assess the effectiveness of compliance assurance activities and thereby ultimately improve environmental outcomes.

In line with general trends in OECD countries, Egypt privileges risk-based targeting to identify high-risk industrial installations for in-depth compliance audits depending on size, location and environmental risks. It also conducts complaint-based inspections. If infractions are detected, the company has up to 60 days to take corrective actions. In case of violations, the environmental law forces the polluters to remedy violations and submit a time-bound environmental compliance action plan. In addition, the polluter remains legally liable for its action.

Non-compliance (e.g. open burning of waste, illegal wastewater discharges in the Delta) calls for proactive inspections and stronger enforcement mechanisms. Following a decision of the President (No. 314 of 2017), the government set up an integrated digital platform that allows citizens to submit complaints electronically. More than 2 700 complaints had been submitted by the end of 2023, including close to 800 environmental complaints (Government of Egypt, 2023<sup>[15]</sup>). The large majority of cases have been solved. Further digitalisation will play a key role in enhancing the current compliance monitoring and enforcement system and could also contribute to improving transparency.

### *Green public procurement*

The government has implemented several pilot projects to advance the integration of environmental aspects into its public procurement policies. It developed a series of new tools and methodologies, including sustainable public procurement guidelines for practitioners, with the support of the EU-funded SwitchMed Programme. It also trained more than 100 government officials and practitioners. A public procurement law, approved in 2018, represents a major step towards international best practice (AfDB, 2022<sup>[16]</sup>). However, green public procurement is not yet mandatory. According to survey results on existing legislation, the MoE can implement a preference for green products by decree (UNEP, 2023<sup>[17]</sup>). In this regard, the introduction of LED lamps in public buildings is one of Egypt's success stories. Some 9.5 million LED lamps were distributed for household lighting (UNEP, 2020<sup>[18]</sup>).

#### **Box 2.2. Policies in practice: The Netherlands' CO<sub>2</sub> Performance Ladder**

Since 2015, green public procurement has been mandatory for Dutch public authorities. However, contracting authorities need to be able to easily identify and procure greener works, products and services that meet key environmental and climate-friendly procurement criteria. Therefore, the Netherlands developed a set of practical instruments, including a certification system that lightens the burden on procurement authorities to verify the companies' commitments.

Initiated in 2009, the CO<sub>2</sub> Performance Ladder is a green public procurement instrument that certifies companies' climate action. Bidding companies commit to reducing emissions and receive in turn an award advantage. As it increases its commitments to reducing CO<sub>2</sub>, the company moves up the Ladder and receives more rewards. The Ladder serves as both a CO<sub>2</sub> management system by guiding a company's climate action, and a public policy instrument through which the government can incentivise climate mitigation.

The Ladder's certification system comprises five CO<sub>2</sub> ambition levels (or steps on the Ladder). The first three levels focus on CO<sub>2</sub> management and emissions reductions within the company's business operations. Most organisations start at level 3. As of step 4 and 5, contractors begin exerting influence beyond their own business sphere. They commit to reducing the carbon footprint of the supply chain, participate in investments for innovation and share their knowledge with other business partners. Essentially, as a company increasingly commits to reducing CO<sub>2</sub>, it moves higher up the Ladder.

Each CO<sub>2</sub> ambition level is linked to a percentage reduction of the submission price. Bidding companies can thus reduce their price by up to 10% (2% per step). In the contract, the ambition level is included as a performance requirement and must be implemented as part of project execution. Therefore, the Ladder helps companies reduce their carbon footprints and costs.

Source: OECD (2022), IPAC Policies in Practice: The Netherlands' CO<sub>2</sub> Performance Ladder, [www.oecd.org/climate-action/ipac/practices/the-netherlands-co2-performance-ladder-890de76d](http://www.oecd.org/climate-action/ipac/practices/the-netherlands-co2-performance-ladder-890de76d).

Experiences in OECD countries have shown that green public procurement can be a major driver for innovation, providing industry with incentives to develop environmentally friendly works, products and services. For example, the Netherlands introduced a CO<sub>2</sub> Performance Ladder for companies, which has become the Netherlands' most important green public procurement instrument (Box 2.2). Egypt has a strong, untapped potential to enhance green practices in its building sector (Chapter 3).

## 2.2.4. Environmental democracy

### *Public participation in environmental decision making*

Civil society played a key advocacy role in the foundation of Egyptian environmental policy and legal framework in the early 1980s – a time when environmental concepts were largely unknown by most people in Egypt. Each year, Egypt celebrates National Environment Day on 27 January to commemorate the anniversary of Egypt’s Environmental Law no. 4 of 1994. The commemoration highlights the importance of partnerships with private and public sectors and non-governmental organisations (NGOs). Civil society organisations (CSOs) play an active role in the implementation of many local projects. The Small Grants Programme of the Global Environment Facility provides financial and technical support to local civil society and community-based organisations. The MoE played a role in defending the level of this contribution to support local action.

Public participation in environmental decision making needs to be enhanced. Although Egypt’s Constitution guarantees civic associations the “right to practise their activities freely” (Article 75), CSOs face many obstacles, notably a chronic lack of funding and administrative hurdles. Any activity, including selecting their Board of Directors or receiving funds, requires prior approval of the Ministry of Social Solidarity (Law no. 84 of 2002).<sup>4</sup>

Some progress has been achieved in this area. The NGO Law of 2019 governs the registration of domestic and foreign NGOs. It shortened the review period for external funding to 60 days and abolished sanctions of incarceration. Furthermore, a central unit was established within the Ministry of Solidarity to monitor NGO matters. However, NGO capacity needs to be further strengthened so they can play their role as watchdogs to alert the public about environmental threats (Human Rights Watch, 2022<sub>[19]</sub>).

### *Environmental awareness and education*

Some progress has been made in increasing environmental awareness of citizens. The government launched the “Live Green” campaign, targeting young people, to encourage environmentally friendly behaviour. The campaign covered a wide range of environmental issues, including food waste, deforestation, recycling, energy consumption and air pollution (UNEP, 2023<sub>[17]</sub>). Other campaigns include ECO Egypt to promote sustainable tourism, e-Tadweer to encourage the recycling of electronic waste or the “Return Nature to its Natural State” initiative to raise public awareness of climate change and its consequences ahead of COP27. On World Environment Day (5 June), all lights are symbolically switched off during an “Earth Hour” in school to raise children’s awareness about climate change.

Drawing on a partnership between the MoE and the Ministry of Education and Technical Education, the government has also updated its school curriculum to integrate environmental issues across all educational levels. This includes comprehensive educational packages for teachers (e.g. climate change, biodiversity, sustainable development). As a next step, it will be key to roll out these programmes across Egypt’s educational institutions and monitor impacts over time.

Furthermore, the government has plans to create a Master’s programme in the field of environmental compliance and natural resource management at Cairo University. This will be linked to scientific, economic and social specialisations to help open up new areas for business and investment in various environmental fields (Government of Egypt, 2023<sub>[15]</sub>). Training for government officials to help them use geographic information systems is also under preparation. These efforts will help fill the gap of environmental expertise and create a new generation of Egyptian environmental and climate experts.

### *Access to environmental information*

Access to environmental information and data has improved overall. Monitoring capacity for air, water and soil has expanded but still requires efforts to align with international standards. About half of all SDG indicators are now available, making Egypt one of Africa's top performers. The MoE has published annual reviews of the state of the environment since 2004.

The Annual Bulletin on Environmental Statistics, produced by Egypt's CAPMAS, includes useful environmental data and information. However, more work is needed to expand the scope of data and indicators to better support policy analysis and evaluation. More specifically, it could provide more information on trends over time. Beyond non-editable reports, data should be made available on line to enable users to customise and download them in different formats. In addition, the CAPMAS bulletin could analyse the evolution of the information base, recent developments and remaining gaps.

Environmental data and information remain scattered across various ministries. Key documents such as sectoral strategies, action plans and policies should be systematically published on line. Improving access to information would also require improving ministries' abilities to proactively share information with citizens. The capacity of ministries in this area varies greatly across the government. Moreover, it is critical to improve data sharing between national entities, as well as between Egypt and development partners. This will require substantial upscaling of human, financial and technical resources for data management. The OECD Statistics Directorate works in collaboration with CAPMAS to provide advice on Egypt's national statistical system. This could allow reviewing the presentation and accessibility of environmental information and advance work on an integrated data portal.

## **2.3. Environmentally related taxes**

### **2.3.1. Greening the tax system**

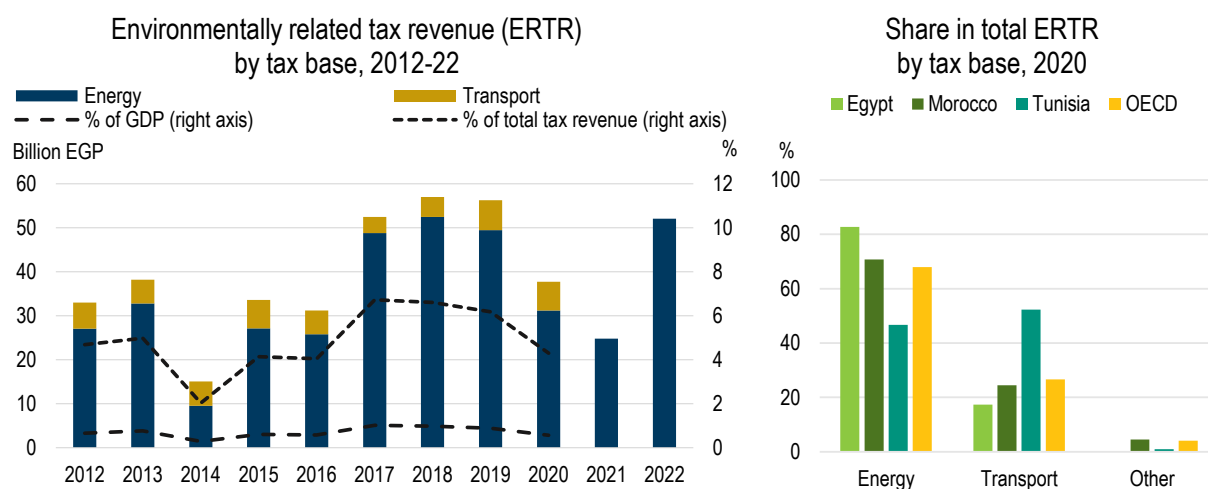
Egypt's tax revenues relative to its gross domestic product (GDP) remain modest in international comparison. Despite an increase in tax revenue in recent years, the tax-to-GDP ratio dropped to 13.3% in 2020 (Figure 2.5).<sup>5</sup> This ratio remains below the African average of 16% assessed in recent OECD analysis.<sup>6</sup> It also falls substantially behind the tax-to-GDP ratio of Tunisia (32.5%) and Morocco (28.3%), which are closer to the OECD average of 32.5% (OECD/AUC/ATAF, 2022<sub>[20]</sub>). The 2021 Medium-Term Revenue Strategy targets a 2% increase in the national tax-to-GDP ratio until 2024 (IMF, 2023<sub>[21]</sub>; World Bank, 2023<sub>[22]</sub>).

The role of environmentally related taxes in public revenues is limited. As a ratio to GDP, revenues from environmentally related taxes account for less than 0.6%, below the OECD average of 1.4% (OECD/AUC/ATAF, 2022<sub>[20]</sub>) (Figure 2.5). This points to further scope for strengthening the role of environmentally related taxes in the economy.

