

Ukraine Reform Tracker 2

About the report

Maintaining momentum in Ukraine's ambitious reform programme will be essential to the nation's recovery after the war. With the aim of stimulating and supporting discussion on this matter at the 2022 Ukraine Recovery Conference (URC), Economist Impact presents the *Ukraine Reform Tracker*.

The *Ukraine Reform Tracker* analyses the state of reforms across four key areas: **economic reforms, environmental** and **energy reforms, social reforms and governance reforms** (mirroring the key themes of the 2022 URC). Economist Impact has produced a policy brief for each reform area, with an assessment of: 1) reform progress since 2014; 2) the resilience of reforms in 2022, in particular given the stresses of the ongoing war with Russia; and 3) the outlook for reform, with a focus on the role that reforms will play in facilitating Ukraine's recovery. These policy briefs are accompanied by an interactive data story that visualises the key trends in Ukraine's reform progress since 2014.

Importantly, the *Ukraine Reform Tracker* does not attempt to provide a wholly comprehensive account of every reform that has been implemented in Ukraine since 2014. Instead, the tracker focuses on the most salient components of Ukraine's reform programme, which will best support an understanding of the contribution of reform to Ukraine's past, present and future development.

Ukraine Reform Tracker 3

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Progress since 2014

Ukraine's economic indicators have been trending upwards since the economic crisis in 2014-2015 (with the exception of the pandemic-driven disruption in 2020). Real GDP growth averaged 2.9% over 2016-2019, and returned to growth of 3.4% in 2021 after contracting during the pandemic. Average wages have also been rising steadily since 2014, although employment has been trending downwards. Ukraine has had varied success in reforming its economy in recent years. Business environment reforms have centred on improving competition, rationalising the taxation system, stimulating domestic innovation and attracting greater flows of foreign direct investment. The restructuring and development of Ukraine's financial sector has also been a key reform focus since 2014, in an effort to improve the accessibility and adequacy of the financial system and support increasing integration into global financial markets. Similarly, successive administrations have made an effort to redirect Ukraine's trade operations, bolstering export volumes and diversifying trade partners.



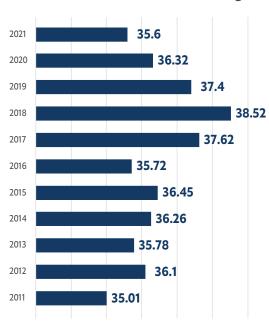
Business Environment

Competition has been a perennial issue in Ukraine's business environment. Since 2014. successive administrations have set out to tackle the issue by bolstering the powers of the Anti-Monopoly Committee of Ukraine, rationalising loss-making state-owned enterprises (SOEs) and facilitating properly-regulated privatisation when appropriate. The improvements for private enterprises have been reflected in BTI's private enterprises scoring for Ukraine (an indicator in its wider Transformation Index that measures whether private companies are permitted and protected), which improved steadily, from 6/10 in 2014 to 8/10 in 2021 (slightly higher than regional peers, such as Moldova and Georgia, and in line with Armenia).² Despite the progress made, however, a small number of powerful and politically-connected enterprises continue to dominate many of Ukraine's. 3 Ukraine's score in the Economist Intelligence Unit's (EIU)'s indicator that measures Policy Towards Private Enterprise and Competition (part of its Business Environment rankings) is held down by this factor. Ukraine scored 3.3/10 from 2014-2019, before falling to 3/10 by 2021.4 Specifically, the EIU cites issues in deregulation and competition that still need to be addressed, such as ongoing state intervention and lingering instances of oligarchism.

The government has also carried out limited reforms on Ukraine's tax administration, in an effort to make it more stable and equitable. Limited progress has been made in improving taxpayer compliance by promoting e-governance (allowing payments via the Diia app) and decentralising taxation processes where possible. This progress was reflected in the EIU's Tax

Regime Rating, which climbed from 3.3/10 in 2014 to 4/10 in 2021.⁵ The muted nature of the gains are representative of the lack of progress in other areas of tax reform, in particular transparency in corporate taxation.