A green fiscal reform can help Egypt better align its tax system with environmental objectives and mobilise domestic revenues. Within the context of several International Monetary Fund agreements, Egypt is undergoing a comprehensive fiscal reform to restore macroeconomic stability and reduce the country's budget deficit. Phasing out untargeted fossil fuel support and enhancing the tax system's role in mobilising domestic public revenues are at the core of this reform. Expansion of environmental taxes could be considered an additional opportunity to broaden the tax base, while strengthening the link with environmental objectives. By pricing environmentally harmful activities, Egypt can advance its green transition while creating additional fiscal space. Additional revenues can, in turn, enable green investment to enhance its provision of basic services and expand its social protection programmes, among other policy priorities. The trade-off between revenue raising and environmental effectiveness may arise over time and should be considered to ensure that both objectives are pursued.

As in many OECD countries, the bulk of Egypt's environmentally related tax revenue (ERTR) comes from taxes and charges on energy products (83% in 2020) (Figure 2.5). The introduction of a fuel excise tax on petroleum products in 2016 led to an 80% increase of the ERTR the following year. Revenues from fuel excise taxes more than doubled in 2022 from the previous year due to a rebounding fuel consumption after the COVID-19 pandemic. The remainder of ERTR stems from taxes and charges on transport. Egypt has implemented multiple transport-related taxes and fees, including licence fees, annual ownership fees and road tolls. However, Egypt has significant scope for expanding vehicle-related taxation for environmental purposes. In 2020, revenue generated from vehicle-related taxes and fees, excluding value-added tax (VAT), import tariffs and schedule tax, represented approximately 0.75% of Egypt's total tax revenues, less than levels observed in Morocco or Tunisia (Figure 2.5).

**Figure 2.5. Environmentally related tax revenue has increased, but its share in GDP remains low**



Note: Billion EGP (2021, real prices). For 2021 and 2022, information on transport-related tax revenue was not yet available as of January 2024; data points for energy-related tax revenue stem from Egypt's Ministry of Finance.

Source: OECD (2022), Environmentally related tax revenue, OECD Environmental Statistics (database), Egyptian Ministry of Finance, <https://doi.org/10.1787/df563d69-en>.

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Egypt does not tax pollution or use of natural resources. Like most countries, Egypt levies drinking water and sewage fees as part of the bill for water consumption. The level of fees per cubic litre of water increases progressively with consumption (Chapter 1). However, there are no taxes that could incentivise firms or households to adopt a more efficient use of water resources and to prevent polluting activities. Such instruments exist in several countries, including a surcharge on industrial wastewater in Canada and a tax on pesticide use in Mexico, Sweden and Norway. Furthermore, Egypt also has an opportunity to levy taxes or charges on resource use such as harvesting of biological resources (e.g. fish), landscape changes, freshwater abstraction or extraction of raw materials. The introduction of taxes on pollution and resources could broaden Egypt's tax base and generate additional revenue streams. At the same time, such taxes set incentives to use resources more efficiently and avoid wasteful consumption, strengthening the application of the polluter pays principle.

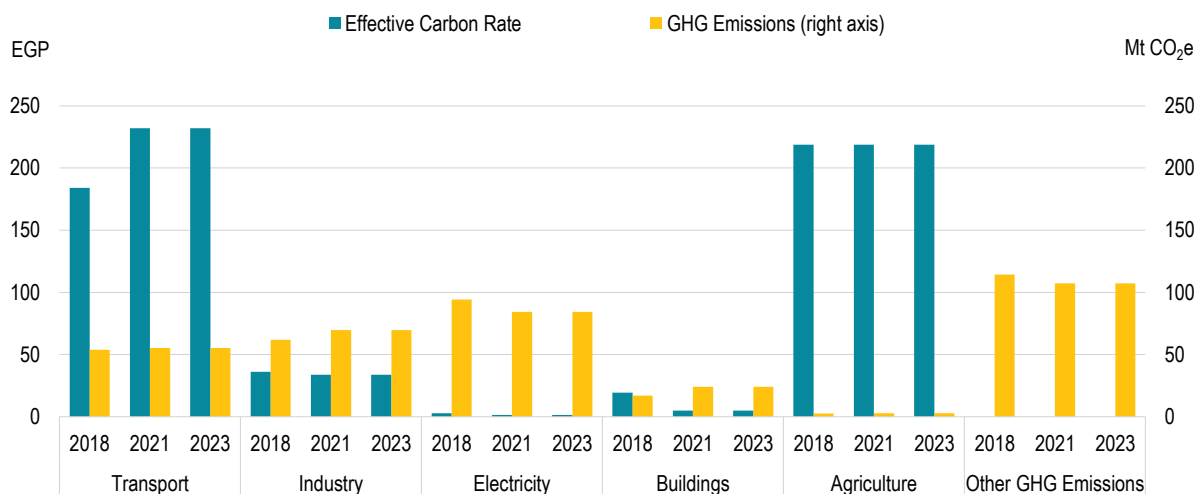
### 2.3.2. Energy taxes and carbon pricing

#### Energy use taxation

Fuel excise taxes on petroleum products, mainly used in road transport are Egypt's most relevant taxes on energy use and, indirectly, on CO<sub>2</sub> emissions. Since 2016, Egypt levies fuel excise taxes on petroleum products, while natural gas use remains exempted from these and is only subject to a small stamp duty that can be classified as a specific excise tax. As Egypt neither levies an explicit tax on greenhouse gas (GHG) emissions nor operates an emissions trading system, fuel excise taxes are the only instrument to (implicitly) price CO<sub>2</sub> emissions. Half of combustion-related GHG emissions are covered by a positive Effective Carbon Rate (ECR), which is defined as the sum of a country's explicit carbon prices and fuel excise taxes (Figure 2.6).<sup>7</sup> It amounts on average to 46 EGP/tCO<sub>2</sub>-eq. since 2021, up from EGP 38 /tCO<sub>2</sub>-eq. in 2018. Since 2021, 16% of these emissions faced an ECR of more than EGP 200, while 30% were priced at a positive rate below EGP 25.

ECRs in Egypt differ across sectors, but overall the transport sector represents the largest component. Combustion-related emissions in the transport sector are nearly fully covered by a positive ECR. Since 2021, an ECR of above EGP 200 covers more than 90% of transport-related emissions. Road transport makes up the lion's share as a fuel excise tax covers all emissions from petrol and diesel combustion. The industry sector's emissions are covered to 53% by a positive ECR but only 15% are covered by an ECR above EGP 25. Agriculture and fisheries are fully covered by a positive ECR. However, the sector only accounts for less than 1% of the country's combustion-related CO<sub>2</sub> emissions. Despite making up a quarter of Egypt's combustion-related emissions, electricity generation did not face an ECR above EGP 25 in 2023. Likewise, residential and commercial buildings continue to benefit from energy subsidies (OECD, forthcoming<sup>[23]</sup>).

**Figure 2.6. Most CO<sub>2</sub> emissions from energy use are covered by a positive ECR, but the levels remain low**



Note: Agriculture also includes fisheries; "Buildings" consists of residential and commercial dwellings; the Effective Carbon Rate (ECR) does not include fossil fuel subsidies; "Other" consists of other sectors, including land-use change and forestry.

Source: OECD (forthcoming), Pricing Greenhouse Gas Emissions 2024.

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Fuel excise taxes, as the main instrument for pricing CO<sub>2</sub> emissions from energy use, could be better aligned to reflect external costs. Already progress has been made to strengthen carbon prices on

petroleum products. Amid the VAT reform in 2016, Egypt introduced a new tax, the so-called schedule tax for petroleum products, which can be classified as a fuel excise tax. It applies to petroleum products used in transport, industrial applications and buildings (Riad and Salah, 2016<sup>[24]</sup>; PWC, 2023<sup>[25]</sup>). In 2023, rates stood at EGP 0.36 per litre for automotive diesel and EGP 0.65 litre for domestic Gasoline 92 (RON 92). In contrast to international trends to reduce fuel excise taxes during the energy crisis (OECD, 2023<sup>[26]</sup>), Egypt introduced an additional levy in 2020 on diesel and petrol consumption to increase tax revenue during the COVID-19 pandemic (Reuters, 2020<sup>[27]</sup>). This development fee is set to EGP 0.25 per litre for diesel and to EGP 0.30 per litre for all types of petrol (OECD, 2018<sup>[28]</sup>) (Table 2.1).<sup>8</sup> Consequently, the average, effective tax rate for petrol is higher than for diesel. On environmental grounds, it makes sense to apply a higher tax rate on diesel as it has a higher carbon content per litre and the combustion of diesel tends to produce higher emissions of local pollutants and thus contribute to air pollution. However, diesel-fuelled vehicles represent only 6% of Egypt's vehicle stock (Chapter 1). In contrast to petroleum products, the use of natural gas and electricity is subject to a low specific (excise) tax, levied under the Stamp Duty Law (Table 2.1).

Among other measures, the government could consider introducing a climate component in its current taxes on energy use. To that end, it could link the tax rate directly to the fuel's carbon content to set the highest price on the most emitting petroleum use. Such a reform could serve as the basis for a fuel-based carbon tax, whereby the tax rate would still be expressed as a price per commercial unit of a fuel. This is common practice among OECD countries, as well as for emerging economies. Uruguay introduced a carbon tax on petrol in 2022, for example, while Albania's carbon tax varies by fuel.

**Table 2.1. Level of taxes by energy source**

	Fuel excise tax	Development fee	Specific (excise) tax	Total
Diesel	EGP 0.36 /litre	EGP 0.25 /litre	-/-	EGP 0.61 /litre
Gasoline 92, domestic	EGP 0.65 /litre	EGP 0.30 /litre	-/-	EGP 0.95 /litre
Petrol/gasoline (Other)	EGP 0.18 – 0.48 /litre	EGP 0.30 /litre	-/-	EGP 0.48 – 0.78 /litre
Kerosene	EGP 0.36 / litre	-/-	-/-	EGP 0.36 / litre
Natural gas (Industry)	-/-	-/-	EGP 0.002 /m <sup>3</sup>	EGP 0.002 /m <sup>3</sup>
Natural gas (Other)	-/-	-/-	EGP 0.036 /m <sup>3</sup>	EGP 0.036 /m <sup>3</sup>
Electricity (Lighting, Buildings)	-/-	-/-	EGP 0.03 /kWh	EGP 0.03 /kWh
Electricity (Industry)	-/-	-/-	EGP 0.00006 /kWh	EGP 0.00006 /kWh

Note: Petrol/gasoline (Other) includes domestic and imported Gasoline 80 and Gasoline 95.

Source: Country submission from the Egyptian Ministry of Finance (2024), Stamp Duty Law no. 111 of 1980 and its amendments, including Law no. 104 (2012), Schedule Tax Law no. 67 (2016).

Driven by strong population growth and high energy subsidies, Egypt's electricity consumption has increased by 26% since 2010, while more than 80% of the country's electricity generation continues to rely on natural gas (IEA, 2023<sup>[29]</sup>). Electricity demand spiked in summer 2023 due to high cooling needs. At the same time, outputs from Egypt's major gas fields declined, putting electricity supply under additional strain (Cousin, 2023<sup>[30]</sup>). In addition, Egypt's power grid suffered from high transmission and distribution losses of about 22% in 2022 (Egypt Today, 2023<sup>[31]</sup>). Consequently, Egypt urgently needs to invest in the modernisation of its power grid infrastructure and rationalise the use of electricity and thereby natural gas. Increasing effective energy rates<sup>9</sup> can contribute to the provision of reliable and sustainable electricity. In Egypt, energy use based on fossil fuels is taxed less than other energy sources in large part due to its fossil fuel subsidies, including on fuels used for electricity generation (OECD, 2022<sup>[32]</sup>).

Egypt does not price electricity at a sufficiently high level to allow for full cost recovery of power generation, transmission and distribution costs (EI-Tablawy and Wahba, 2024<sup>[33]</sup>) (Section 2.4.1). The IMF estimates that Egypt spent about EGP 114 billion in explicit consumer subsidies in 2022 (IMF, 2023<sup>[34]</sup>). Electricity



consumption is subject to a low specific (electricity excise) tax, sometimes referred to as a stamp tax. In April 2023, industrial electricity consumption was taxed at a rate of EGP 0.00006 per kWh, while electricity used in residential and commercial spaces or for lighting purposes was subject to a rate of EGP 0.03 per kWh. Egypt needs to further leverage energy taxes and align prices with cost recovery to induce energy savings. This will allow it to reduce wasteful energy consumption, promote the uptake of more energy-efficient electric appliances and spur investments in industrial energy efficiency.

### *Towards a voluntary carbon market*

In December 2022, the government issued a decree to establish a voluntary carbon market platform within the Egyptian Stock Exchange for the trading of carbon emissions reduction certificates. The market aims to become the first of its kind in Africa, enabling companies to trade certified carbon credits and contribute to carbon emission reduction efforts in line with international standards and Egypt's 2030 Vision. The government has established a regulatory committee and approved certification and verification bodies to oversee the market (Business Today, 2022<sup>[35]</sup>; Enterprise, 2023<sup>[36]</sup>; Meshref and Gadelhak, 2023<sup>[37]</sup>).

### **2.3.3. Transport-related taxes and charges**

#### *Vehicle taxes*

Vehicle taxation in Egypt is complex, encompassing various taxes and fees on different types of vehicles throughout their life cycle (from import to annual use) (Table 2.2). Vehicle taxes primarily aim to raise government revenue, but, if well designed, they can also encourage adoption of less polluting vehicles. Beyond high import taxes, vehicles face schedule taxes, which are specific rates based on vehicle type, age and engine capacity. These are all partial proxies for environmental performance of a vehicle (Table 2.2).

**Table 2.2. Taxes and fees levied on vehicles**

Taxes or fees	Frequency	Rates
Private vehicle licence	First year of registration	0.25%-2.5% of vehicle value depending on cm <sup>3</sup>
Private vehicle licence	Each year	EGP 225 – 3 000/2.5% of vehicle value depending on cm <sup>3</sup>
Vehicle type development fee	Year of import or of purchase (if new locally manufactured)	0%-8.5% of vehicle value depending on cm <sup>3</sup>
Tax on rapid transit vehicles	Each year	EGP 15-120 (petrol, petrol and CNG), EGP 60-480 (diesel) depending on cm <sup>3</sup>
Annual fee for the use of license plates	Each year	EGP 400
Fee for the smart transport system developed within the Intelligent Transportation Programme	Each year	EGP 60-350 depending on cm <sup>3</sup> for cars EGP 250-300 depending on tonnes of load for trucks
Table tax (excise tax)	Year of purchase	0%-30% of vehicle value depending on cm <sup>3</sup> , local production and powertrain (EV not covered)
Incoming tax (import duty)	Year of import	0%-135% of vehicle value depending on cm <sup>3</sup> , country of origin and powertrain (exemption for EV, 35% reduction for CNG-fuelled vehicles)

Note: Additionally, a 14% VAT is levied at the time of purchase, as well as a 0.5% industrial and commercial profit tax and a 3% resources development fee at the time of import.

Sources: Law no. 147 of 1984 imposing a fee for the development of the state's financial resources (as last amended on 9 March 2023); Traffic Law n° 66 of 1973; Presidential Decree n° 419/2018; Egyptian customs website.

Vehicle taxes are almost exclusively administered at the national level (Hemaily et al., 2022<sup>[38]</sup>). Reducing the number of taxes and fees would simplify the taxpayer experience. New imported vehicles are taxed at high rates, up to 176% for a petrol- or diesel-powered vehicle of important size, compared to locally produced vehicles<sup>10</sup> (Figure 2.8). Vehicles from European Union and Türkiye, nevertheless, have benefited from full exemption since 2019 as part of the Egyptian-European Partnership Agreement that gives these vehicles a considerable trade advantage.

Moreover, Egypt has restricted the import of used passenger vehicles. Vehicles can only be imported up to one year after their manufacture date. This discourages the import of heavily polluting vehicles, while boosting development of the domestic automotive industry. In contrast, second-hand car sales have been booming in many African countries, with considerable negative environmental impacts. Nevertheless, Egypt's vehicle stock remains old considering the high purchasing costs of new vehicles (Chapter 1).

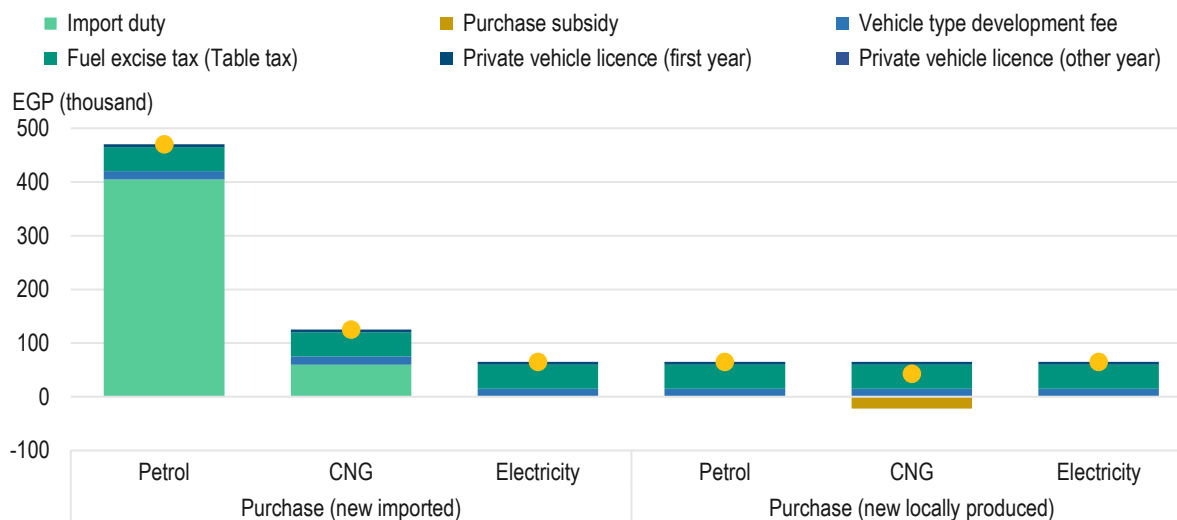
Egypt's transport-related taxes would benefit from a thorough review and adjustment to better consider externalities linked to road use and pollution. Directly setting tax rates on environmental parameters can more effectively address external costs related to the road transport sector. The collected transport-related taxes cover only a small fraction of public investment in road infrastructure and social costs related to environmental damage caused by road usage (e.g. GHG emissions, air pollution, congestion, road damage). Therefore, it would be key to better apply the polluter pays principle in the sector, ensuring that road users pay more for environmental and economic externalities of transport use.

#### *Incentives to encourage the switch to less polluting vehicles*

Egypt promotes the renewal of its vehicle fleet by incentivising the shift to vehicles powered by compressed natural gas (CNG). Since 2021, adoption of dual-powered vehicles (petrol and natural gas) has been promoted through scrappage schemes for old, highly polluting vehicles, as well as purchase incentives to convert the existing vehicle fleet (Figure 2.7). The Green Incentive of the Presidential Aging Vehicle Replacement Initiative, launched in 2021, has already replaced 24 000 cars by the end of 2022 (Government of Egypt, 2023<sup>[13]</sup>). This initiative facilitates the purchase of a new, dual vehicle (petrol and CNG) by extending credit and offering a subsidy equal to 10% of the vehicle price for private cars and 25% for taxis (Government of Egypt, 2023<sup>[13]</sup>). Reduced insurance price is also granted. Natural gas vehicles further benefit from an exemption from import restrictions on used vehicles, as well as reduced import tariffs. Over 900 natural gas refuelling stations are available, but further investment to develop storage and distribution infrastructure will be necessary.


**Figure 2.7. Electric and compressed natural gas vehicles have the lowest vehicle tax burden**

Net taxation for an average vehicle depending on powertrain



Note: Results for a 1 700 cm<sup>3</sup> vehicle, with EGP 300 000 value if new. Imported vehicles from European Union countries and Türkiye have benefited from full exemption of incoming tax since 2019 as part of the Egyptian-European Partnership Agreement. CNG: compressed natural gas.

Source: Law no. 147 of 1984 imposing a fee for the development of the state's financial resources (as last amended on 9 March 2023); Traffic Law n° 66 of 1973; Presidential Decree n° 419/2018; Egyptian customs website.

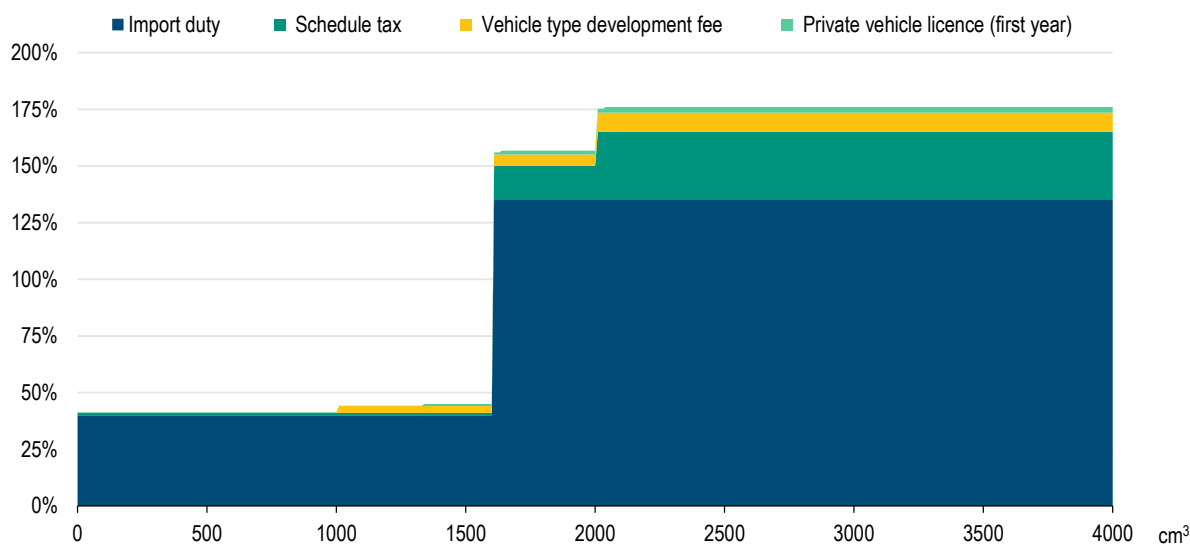
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Vehicles powered by natural gas are not necessarily a more environmentally friendly option due to differences in fuel economy (Transport & Environment, 2018<sup>[39]</sup>) and emissions of other toxic pollutants, in particular by older models (Transport & Environment, 2020<sup>[40]</sup>). Therefore, the government should pursue efforts to discard old, polluting vehicles and promote a shift to more fuel-efficient, low-carbon vehicles. Scrappage schemes could be costly and less effective, particularly if they subsidise the scrappage of old vehicles that would have been discarded regardless (Li, Linn and Spiller, 2013<sup>[41]</sup>; Linn, 2020<sup>[42]</sup>). Better targeting of the scrappage scheme based on a vehicle's future emissions can reduce programme costs substantially (Linn, 2020<sup>[43]</sup>). The emission-based design of the scheme reinforces the need to track vehicles' emission performance. At the same time, there is an opportunity cost to selling untaxed natural gas domestically at prices that do not cover costs, as well as the cost of the incentive schemes for CNG vehicles. While the transition towards low-emission vehicles may warrant a greater role for CNG-powered vehicles, the costs versus benefits of this strategy should be considered to ensure long-run fiscal and environmental sustainability.