Global Innovation Index (0 to 100, 100 = good)



Improvements to the tax administration fit within Ukraine's broader strategy to make its policy environment more attractive to foreign businesses. The government has attempted to increase foreign direct investments to support domestic capital formation and stimulate economic activity within the private sector. Progress has been made in improving the regulatory environment for investors, in particular enhancing transparency and assurances. Consequently, Ukraine's FDI inflows have been steadily trending upwards, but investor trust continues to be undermined by the lingering

¹ https://www.oecd.org/corporate/SOE-Review-Ukraine.pdf

https://bti-project.org/en/?&cb=00000

https://documents1.worldbank.org/curated/en/368301553112891891/pdf/135463-WP-P169603-PUBLIC.pdf

⁴ EIU Business Environment Rankings

⁵ EIU Business Environment Rankings

⁶ State Committee of Statistics

unpredictability of the policy environment. The decision to reduce green tariff rates in 2020 is a prime example in which confidence in the policy environment was damaged, as the government lowered rates that were previously fixed as an incentive to foreign investors. The enactment of the National Economic Strategy in March 2021 provides an important foundation for development, although this is likely to be reworked once economic viability returns in the aftermath of the war.

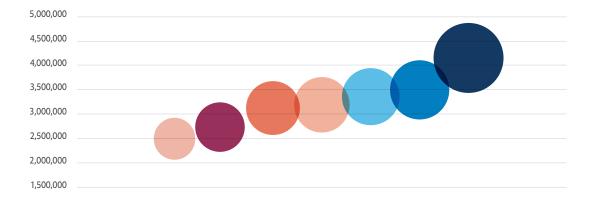
Financial Sector Development

The development of the financial sector has been a clear success story in Ukraine's economic reform programme. After the financial crisis in 2014-2016, the Ukrainian government (supported by bilateral and multilateral development partners) restructured the beleaguered sector, strengthening the ability of regulators and financial market participants to withstand future crises. A core focus was the overhaul of the National Bank of Ukraine (NBU; the

central bank). The government strengthened the NBU's institutional standing, empowering it to drive financial sector development. From 2015-2019 the central bank carried out the Comprehensive Programme of Ukrainian Financial Sector Development Until 2020 which involved successfully liberalising the currency, floating the exchange rate, rationalising the banking sector and redirecting monetary policy to target inflation.9 The NBU was also tasked with the supervision of broader financial institutions.¹⁰ The improved regulation of the banking system brought gains in the sector's non-performing loan (NPL) ratio, which has been in steady decline since 2017. Progress has also been made in the regulation of non-banking financial services. The government is working with multiple local and international partners to regulate and develop Ukraine's non-bank financial sector, and in 2019 Ukraine's Verkhovna Rada (parliament) adopted 'law No. 1069-2' which amended and improved the regulatory capacity of the system.¹¹

Beyond stabilising and fortifying the system, Ukraine also focused on growing the breadth

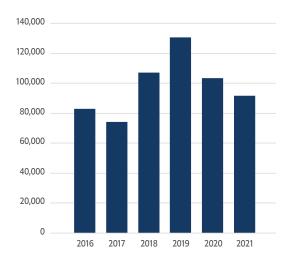
Financial corporations: financial assets (UAH, million)



- ⁷ https://www.reuters.com/article/us-ukraine-energy-renewables-idUSKCN24M1DS
- 8 https://www.kmu.gov.ua/en/news/denis-shmigal-uryad-zatverdiv-nacionalnu-ekonomichnu-strategiyu-do-2030-roku
- https://bank.gov.ua/en/files/wFebBRAYYAAlkgV
- 10 https://bank.gov.ua/en/news/all/golovni-pidsumki-roku-regulyuvannya-ta-naglyadu-za-nebankivskimi-finansovimi-ustanovami
- https://bank.gov.ua/en/files/DbTumkPIsHRCuzG

and depth of the financial sector. Loss-making state-owned banks (SOBs) have been reformed by improving corporate governance structures (in line with the *Principles of Strategic Reform of the Public Banking Sector*), ¹² while Privatbank, the largest commercial bank in Ukraine, was successfully nationalised, averting the disruption of a potential collapse. ¹³ Financial assets under management increased steadily over 2014-2021, with a particular acceleration in 2020. ¹⁴ As the sector grew and adequacy ratios were brought in line, lenders slowly increased the quantity of domestic credit on offer over 2016-2021. ¹⁵ As the sector grew in size, so too did financial services exports, which rose sharply over 2017-2019. ¹⁶