Egypt could encourage the renewal and decarbonisation of the fleet by introducing a tax system based on fuel efficiency or CO<sub>2</sub> emissions. Currently, taxation of passenger cars is based mainly on vehicle size and value. The difference in taxation according to vehicle size is especially acute for new cars. Tax rates range from 1% of vehicle value for less than 1 000 cm<sup>3</sup> to 41% and 176% for more than 3 000 cm<sup>3</sup> for locally produced and imported vehicles, respectively (Figure 2.8). To a certain extent, this may incentivise less polluting vehicles as the tax structure provides incentives to buy smaller cars, which tend to emit fewer GHG emissions. To influence the purchase of low-emission vehicles, Egypt should consider adding a climate component in vehicle taxation. Through a feebate (or bonus-malus) system, vehicles with high CO<sub>2</sub> emissions or poor fuel efficiency (low fuel economy) pay a fee. Meanwhile, those with low CO<sub>2</sub> emissions or better fuel efficiency (high fuel economy) receive a rebate.

**Figure 2.8. Vehicle size mainly determines the level of taxes for imported vehicles**

Taxes on new imported internal combustion engine vehicles by percentage of the vehicle's value depending on size



Note: Vehicles imported from the European Union or Türkiye are exempted from incoming tax. A 14% VAT also applies uniformly to all vehicles when purchased.

Source: Law no. 147 of 1984 imposing a fee for the development of the state's financial resources, (as last amended on 9 March 2023); Traffic Law no. 66 of 1973; Egyptian customs website.

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Feebate systems need to be revenue-neutral and avoid adding a burden to public finances. France, Singapore and New Zealand have had feebate programmes of varying designs and adjustments over time (Wappelhorst, 18 June 2022<sup>[44]</sup>). France, for example, has had a longstanding feebate scheme. It has continuously adjusted the design of its bonus-malus programme to increase its effectiveness and stabilise its budget. Mostly recently, in 2023, France further strengthened the malus component (Government of France, 2023<sup>[45]</sup>). Sweden discontinued its bonus part of the scheme in 2022 (TransportSyrelsen, 2023<sup>[46]</sup>).

Introducing a fuel efficiency standard for new vehicles could complement the fiscal incentives for cleaner vehicles and higher fuel taxes. Fuel standards can influence fleet composition by transferring responsibility to carmakers for clean technology in a context of uncertain fuel prices (Anderson et al., 2011<sup>[47]</sup>). Indeed, households usually tend to underestimate the future cost of fuel when buying a vehicle. This is all the more relevant in Egypt, where the low fuel taxation level is less likely to send a price signal that influences a buyer's decision. A simple mechanism, such as setting a fuel efficiency standard per vehicle as in the People's Republic of China (hereafter "China"), could be implemented. However, caution is warranted. Fuel efficiency standards that improve the fuel economy of new vehicles may result in a "rebound effect", increasing the distance driven and thus partly offsetting the gains (Anderson et al., 2011<sup>[47]</sup>; Frondel and Vance, 2017<sup>[48]</sup>; Bjertnæs, 2019<sup>[49]</sup>). Similarly, air emission standards would help reduce air pollution, which would be valuable in cities with high traffic (ACEEE, 2022<sup>[50]</sup>). For example, new vehicles have to comply with Euro 6b standard in China starting from 2023, and in Morocco starting from 2024. In addition, the introduction of an electronic "smart card system" for gasoline could help better understand consumption patterns and rationalise the use of subsidised fuels.

### *Support for low-carbon vehicles*

Electric vehicles (EVs) benefit from some tax exemptions, but their broad uptake will require further measures and substantial support to build a spatially balanced network of charging infrastructure. Egypt

implemented several incentives in favour of EVs. It has exempted import tariffs since 2013 and the need for a permit to import used EVs up to three years old since 2018 (Egypt, 2018<sup>[51]</sup>). However, vehicles imported from the European Union and Türkiye also benefit from exemptions, which do not provide EVs a relative advantage (Table 2.3). Additionally, this exemption benefits only cars and trucks, and could be extended to motorcycles and buses. Motorcycles, buses and, to a lower extent, taxis are indeed the most cost-effective segments to electrify first in developing countries. This is due to the small additional cost for motorcycles and buses, and the high mileage throughout the lifespan of taxis (Briceno-Garmendia, Qiao and Foster, 2023<sup>[52]</sup>). There are no direct subsidies, which should be implemented with caution due to their fiscal cost. Moreover, given that Egypt's electricity mix relies heavily on fossil fuels (Chapter 1), climate mitigation impacts will be limited. However, advancing the electrification of road transport would have major benefits for improving air quality, especially in densely populated urban areas. As Egypt is advancing development of its domestic EV industry, producing more affordable low- or zero-emitting vehicles will enhance their presence on the domestic market. Therefore, the government should maintain incentives granted under the Special Initiative to support investment throughout the entire EV value chain (e.g. battery cell manufacturing and deployment of rechargeable batteries).

### *Road pricing*

Road tolls are relatively well developed and applied on major national routes.<sup>11</sup> They are mostly collected by the National Road Company. Receipts are dedicated to a private fund for maintenance and construction work. In addition, some urban tolls have been introduced, mainly in new urban communities. As part of the Intelligent Transportation Programme, the government is building new roads with toll fees that will be collected electronically, without need to stop. This programme has been financed since 2020 by a dedicated annual fee for all registered vehicles (Table 2.2). Road tolls in place use a fixed price per trip or monthly pass. Tolls vary only according to the type of vehicle (e.g. private car, bus, truck, etc.) and not according to the distance or vehicle characteristics (Morsy, 2020<sup>[53]</sup>). Egypt could further increase the use of road pricing to make drivers pay more directly according to use and environmental damage. For instance, it could put in place distance and emission parameters. Additionally, the introduction of congestion charges would be particularly relevant for Egypt's densely populated mega cities, helping reduce air pollution and other negative environmental impacts. As a start, Egypt could consider modulating road tolls according to time to reduce congestion and encourage road users to avoid peak hours. However, these measures would need to be socially balanced, including through the provision of alternative, less polluting transportation options.

### **2.3.4. Greening corporate income tax incentives**

Corporate income tax (CIT) incentives are often used to reduce investment costs for businesses and influence investment decisions in certain sectors, activities or locations – including green investment. If well designed, CIT incentives can encourage investment to promote climate and environmental objectives. This could include, for example, investment in clean power generation and the take-up of cleaner production technologies. While investment decisions are driven by both tax- and non-tax factors, CIT incentives can act as an additional policy to help mobilise the significant volume of investment needed for the transition to carbon neutrality.

Using CIT incentives comes with a cost. Tax revenues forgone can be significant and they may be difficult to remove support once incentives have been introduced. Tax incentives may also benefit investments that would have taken place in the absence of the support scheme (limited additionality). If the incentives are not properly designed, they could create windfall gains for some investors. In addition, CIT incentives heighten complexity in the tax system, create distortions and increase administrative costs. The trade-offs linked to using CIT incentives are not always well understood and pose a significant challenge for tax and investment policy makers.

Egypt does not offer CIT incentives that exclusively target green investments, but certain green investment projects can benefit from the Special Incentive (Table 2.3).<sup>12</sup> The Special Incentive is available to investment in certain strategic sub-sectors for approved projects by the Supreme Council for Investment. Companies can deduct an additional 30% or 50% of investment costs for tax purposes. This comes in addition to a 100% deduction of capital investment costs for tax purposes. Given other CIT system features, the total deduction for eligible investment can effectively total 150% of investment costs.<sup>13</sup> Investments in regions most in need of development in Egypt (Locations A), receive the more generous 50% tax allowance, while other regions (Locations B) receive a 30% allowance.<sup>14</sup>

Introduced in 2018, the Special Incentive targets expenditures as opposed to income. This is likely to be more effective in promoting additional investment than tax holidays that are widely used in Egypt for other purposes.<sup>15</sup> Empirical evidence on the benefits of tax incentives is limited. However, it generally supports the view that expenditure-based incentives, such as tax allowances, are more efficient in promoting additional investment (Klemm and Van Parys, 2012<sup>[54]</sup>; IMF-OECD-UN-World Bank, 2015<sup>[55]</sup>). Expenditure-based incentives reduce the cost of investing and can make more projects economically viable at the margin, encouraging projects that would not be made in the absence of the incentive. On the other hand, income-based tax incentives, such as tax holidays, provide tax relief based on secured earnings. In so doing, they only benefit projects that are already profitable. This, in turn, risks creating windfall gains for those investors without necessarily making additional projects profitable. Egypt, as other countries in MENA, employs a range of income-based incentives (OECD, 2022<sup>[56]</sup>). The recently agreed Global Minimum Tax for large MNEs may curtail the effect of certain tax incentives by reducing or nullifying the monetary benefit of the incentive (Box 2.3).

### Box 2.3. Tax incentives and the global minimum tax for multinational enterprises

#### A global minimum effective taxation level for large MNEs

Pillar Two of the new international tax agreement establishes a global minimum effective corporate tax rate of 15% for large multinational enterprises (MNEs) with a EUR 750 million revenue threshold. Where an MNE's effective tax rate in a jurisdiction falls below 15%, the MNE would potentially be subject to top-up taxes under the Global Anti-Base Erosion (GloBE) Rules, a core component of Pillar Two. The GloBE Rules establish the minimum corporate tax and are complemented by the subject-to-tax rule. This will allow developing economies to tax certain base-eroding payments (such as interest and royalties) when they are not taxed up to the minimum rate of 9%. The GloBE Rules apply top-up taxes to profits in excess of a substance-based income exclusion (SBIE), which allows some profits based on economic substance (tangible assets and payroll) to be deducted from the GloBE base.

#### Impact on the use of tax incentives

The GloBE Rules will not affect all jurisdictions, MNEs and tax incentives in the same manner. The impact of the GloBE Rules on tax incentives will depend on their design, on the jurisdiction's tax system (its baseline tax system and its use of base narrowing provisions), and on the characteristics of MNEs and their activities in the jurisdiction. For example, MNEs may continue to use tax incentives below the EUR 750 million revenue threshold without them being affected by the GloBE Rules.

The impact of the GloBE Rules will strongly depend on the design of tax incentives. Certain types of tax incentives will be strongly affected. This is especially true for certain income-based tax incentives such as full exemptions or significantly reduced CIT rates, which are widely used across the world. Others may not be affected at all, such as accelerated depreciation for tangible assets. Understanding how the rules may affect tax incentives requires careful consideration of the detailed design of tax incentives.

Targeted tax incentives, incentives with economic substance requirements and expenditure-based tax incentives targeted at tangible assets may be less affected. Tax incentives may affect some categories of income or expenditure or limitations to tax benefits more than others. Due to the SBIE, for example, GloBE Rules may be less likely to affect expenditure-based tax incentives targeted to payroll tangible assets or tax incentives with substantive economic substance requirements. However, the value of providing strongly reduced CIT rates or CIT exemptions to in-scope firms might merit reassessment of the use of these tax incentives.

The GloBE Rules should prompt jurisdictions to review the use of tax incentives and consider tax incentive reform. This is particularly the case for tax incentives that may become inefficient due to the operation of the GloBE Rules.

Source: (OECD, 2022<sup>[57]</sup>).

Renewable energy and green manufacturing industries can benefit from the Special Incentive, including producers of machinery and equipment used in these industries. Investment projects need to relate to certain sub-sectors to be eligible for the Special Incentive. Sub-sectors differ in A and B Locations but overlap to some extent (Table 2.3). The incentive appears to put an additional focus on infrastructure and renewable energies for A Locations, and the wider industrial sub-sectors for B Location.<sup>16</sup> In March 2022, the eligible sub-sectors were broadened to include renewable energy projects. They also include the production of goods that can help reduce environmental impacts in Egypt, such as EVs and alternatives to

plastic. Support to green industries extends beyond the targeted industry to producers of inputs. This provides support to the entire value chain, such as investments, EV components and EV charging stations.

The Special Incentive is also available to non-green investments. As a result, it may not lower the relative costs of green investments in certain segments, which reduces the steering effect towards the green transition. The Special Incentive may target green and non-green segments of a market (e.g. petrochemical products can benefit from the B Location incentives as can green petrochemical products) (Table 2.3). In such cases, the steering effect of the incentive towards the green investment may be reduced or even nullified as it does not make the green investment relatively more attractive.

**Table 2.3. Green and non-green investment projects can both benefit from the Special Incentive**

Overview of industries eligible to benefit from the Special Incentive, by sector group and location

Eligible industries	Location A and location B	Only location A	Only location B
Renewable energy generation and inputs	Wind power station components Solar cells and their components Green hydrogen and ammonia Seawater desalination supplies	Green hydrogen electrolyser Wind power station components Green fuel derivatives; Seawater desalination using environmentally friendly technologies	Batteries
Reducing environmental impacts	Electric and natural gas vehicles, their components and EV charging stations Manufacturing environmentally friendly alternatives to plastic products Refrigerated transportation Carbon and methane reduction	Sewage and industrial waste treatment plants  Investment in sustainable and green tourism	Green petrochemical products
Other sectors	Mining and related services Food industries Pharmaceutical industries Land transportation (rail, road, river) Dry ports Hotels Education, sports and health services	Agriculture and husbandry Mining ores and minerals Petroleum exploration-related services and oil storage Non-green hydrogen Printing and furniture industry Wet ports	Fishing and meat production Petrochemical products Other manufacturing industries (textile and apparel; wood; chemical and plastics; basic and fabricated metals industries; auto parts; electronic and ICT equipment; machinery and equipment) Medical tourism

Note: ICT: information and communication technology.

Source: OECD based on the Investment Tax Incentives database (Celani, Dressler and Wermelinger, 2022<sup>[58]</sup>) and Prime Ministerial Decree Nos. 104, 981 and 1775 of 2022.

Moreover, green technologies of different levels of maturity can benefit from the incentive. Both well-established and emerging green technologies are eligible for the incentive. This could include solar panels and wind turbines, as well as hydrogen and carbon capture. Emerging green technologies may face relatively higher up-front costs than competing technologies based on fossil fuels. Targeting support towards green projects that are not yet competitive may help bring technologies to the market. However, costs related to such targeting need to be evaluated carefully and scaled back once the market has become more mature. In particular, care must be taken to avoid technological “lock-in” and providing windfall profits to investors for activities they would have undertaken anyway. Governments need to carefully balance their targeted interventions to avoid excessive spending.

Only a limited number of economies in MENA and Africa provide CIT incentives for green investments, which are more widely used in OECD economies (Table 2.4). Egypt is the only country in its region that provides a tax allowance (as opposed to an income-based incentive) to support green investments. When other economies in the region use incentives to promote green investment, they use tax holidays (Algeria,



Tunisia and Palestine Authority). When those developing economies use expenditure-based incentives in the green transition, they target them narrowly to renewable energies (e.g. Mauritius and South Africa). Previous OECD work has shown that 10 out of 36 OECD and selected partner economies provide fiscal depreciation schedules that are more generous for carbon-neutral power generation technologies than the comparable carbon-intensive technology (Dressler, Hanappi and Van Dender, 2018<sup>[59]</sup>).

**Table 2.4. CIT incentives targeting green investment in selected African and MENA economies**

Country	Targeted investment	Description of policy
Algeria	Priority sectors, including renewable energy	Investors benefit from a three- to five-year CIT exemption. Eligible sectors include renewable energy; agriculture, aquaculture and fisheries; mining and quarrying; industry (including petrochemical), services and tourism; knowledge economy; and information and communication technologies.
Mauritius	Renewable energy	An accelerated depreciation allowance for solar energy units (100% in the first year) and green technology equipment (50% per year).
	Renewable energy (financing)	CIT exemption from interest derived by individuals and companies from debentures, bonds or sukuk issued by a company to finance renewable energy projects.
Morocco	Renewable energy (wind, solar, hydropower or biomass)	A once-off deduction of 125% of renewable energy assets (including their supporting structures, as well as the direct cost of installation or assembly) used to generate electricity from renewable energy sources, including: wind power, solar energy (photovoltaic or concentrated), hydropower or biomass. The incentives apply to renewable energy projects brought into use on or after 1 March 2023 but before 1 March 2025.
South Africa	Renewable energy (bio-fuels)	An accelerated depreciation allowance (50% in the first year of use, 30% in the second and 20% in the third year) for machinery and articles used in farming and production of bio-diesel or bio-ethanol.
Tunisia	Waste management & recycling	A partial 66% exemption from CIT on qualifying income and a reduced 10% CIT rate, which apply from the start of their operation. Eligible sectors include collection, processing, recovery, recycling or treatment of waste and refuse; as well as various social services (e.g. child and elder care institutions, education, scientific research, cultural industry and others).

Note: This table considers the tax incentives available as of 1 January 2023.

Source: OECD based on the Investment Tax Incentives database (Celani, Dressler and Wermelinger, 2022<sup>[58]</sup>) and national legislation.

Egypt could more clearly define the criteria used to approve projects for the Special Incentive. Applications for the Special Incentive are sent to the General Authority for Investments (GAFI) and approved by the Supreme Council for Investment, which consists of members of both GAFI and the Egyptian Tax Authority. While regulations define eligible sector and investment areas, the granting committee issues approvals on a case-by-case basis, which can increase the risk for discretion when approving projects. The criteria used by the granting committee should be clarified, a process considered as a best practice in granting CIT incentives (IMF-OECD-UN-World Bank, 2015<sup>[55]</sup>). One option could be to create a points-based system to evaluate applications. For example, applications to Uruguay's *COMAP* incentive are evaluated based on quantifiable measures of how the project satisfies different policy objective, such as job creation, exports generated and clean technology investment. However, this approach involves administrative costs.

Egypt's Vision 2030 is ambitious, requiring the support of co-ordinated and cohesive tax and non-tax investment policies to reach its goals of sustainable development. Focusing CIT incentives on green and energy-efficient technologies could better align investment decisions with Egypt's climate goals and limit revenue forgone. This would also increase the competitiveness of energy efficiency initiatives.

In addition to the Special Incentive, Egypt grants other CIT incentives that are not targeted to specific sectors and activities, such as the Free Zone regime and accelerated depreciation for machinery. Prior to August 2023, Egypt prohibited oil and gas processing companies from operating under its Free Zone regime, which grants a permanent CIT exemption to investors within these zones.<sup>17</sup> An amendment to the Investment Law authorised oil and gas companies from operating in the Free Zone with the approval of the Supreme Council of Energy.<sup>18</sup> Several countries in MENA prohibit oil and gas investment from benefiting from CIT incentives where these industries are well established, including Algeria, Jordan and

Tunisia. The Supreme Council of Energy should carefully evaluate the need to grant Free Zone regime to fossil fuel projects and consider re-introducing the prohibition in the medium term. The August 2023 law amendment also introduced a new 35-55% refund of the corporate tax paid by taxpayers in the previous year for up to ten years.<sup>19</sup> The target of the new policy is under discussion, but Egypt could consider excluding fossil fuel industries from the new policy.

While tax incentives do not result in up-front policy costs, they can result in significant tax revenues that are not collected. As a result, tax incentives reduce available public finances, crucial for delivering public goods and services. Identifying opportunities to focus support where it is needed, such as for green investment and energy efficiency initiatives, could help limit pressure on public resources.

## 2.4. Reforming environmentally harmful support

### 2.4.1. Energy consumption subsidies

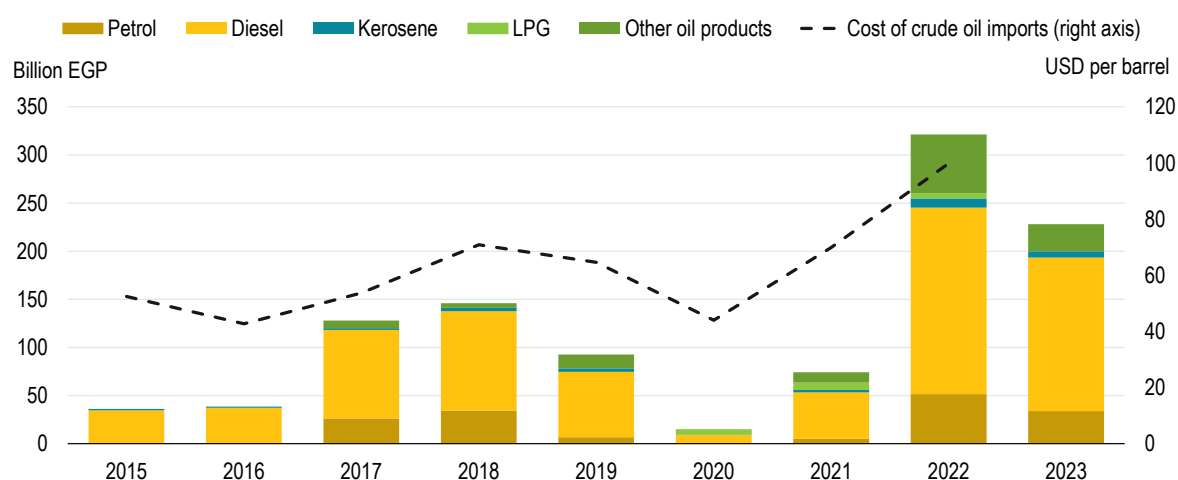
Energy subsidies have been a longstanding feature to support households and industries in MENA countries. In 2022, the region alone accounted for a quarter of global explicit subsidies on energy use (IMF, 2023<sup>[34]</sup>). By supplying energy products to businesses and households at prices well below the market value of the fuel itself, these economies have traditionally used energy subsidies as a crucial pillar for their industrialisation strategies. They are also a key mechanism to protect domestic consumers from fluctuating energy prices, attenuate social inequalities, or address energy poverty and reliability of access.

However, energy subsidies that incentivise fossil fuel use have negative environmental impacts and, if untargeted, may not attenuate social inequalities. In addition to the fiscal burden, subsidising fossil fuel use has negative effects on the environment and climate. Instead of internalising environmental damage, fossil fuel support undermines the clean energy transition by setting artificially low prices for fossil fuels. These artificial prices lead to excessive demand and risk wasteful energy use. Further, these subsidies divert scarce public resources from productive uses including health, education, social protection programmes and investments in low-carbon technologies. Thus, fossil fuel support can prolong the economy's reliance on energy-intensive industries and stall energy efficiency improvements, e.g. through electrification (Rohac, 2013<sup>[60]</sup>; Eibl, 2017<sup>[61]</sup>).

Furthermore, untargeted low energy prices do not necessarily reduce poverty levels efficiently. Fossil fuel support, in particular for automotive fuels, can be highly regressive (IMF, 2017<sup>[62]</sup>). If subsidies are not targeted at low-income households, they disproportionately favour wealthier people, who generally consume more fossil fuels (e.g. having larger homes or owning a vehicle) (Abouleinein, El-Laithy and Kheir-El-Din, 2009<sup>[63]</sup>; WRI, 2021<sup>[64]</sup>). Before the subsidy reform, according to analysis of Egypt's household surveys in 2010, the population's top 40% in income distribution received around 60% of energy subsidies; the bottom 40% received about 25%. These differences are more pronounced in urban areas where the top 40% received about 75% of energy subsidy benefits, and more than 90% of petrol subsidies (ESMAP, 2010<sup>[65]</sup>).