Financial services exports (US\$, million)



Trade

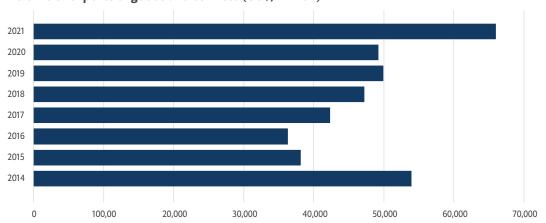
Ukraine has had success in reforming its trade activities, in part owing to the successful design and implementation of the Export Strategy of Ukraine 2017-2021.¹⁷ The government supported the development of a growing export sector by removing excessive regulations, simplifying import tariffs, and improving systemic harmonisation with trade partners. Ukraine successfully executed reforms to its customs processes, with the passing of the amendments to the Law On Customs Tariff of Ukraine in June 2020,18 as well as continued progress in reforming the State Customs Service in 2021.19 Progress in trade reforms resulted in rapid growth in export volumes over 2016-2019, at an annual average of 11.2%, as well as a sharp increase of 34% in 2021, after a pandemic-related dip in 2020.20

Ukraine's trade reforms centre on efforts to diversify its trade operations and enhance its integration into the EU market. In both areas, Ukraine has seen steady progress. Russia was Ukraine's main trading partner in 2014, capturing 18.2% of its exports and providing 22% of its imports.²¹

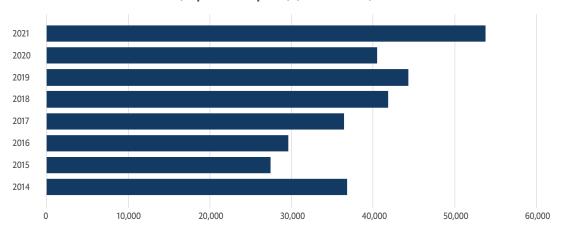
Since then, however, Russia's share of Ukraine's exports and imports has decreased consistently, reaching 4.9% and 8.4% in 2021, respectively.²² China picked up much of the slack, purchasing 11.7% of Ukraine's exports and providing 15.3% of imports in 2021.²³ Ukraine made particular progress

- 12 https://www.mof.gov.ua/en/news/uriad_zatverdiv_printsipi_strategichnogo_reformuvannia_bankiv_derzhavnogo_sektoru_-2392
- 13 https://pb.bank.gov.ua/en.html
- ¹⁴ State Statistics Service of Ukraine
- 15 https://data.worldbank.org/indicator/FM.AST.DOMS.CN?locations=UA
- ¹⁶ State Statistics Service of Ukraine
- https://www.me.gov.ua/Documents/Detail?lang=en-GB&isSpecial=True&id=5a3190f8-2e59-411c-830c-cae3306000d4&title=ExportStrategyOfUkraine
- 18 https://chamber.ua/wp-content/uploads/2020/07/New-Edition-of-the-Customs-Tariff-of-Ukraine.pdf
- https://www.kmu.gov.ua/en/news/ukrayina-vprovadzhuye-sistemu-obminu-mitnoyu-informaciyeyu-z-yes-yaka-dozvolit-minimizuvati-zlovzhivannya-na-mitnici-denis-shmigal
- ²⁰ International Monetary Fund
- ²¹ International Monetary Fund
- ²² International Monetary Fund
- ²³ International Monetary Fund

Volume of exports of goods and services (US\$, million)



Volume of trade with the EU (exports + imports) (US\$, million)



in diversifying its trade portfolio within the EU, raising its trade volumes with member states by 46.2% from 2015 to 2019.²⁴ Increasing trade with the EU was facilitated by the signing of the Deep and Comprehensive Free Trade Agreement (DCFTA), which reduced tariffs for European firms exporting

to Ukraine.²⁵ The Ukrainian government also made efforts to harmonise with EU trade standards, including the introduction of a New Computerised Transit System (NCTS),²⁶ which minimises customs abuses and underlies the *European Convention on the Common Transit Procedure*.