Energy subsidies have come at a tremendous cost and higher uncertainty for public finances. Fluctuating with international petroleum prices and the currency exchange rate, Egypt's petroleum subsidy expenditure is volatile. This adds to the challenging macroeconomic situation. Until 2014, Egypt strongly subsidised petroleum products such as petrol, diesel, kerosene and liquefied petroleum gas (LPG), natural gas and electricity by setting fuel prices well below world market average. As Egypt has been an oil importer since 2005, the petroleum subsidies made its economy vulnerable to fluctuations of global commodity prices (Rohac, 2013<sup>[60]</sup>; IEA, 2023<sup>[29]</sup>) (Figure 2.9). After spikes in petroleum subsidies driven by international prices, the Egyptian government implemented a far-reaching subsidy reform between 2014 and 2019, strongly increasing domestic consumer prices for a range of petroleum products (WRI, 2021<sup>[64]</sup>).

**Figure 2.9. Egypt's petroleum subsidy expenditure fluctuates with global oil prices**



Note: Billion EGP (2021, constant prices); LPG: liquefied petroleum gas; cost of crude oil imports is calculated as the unweighted average of average annual cost of total crude imports across 26 exporting countries.

Source: IMF (2023), IMF Fossil Fuel Subsidies Data: 2023 Update; IEA (2024), "Crude oil import costs and index", IEA Energy Prices and Taxes Statistics (database), <https://doi.org/10.1787/eneprice-data-en>.

StatLink  <https://stat.link/6jqgdk>

The fuel price adjustment mechanism has been a core component of Egypt's wide-ranging energy subsidy reform. In 2019, the Egyptian government established the Fuel Automatic Pricing Committee (FAPC), comprising representatives from the Ministry of Petroleum and Mineral Resources, the Ministry of Finance and the Egyptian General Petroleum Corporation. The FAPC regulates prices of petroleum products on a quarterly basis through a fuel price indexation mechanism. The mechanism considers changes in global commodity prices, Egypt's exchange rate and the share of imported fuel in domestic consumption. However, it does so only within the limit of a +/-10% change (IMF, 2018<sup>[66]</sup>; Egypt, 2023<sup>[67]</sup>). As a result, end-user fuel prices increased, which contributed to a drop in spending on fuel subsidies by approximately 65% from July 2019 to March 2020 (OECD, 2018<sup>[28]</sup>). Since early 2022, driven by surging petroleum prices in international markets and currency depreciation, the price per litre has been raised in steps. Between the end of 2022 and the end of 2023, prices of petrol and diesel increased between 22% (automotive diesel) and 43% (industrial diesel) (OECD, 2024<sup>[68]</sup>).

In contrast, prices for natural gas are not frequently revised. Egypt's Prime Minister tasked a ministerial committee in 2019 to periodically review natural gas prices for industrial activities, considering changes in global prices, and economic and social circumstances. Consequently, reviews of natural gas prices are conducted less frequently than for petroleum products. Moreover, recommendations for adjustments are not based on an adjustment mechanism, which bears the risk of under-pricing. Building on its positive experience with the FAPC, Egypt could develop and implement a similar price adjustment mechanism for natural gas as an intermediate step towards further energy market liberalisation.

Like many countries around the world, Egypt implemented measures to support its industry during the COVID-19 pandemic in 2020. The government cut the price of natural gas for industry to USD 4.5 per million British thermal units (BTU) (UNDP, 2021<sup>[14]</sup>). The most recent changes in prices were made in 2021 and 2022, which are set according to sub-sector. For instance, natural gas for electricity generation has been priced at USD 3 per million BTU since 2022, while the iron and steel sector has paid USD 5.75 million BTU since 2021. In addition, natural gas use in households is priced progressively with the consumption level at EGP 2.5 to 3.75 per m<sup>3</sup> (Gas Regulatory Authority, 2024<sup>[69]</sup>). Explicit natural gas subsidies were largely used to support residential consumption of LPG bottles. The government supported the switch

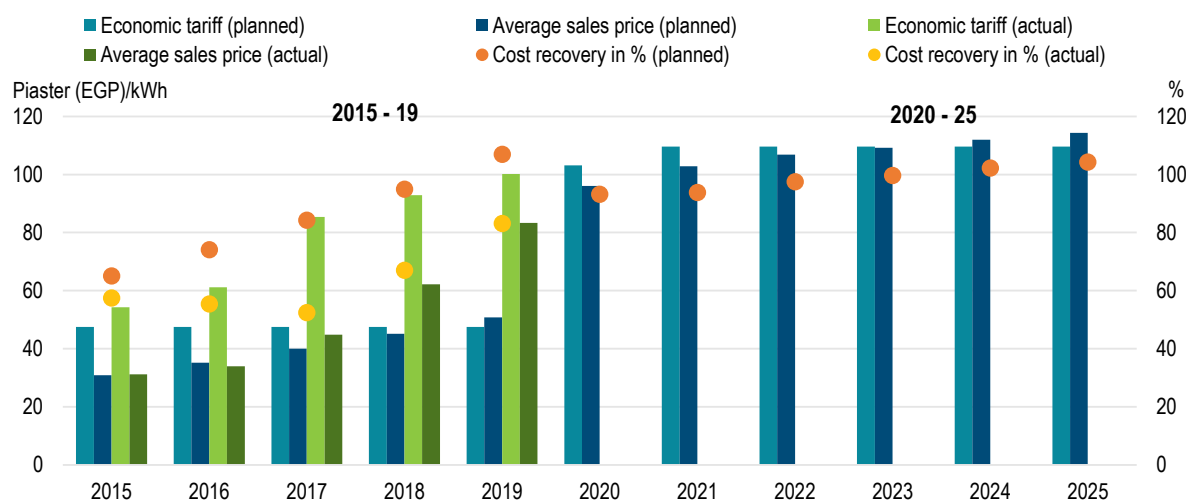
from LPG bottles to residential gas connections through economic incentives (including covering installation costs and collecting small instalments over long payment periods). As most households are now connected to the national gas grid, LPG consumption has strongly decreased since 2019.

Egypt's electricity market reform brought greater transparency in tariff setting, but full cost recovery has not yet been achieved. While the first five-year Electricity Tariff Restructuring Plans 2015-19 envisaged increasing cost recovery from 57% in 2015 to 100% in 2019, it is estimated that Egypt achieved 83%. The second Plan 2020-25 reiterated the goal of achieving full cost recovery by 2023 (EgyptERA, 2023<sup>[70]</sup>) (Figure 2.10). While Egypt took important steps to raise electricity tariffs multiple times in 2023, full cost recovery has still to be achieved. Despite a recent 16-26% increase in January 2024 (depending on the consumer category), the price of electricity for the highest consumption bracket still remains below the supply costs of EGP 1.77 per kWh (El-Tablawy and Wahba, 2024<sup>[33]</sup>). The IMF estimates that Egypt spent about EGP 114 billion in explicit consumer subsidies on electricity in 2022 (IMF, 2023<sup>[34]</sup>).

In Egypt, as in many countries, electricity tariffs are differentiated by type of customers (e.g. industry, shops and households) and consumption levels. Residential tariffs are divided into seven categories. Vulnerable customers whose consumption is below 650 kWh per month are supposed to be charged at a lower rate than the cost of supply. However, in principle, all residential consumers receive a subsidised tariff. This reflects the need to pursue reforms to provide more targeted support for vulnerable households while improving energy efficiency.

**Figure 2.10. Electricity tariffs remain below cost recovery**

Electricity tariffs compared against average sales prices and resulting cost recovery in the two five-year Electricity Tariff Restructuring Plans 2015-19 (actual and planned) and 2020-25 (planned)



Note: 100 piasters = 1 Egyptian Pound (EGP). Information about the actual implementation of the Electricity Tariff Restructuring Plan 2020-25 is not yet available.

EgyptERA (2023), Electricity Tariff Subsidy Reduction: The Case of Egypt.

StatLink  <https://stat.link/jlxi2k>

As part of the reform, adoption of the New Electricity Law no. 87 of 2015 enhanced the role of the country's independent power sector regulator, the Egyptian Electric Utility and Consumer Protection Regulatory Agency (EgyptERA). Following the reform, EgyptERA began developing economic rules and principles to calculate tariffs and charges; approving access charges to the transmission and distribution networks; and recommending changes in electricity tariffs to the Cabinet of Ministers. EgyptERA develops such

recommendations for tariff adjustments based on its “Cost of Service” methodology. It uses a formula that considers costs of electricity generation, transmission and distribution; the weighted average cost of capital of a regulated asset; and allocation costs to different voltage levels and customer groups (Africa Energy Portal, 2022<sup>[71]</sup>; EgyptERA, 2023<sup>[70]</sup>). While EgyptERA’s new methodology made tariff setting more transparent, the Cabinet of Ministers makes final decisions. It can opt for a lower electricity tariff if the Ministry of Finance pays the difference as a subsidy (Rana and Khanna, 2020<sup>[72]</sup>). As a next step, electricity prices need to be adjusted following EgyptERA recommendations more closely and more frequently to better reflect fluctuations of exogeneous factors affecting electricity supply costs.

#### **Box 2.4. The Takaful and Karama Programme enables targeted poverty reduction**

In 2014, Egypt adopted a far-reaching economic reform programme that transitioned government spending away from general untargeted and costly subsidies for fuels and food. This reform provided fiscal space to develop and expand more targeted social protection measures aimed at mitigating increases in poverty and inequality among the most vulnerable groups in the country.

As a result of this reform, Egypt adopted an expanded social protection programme, Takaful and Karama, in 2015. Initially co-financed by the World Bank, the programme is now fully funded by the general state budget and implemented by the Ministry of Social Solidarity. Karama is an unconditional cash transfer to elderly poor (over 65 years old) and people with severe disabilities, ranging between EGP 230-450 per month. Takaful provides cash transfers to low-income families with children. Each household receives EGP 325 per month, plus between EGP 60-140 per child depending on their age for up to two children. A soft conditionality was introduced in 2018, tying the benefits to children’s regular school attendance and on periodic health follow-up visits for the children and expectant mothers at primary health care units. Beginning in March 2022, Egypt implemented multiple major fiscal packages, which expanded the programme’s scope in terms of beneficiaries and financial benefits. Most recently, Egypt increased the programme’s benefits by 15% through the fiscal package in February 2024.

In 2022, Takaful and Karama covered 3.67 million beneficiaries, about 13% of the country’s households. This was up from 0.51 million in 2016 after beneficiaries of the social security pensions – another unconditional cash transfer programme – were transferred to Takaful and Karama. Most beneficiaries live in Minya, Giza and Assiut governorates. Women make up 75% of beneficiaries representing their household. The total amount of cash transferred through the programme tripled between 2017 and 2022, amounting to EGP 19.4 billion.

Sources: (ESMAP, 2017<sup>[73]</sup>; UNDP, 2021<sup>[14]</sup>; Egypt, 2023<sup>[67]</sup>; OECD, 2024<sup>[68]</sup>).

In recent years, Egypt has started rechanneling fiscal savings from the energy subsidy reform towards social spending, especially health and education. In 2015, the government established the Takaful and Karama Programme, which directs cash transfers to vulnerable households, notably women (Box 2.4). To further counterbalance undesired social impacts of electricity price increases, Egypt could consider expanding cash transfers through these existing channels (UNDP, 2021<sup>[14]</sup>; IEA, 2023<sup>[29]</sup>).

#### **2.4.2. Production subsidies for petroleum and natural gas**

The oil and gas sector is an important pillar of Egypt’s economy, representing around 24% in 2020 of the country’s GDP (US ITA, 2022<sup>[74]</sup>). It contributes nearly EGP 320 billion to GDP (2021), strongly expanding its role since 2011 (Egypt Oil & Gas, 2022<sup>[75]</sup>). Egypt’s oil and gas exploration and production industry is governed by concession agreements. These agreements are formalised between i) the Arab Republic of

Egypt, as the owner of the resource; ii) the Ministry of Petroleum represented through one of the public sector companies – Egyptian General Petroleum Corporation, Egyptian Natural Gas Holding Company or South Valley Egyptian Petroleum Holding Company; and iii) a multinational energy company (EY, 2018<sup>[76]</sup>). Like many countries with extractive industries, Egypt levies a higher corporate tax rate on profits of oil and gas exploration and production companies to capture economic rents. Profits of oil and gas exploration and production companies are taxed at a rate of 40.55% compared to a standard corporate tax rate of 22.5%.

At the same time, the oil and gas sector benefits from certain VAT incentives and CIT incentives. For instance, machinery and equipment used in producing goods benefit from a reduced VAT rate of 5% and exported goods and services are subject to a zero VAT rate (EY, 2018<sup>[76]</sup>). Egypt grants CIT tax incentives to its fossil fuel producers. However, as these incentives are not direct budgetary transfers, their cost to the government is not measured systematically. Most incentives for fossil fuel producers are provided on the level of individual concession agreements, which makes it difficult to ascertain the type and level of incentives granted. Tax expenditures (and other provisions resulting in government revenue forgone) are reviewed less frequently than direct transfers, which are authorised through the budget process. While this ensures some tax policy stability for economic agents, the lack of frequent reviews impedes opportunities for tax reforms. This can result in tax expenditures costing more than the gains they were designed to generate, or their policy objective no longer being relevant. Therefore, keeping track of forgone revenue is a first step towards verifying that these measures are achieving their objectives in the most cost-effective way. Regularly published tax expenditure reports, including those related to the oil and gas sector, are an important fiscal management tool (Elgouacem, 2020<sup>[77]</sup>). They also help monitor the alignment of public expenditure with climate goals. Egypt could consider using tax expenditure reports, including tax incentives for the oil and gas sector, to enhance its transparency and tracking of progress towards its climate goals.

## 2.5. Investment in environmental and low-carbon infrastructure

The government is committed to creating an investment-friendly climate to support Egypt's green transition. Egypt's Climate Investment Plan outlines priorities for low emissions and climate-resilient development (Green Climate Fund and Government of Egypt, 2022<sup>[78]</sup>). It has embarked on many initiatives to transform environmental challenges into investment opportunities (Box 2.1). For instance, the MoE established a specialised unit for environmental and climate investment and organised its first Environment-Climate Investment Forum in 2023. The annual forum will present green investment opportunities to the private sector. A new online investment platform showcases environmental and climate investment opportunities by sector and by governorate, including information on green finance facilities, feasibility studies, incentives and other services (Government of Egypt, 2023<sup>[79]</sup>).

Egypt became the first MENA country to issue a sovereign green bond in 2020 with a value of USD 750 million in 2021 (Government of Egypt, 2021<sup>[80]</sup>). About 46% was disbursed for clean transportation and 54% for sustainable water and waste management (Government of Egypt, 2021<sup>[80]</sup>). Flagship projects include the Cairo Monorail (Box 2.6), the El Dabaa Desalination Plant and the Eastern Alexandria Sludge Treatment Facility. Following Egypt's example, many other MENA countries, notably the United Arab Emirates, issued social, sustainable and sustainability-linked bonds (DGB, 2024<sup>[81]</sup>).

Under its green financing framework, the government defined sustainability criteria to prioritise green investment. It aims to allocate 50% of public investments to green projects in the fiscal year 2024/25 and to achieve 100% by 2030 (Government of Egypt, 2023<sup>[82]</sup>). Efforts could be further supported by setting climate-specific objectives for state-owned enterprises. These should ensure that public assets and investments comply with climate change requirements, including disaster and risk assessments. In addition, Egypt should enhance corporate social responsibility reporting (Box 2.5).

### Box 2.5. Enhancing corporate social responsibility of state-owned enterprises

Investment Law no. 72 of 2017 emphasises corporate social responsibility (CSR) in the investment landscape. However, CSR reporting remains limited among state-owned enterprises. The few exceptions are primarily in sectors such as banking, and oil and gas, where competitive pressures drive the disclosure of such information.

Providing more comprehensive information is a precondition to enhance the effectiveness of CSR reporting. Introducing transparency and reporting mechanisms not only fosters accountability but also stimulates efficiency improvements. CSR reports should become publicly available, which would raise public awareness, inform decision making and encourage more responsible business practices.

State-owned enterprises (SOEs) can play a vital role in catalysing the private sector's engagement in CSR. As large and influential entities, SOEs can set a normative benchmark for CSR practices, thus signalling to the private sector the importance and values of CSR. By demonstrating their commitment to CSR, SOEs can inspire and motivate private companies to follow.

The Central Bank of Egypt and the Egyptian Financial Regulatory Authority impose sustainability reporting requirements in the banking sector and among listed companies, fostering transparency and accountability. Extending these mandates to SOEs would establish a unified approach to sustainability reporting and CSR disclosure. This, in turn, would promote a more ethical and responsible business environment across all sectors.

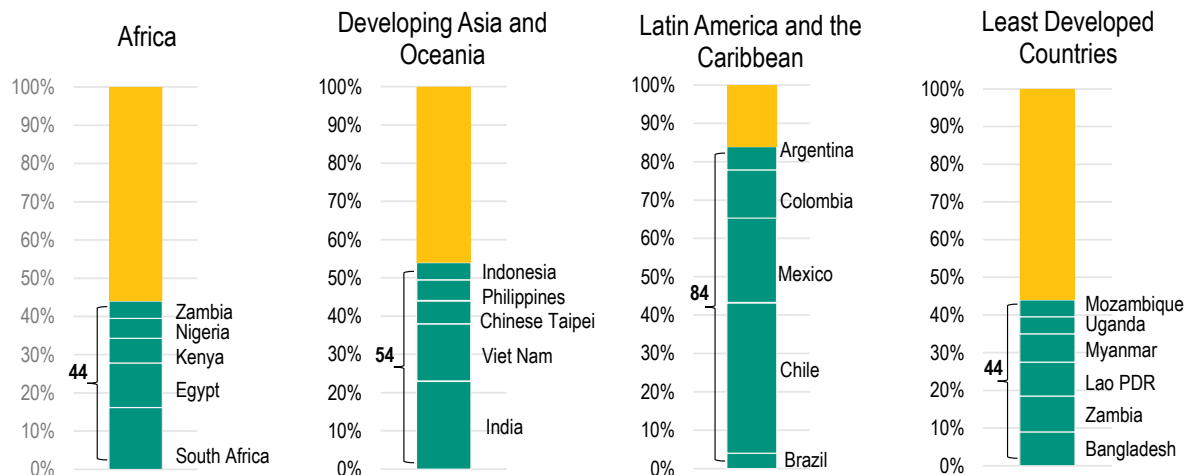
Source: OECD Secretariat.

#### 2.5.1. Renewable energy

The government established the Renewable Energy Financing Framework to unlock Egypt's renewable energy potential (GCF, 2017<sup>[83]</sup>). Between 2015 and 2022, Egypt attracted over USD 45 billion in international finance for renewable energy, ranking among the top ten development economies worldwide. This makes it the second most popular host country for renewable energy projects on the African continent, after South Africa (Figure 2.11). However, the current investment level represents only a fraction of the resources needed to exploit the country's full renewable energy potential.

The government has implemented several mega projects funded by consortia. For instance, the Benban Solar Park, inaugurated in 2019, extends over 37 km<sup>2</sup> in the western desert (Aswan Governorate). It is one of the world's largest solar plant complexes with a production capacity of 1.5 GW, providing electricity to more than 1 million households. It mitigates about 2 Mt of CO<sub>2</sub>-eq. per year and created some 6 000 permanent green jobs (AfDB, 2023<sup>[84]</sup>). Egypt has also built several large-scale wind farms such as Zafarana in Suez (120 km<sup>2</sup>, 545 MW) and Gabal Al-Zait (100 km<sup>2</sup>, 830 MW), located near Rhas Gharbib. These flagship projects may pave the way for future investments.

Figure 2.11. Egypt is attracting a large share of foreign investment in renewables within Africa



Source: UNCTAD (2023), World Investment Report 2023.

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Over the past decade, major policy reforms supported deployment of renewables. Article 32 of the 2014 Constitution stipulates that the “The State shall make the best use of renewable energy sources, motivate investment therein, and encourage relevant scientific research.” With the Renewable Energy Law no. 203 of 2014, the government started creating incentives to encourage private sector investment, while developing an enabling environment for deployment of renewables. The New and Renewable Energy Authority (NREA) acts as national focal point for expansion of renewables.

The Electricity Law no. 87 of 2015 laid the grounds for liberalisation of the electricity market to make it more competitive. Moreover, the government introduced two rounds of feed-in tariffs to attract investors. More recently, it targeted efforts towards developing competitive tenders to attract investors and enhance confidence in the regulatory and operational framework. It also promoted purchasing power agreement prices between private parties.

Several presidential decrees attributed new land areas to NREA for the development of renewable energy plants. The most recent one was announced for the Sidi Barrani district in Matrouh Governorate in 2023 (Presidential Decree No. 55). Unlike many European countries, Egypt does not lack space for the development of renewables.

However, uncertainty over state-owned utility projects and delays in the competitive auction scheme slowed progress in the deployment of renewables. For example, only 26 MW of 1 GW of planned state-owned projects have been commissioned since they were announced in 2017 (IEA, 2023<sup>[85]</sup>). While about two-thirds of installed renewable energy capacity have been channelled through public financing, the private sector leads the large majority of ongoing and planned renewable energy projects. The government has taken several measures to improve a supportive enabling environment to expedite private investment in renewable energy projects, while promoting energy efficiency measures (e.g. electricity sector reform). Overcoming barriers to scale up renewable energy investment needs to remain a priority. Efforts to bring down the cost of capital, improve transparency and streamline administrative procedures need to be pursued.



### *Low-carbon hydrogen*

Egypt aims to become one of the largest exporters of low-carbon hydrogen. Its National Strategy for Low-Carbon Hydrogen, approved by the Supreme Energy Council in February 2024, aims to reach a tradable share of 5-8% in the global hydrogen market. The government intends to contribute thereby to both domestic and global decarbonisation efforts. According to government estimates, the development of low-carbon hydrogen could lead to an estimated GDP increase of USD 10-18 billion by 2040. At the same time, it seeks to create more than 100 000 jobs along the supply chain (Ahmed, 2023<sup>[86]</sup>).

In the context of the EU carbon border adjustment mechanism, increasing exports of low-carbon hydrogen could help Egypt decarbonise its manufacturing industries. This, in turn, would help it maintain the competitiveness of Egyptian exports (e.g. fertilisers, chemicals) on the European market. It would also contribute to Egypt's climate mitigation goals (Government of Egypt, 2022<sup>[87]</sup>). Egypt will need to strike the right balance between low-carbon hydrogen exports and domestic demand to advance local decarbonisation priorities.

Egypt has attractive regulations for investing in renewable energy production. The National Council for Green Hydrogen and its Derivatives aims at fostering a competitive, investment-friendly business climate (Government of Egypt, 2023<sup>[13]</sup>). In January 2024, the government issued Law no. 2 regarding incentives for low-carbon hydrogen production projects and derivatives, offering generous tax credits of up to 55%; VAT exemptions on equipment and exports; discounts for the use of seaports, maritime transport and ship servicing; and other non-tax incentives for project developers. In turn, 70% of investment costs need to be sourced from foreign sources; operations must start within five years; and foreign workers are limited to 30% of the total workforce within ten years (Martin, 2024<sup>[88]</sup>).

So far, Egypt has signed 12 framework agreements and 27 memoranda of understanding for low-carbon hydrogen production projects. The Green Hydrogen Plant Project in the Suez Canal Economic Zone, worth USD 8 billion, launched its first phase in 2022 (UNCTAD, 2023<sup>[89]</sup>). As elsewhere, most planned projects have not yet reached a final investment decision. The delays are due to uncertainties about demand and transport infrastructure (IEA, 2022<sup>[90]</sup>).

The OECD Clean Energy Finance and Investment Mobilisation Programme is helping Egypt operationalise its national hydrogen strategy. Drawing on the OECD framework for industry's net-zero transition, the programme is assessing the low-carbon hydrogen production capacity gap. This will further identify enabling conditions and financial solutions to enhance bankability of the current low-carbon hydrogen project pipeline in Egypt. Further, it will accelerate decarbonisation in domestic, hard-to-abate sectors.

Egypt has a competitive advantage in producing and transporting low-carbon hydrogen based on two factors: a large renewable energy endowment and a well-established gas infrastructure that can be retrofitted. It also benefits from its geographical location, with easy access to potential offtakers in Europe through the Suez Canal offering great opportunities for exporting green hydrogen to Europe (Dagnachew et al., 2023<sup>[91]</sup>). However, Egypt faces several challenges in scaling up related to affordable financing, technological expertise, infrastructure development and stable policy. Egypt will need to define a transparent certification process for low-carbon hydrogen and its derivatives. Securing demand is among the most critical factors to support the early stage of low-carbon development projects. A clear signal from major import markets such as the European Union would help unlock private sector investment.

Moreover, EIAs need to carefully consider environmental and safety concerns. Hydrogen export projects should not place additional strain on already scarce resources such as water, energy and habitable land (Dagnachew et al., 2023<sup>[91]</sup>). In this regard, seawater electrolysis could be an interesting option. However, this technology is not yet mature and may require more energy-intensive processes (Dargin, 2023<sup>[92]</sup>). Low-carbon hydrogen production will require large quantities of renewables. This should also not compromise the government's domestic renewable energy target. It will also be important to further develop local expertise and invest in research to create ownership of projects and local jobs.

## 2.5.2. Sustainable transport

The transportation sector is one of the main drivers of economic and social development in Egypt and thus a key national priority. The government allocated USD 15.6 billion of investments to the transport sector in fiscal year 2021/22, representing a 110% increase compared to the previous fiscal year (Government of Egypt, 2021<sup>[80]</sup>). The transport sector also attracts the largest share of development finance, representing USD 7.3 billion between 2020 and 2023.

As the government is advancing its shift from old Cairo to the New Administrative Capital, it is essential to create the necessary public infrastructure to help people commute between their residence and workplace. The Cairo Monorail, one of Egypt's flagship projects, has been under construction since 2018 (Box 2.6). Considering the high population density of Greater Cairo, Egypt has many opportunities to further develop clean transport options. Better inter-city connections will help decrease use of private vehicles and related environmental pollution in densely populated areas. The country's electric public transport system has been expanded significantly, including investments in tramway, and improved electric rail links and bus rapid transit lines.

### Box 2.6. The Cairo Monorail

#### A mass transit system to improve inter-city connections in the Greater Cairo area

Spanning over the governorates of Giza and Cairo, the Cairo Monorail covers 56.5 km from East Cairo to the New Administrative Capital (22 stations), and 42 km connecting 6th of October City to Giza (12 stations). It will be one of the longest driverless monorail systems worldwide and Egypt's first public transport inter-city connection. At full capacity, the Cairo Monorail can transport approximately 45 000 passengers an hour in each direction, representing more than 1 million passengers per day. The trains will operate at speeds of up to 80 km/h on both lines.

Under a USD 4.5 billion contract with Egypt's National Authority for Tunnels in 2019, the project is managed by a consortium of Bombardier Transportation, Orascom Construction and Arab Contractors in charge of constructing and operating the two lines. About 11% has been funded with the government's Green Bond proceeds. Construction works started in 2018 but have been delayed. They are now expected to be completed by end 2024.

According to government estimates, if 30% of car and bus traffic switches to rail, the Cairo Monorail is expected to help reduce 8 000 t CO<sub>2</sub>-eq. per year for the line to the new capital (weighted to the share of green bond finance), and 13 300 t CO<sub>2</sub>-eq. for the 6th of October City-Giza line. This will also greatly contribute to reducing air pollution. An adequate pricing strategy needs to ensure sustainable access to all social groups to facilitate large-scale uptake and promote inclusive public transport options.

Source: (Railway Technology, 2019<sup>[93]</sup>; Government of Egypt, 2021<sup>[80]</sup>).

The government also advanced plans to develop its national railway network, including the construction of a 2 000 km high-speed rail system linking 60 cities across the country. This will become the sixth largest high-speed rail system worldwide and is expected to create up to 40 000 local jobs. The high-speed network will comprise three lines: i) "The Suez Canal on rails", connecting the port cities on the Red Sea to Marsa Matrouh and Alexandria on the Mediterranean (660 km); ii) connection between Cairo and Abu Simbel near the Sudan border, linking the mega city to rising economic centres in the south (1 100 km); and iii) a line between Luxor in Upper Egypt and Hurgada by the Red Sea (225 km). This rail link will also improve freight transport for goods and materials between the Safaga harbour and inland locations. According to project developers, the expected modal shift from road to rail with a fully electrified network

will cut carbon emissions by 70% compared to current car or bus transport (Siemens, 2022<sup>[94]</sup>). However, more precise estimates and impact assessments over time will be useful. Moreover, decarbonising transport through electrification will also require cleaning Egypt's electricity mix more rapidly to harness the full potential of reduced emissions.

### 2.5.3. Nexus approach to advance investment in water, food and energy

With a view to bridging its climate finance gap, Egypt started developing innovative financial solutions to attract global climate finance and catalyse private sector investment, notably for adaptation and resilience. Launched in July 2022, Egypt's Nexus of Water, Food and Energy Programme (NWFE, Arabic translation of the phrase "Fulfilling Pledges") aims to accelerate implementation of the national climate agenda (NWFE, 2022<sup>[95]</sup>). Nine of 26 flagship projects of the National Climate Change Strategy 2050 will be implemented within the NWFE platform involving eight ministries and 25 development partners. The nexus approach recognises the interlinkages between different sectors considering shared dependence on natural resources and related human activities. It also brings together climate action and development efforts. A leading development partner has been appointed for each pillar: EBRD for energy, the African Development Bank Group for water; and the International Fund for Agricultural Development for food. In addition, led by the European Investment Bank, the NWFE+ programme also covers sustainable transportation.

The NWFE platform contributes to fostering country ownership and makes it easier for development partners to co-ordinate joint efforts. It also allows Egypt to showcase investment opportunities and provides a co-ordination mechanism for international public and private finance. The first NWFE progress report illustrates a broad-based commitment with financial pledges from development partners worth more than USD 3 billion (Government of Egypt, 2023<sup>[96]</sup>).

However, the implementation phase of most projects has not yet started, making it too early to assess NWFE's impact. Enhancing effective governance systems is crucial to maximise positive real-world impacts. As the NWFE platform foresees to comply with international reporting standards, technical support and international expertise may help strengthen national monitoring and evaluation systems (Government of Egypt, 2023<sup>[96]</sup>). This should, however, not undermine speedy implementation.

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## Notes

<sup>1</sup> Article 84 BIS stipulates that “Whoever violates provisions of Articles 19, 23 of this law shall be fined a sum of not less than L.E. fifty thousand and not more than L.E. one million.”

<sup>2</sup> The Informal Sector of Economy is defined as follows: “Each medium, small or micro project that carries out its activities without obtaining a building or operating license, or any other license or approval that is necessary for the practice of the activity and determined by a decision of the Prime Minister.”

<sup>3</sup> Public employees who delay or suspend the project’s licence or harm the investor’s interest without legal justification, are subject to a fine of EGP 20 000-100 000 (Youssry Saleh & Partners, 2020<sup>[107]</sup>).

<sup>4</sup> The Ministry of Social Solidarity is responsible for reviewing the project outline, amount of funds and donors within three working days. For funds from foreign sources, the procedure is laborious and time-consuming, taking up to

60 working days. If the donor has already an existing protocol of co-operation, the approval process may be much shorter.

<sup>5</sup> Egypt's Fiscal Year (FY) ends on 30 June. OECD data are reported as follows: the year 2020 represents 1 July 2019 to 30 June 2020.

<sup>6</sup> The analysis covers 31 African countries (OECD/AUC/ATAF, 2023<sup>[109]</sup>).

<sup>7</sup> Explicit carbon pricing instruments are carbon taxes and emissions trading system permit prices. Fuel excise taxes are considered to be an implicit carbon pricing instrument as most often their objective is not to price carbon emissions but to raise revenue. Yet fuel excise taxes levy a tax on a base that is proportional to CO<sub>2</sub> emissions.

<sup>8</sup> Gasoline 92 accounts for about one-third of Egypt's total petrol/gasoline consumption (OECD, 2022<sup>[32]</sup>). Fuel oil used in bakeries and for electricity generation is exempted from the tax. The use of kerosene remains untaxed; residential LPG use has been subsidised, but consumption has decreased in the past years to a negligible level.

<sup>9</sup> Net Effective Energy Rates include several instruments: fuel excise taxes, electricity excise taxes, carbon taxes, ETS permit prices, fossil fuel subsidies and electricity subsidies.

<sup>10</sup> Excluding VAT, industrial and commercial profit tax and resources development fee.

<sup>11</sup> It includes Cairo to Alexandria, Cairo to Ismailia to Port Said, Cairo to Ain Sukhna, Cairo to El Fayoum, Kaistep to Belbis, Ahmed Hamdy Martyr Tunnel crossing Suez Canal, the route to Mubarak Peace Bridge crossing Suez Canal, Cairo to Suez Desert Road (which is the main road for entering the new Cairo cities, al-Shorouk, Badr and Madinaty).

<sup>12</sup> In addition to the Special Incentive, Egypt provides a range of other CIT incentives that do not directly target green investments.

<sup>13</sup> Investment costs are defined as all assets used in the investment project, such as: tangible fixed and movable assets; intangible assets, such as intellectual property rights; and long-term liabilities in setting up the investment, such as stocks and shares of company incorporation, non-governmental bonds, and privileges or contracts granted under the laws on public utility (Article 11 of the Investment Law of Egypt).

<sup>14</sup> Geographic locations most in need of development include the area South of the Giza governorate, governorates affiliated to the Suez Canal region (i.e. parts of Port Said, Ismailia and Suez governates on the east of the canal, and the border governorates (e.g. Red Sea and the Upper Egypt governorates, New Valley, Matrouh). The Prime Minister may choose additional areas. Non-industrial investment projects in Locations B must meet one additional condition related to the project's size, national importance or export orientation to benefit from the Special Incentive.

<sup>15</sup> Article 11 of the Investment Law of 2017. Prior to January 2022, the Special Incentive was only partially operational and effectively only available to investors within the Suez Canal Economic Zone, as the implementing regulation to define eligible sub-sector had not yet been issued.

<sup>16</sup> For example, investments in sewage and industrial waste treatment plants, seawater desalination, the construction of hotels and tourism infrastructure are only eligible in A Locations. Textile, apparel and leather sub-sectors are only eligible in B Locations.

<sup>17</sup> Fertiliser, iron and steel, arms and ammunitions, liquor and alcohol production and energy-intensive industries, defined by the Supreme Council of Energy, are also prohibited from operating within Free Zones according to Article 34 of the Investment Law no. 72 of 2017.

<sup>18</sup> Under Law no. 160 of 2023, which amended the Investment Law no. 72 of 2017, GAFI, with the approval of the Supreme Council of Energy, can provide Free Zone licences to projects in the fields of petroleum processing and refining, liquefaction and transportation of natural gas, fertiliser industries, iron and steel manufacturing, and other energy-intensive industries.

<sup>19</sup> The partial CIT refund or *cash incentive* was passed into law in 2023 through Law no. 160 of 2023.



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