²⁴ International Monetary Fund

https://trade.ec.europa.eu/access-to-markets/en/content/eu-ukraine-deep-and-comprehensive-free-trade-area

https://eu4pfm.com.ua/news/ukraine-is-already-implementing-a-new-computerized-transit-system-ncts-at-the-national-level-and-reached-a-significant-progress/#:~:text=%E2%80%9CUkraine%20is%20already%20implementing%20a,international%20NCTS%20operations%20in%202022.

Resilience in 2022

Similar to its development since 2014, the current economic reform landscape shows a picture of lopsided progress. In the business environment sphere, deregulation and tax simplification has been further deepened and adjusted to the war conditions as the administrative burden on enterprises was eased, allowing them to continue operation. The government has also been proficient in helping relocate enterprises to economically viable areas, where possible, to limit closures and help temporarily closed businesses resume activity. Competition, however, has been restricted, with tender requirements for public procurement temporarily lifted. Privatisation which already progressed slowly before the war—stalled, with a draft law aiming to simplify the process rejected. In the trade sphere, although customs reform has been adjusted to ensure uninterrupted imports of strategically important goods, the state budget experienced significant shortfalls, while the blockade of maritime shipping routes undermined Ukraine's export capacity. Reforms in the financial sector, building on upgraded prudential requirements and improved supervision, proved successful and helped to buttress the war-related shock to the economy.

Business Environment

With more than a third of Ukraine's businesses suspending operations upon the invasion, and the majority of export activities disrupted by the subsequent port blockade, the government launched an ambitious programme to relocate enterprises to economically viable areas in the west of Ukraine and to create alternate logistics options for exports. The relocation plan appears to have been a success, with vital businesses relocating and beginning to scale operations once again. However, exports remain hamstrung by the lack of maritime logistics, which previously handled about 90% of Ukraine's commodity exports.²⁷

Steps towards deregulation and the simplification of the tax system are examples of measures which not only withstood the blow of the war but have been accelerated by it. The government also began a faster movement towards deregulation to make doing business in conditions of war possible. Licensing regulations have been eased to help businesses resume operations or to start a new business. Indicative results can be seen in a recent survey carried out by the European

²⁷ https://www.fao.org/3/cb9013en/cb9013en.pdf

Business Association (EBA), in which only 3% of the 134 surveyed companies were not working at the start of May (down from 4% in April and 29% in early March).²⁸ Licences and permits that would previously take a long time to receive have been replaced with the simple submission of declarations by the entrepreneur to relevant authorities.²⁹ According to the Cabinet of Ministers of Ukraine, this change is likely to remain in place after the end of the war, as it contributes significantly to a favourable business environment.30 The registration process for individual entrepreneurs has also been simplified further, with individuals now allowed to apply for the status entirely online, regardless of their location.31 The simplified registration of individual entrepreneurship also yielded strong results. Since the start of the war, more than 10,000 individual entrepreneurs and 1,200 companies have been registered.32

Tax simplification was also accelerated: for the period of martial law, the government provided the opportunity to switch to 2% of turnover tax, replacing income tax and VAT.³³ For small businesses (in tax Groups I-II), the payment of the simplified tax is voluntary.³⁴ Although temporary, this measure is designed to help businesses to survive and continue operations in conditions of war. Easing the tax burden on individual enterprises lessened the financial pressure driving Ukrainian business towards bankruptcy or closure.

However, steps towards fair competition have been held back. The transparency of

public procurement has been restricted as the requirement to conduct tenders was suspended for the period of war.35 Although this measure was vital to ensure speed in the procurement necessary for the state's defence and to keep the economy afloat, it led to a significant decrease in competition. As of May 2022, 228,000 contracts have been concluded in the period of war, without a procurement announcement, meaning that businesses were not informed in advance and could not offer a better price.³⁶ The removal of the tender requirement in ProZorro (an electronic system that enables open access to public procurement opportunities in Ukraine) was necessary for the state's prompt response to the changed conditions and helped to ensure that shortages of food, medicine and fuel could be addressed. However, necessary supplies came at inflated prices. According to ProZorro, the state saved some UAH7.47bn (approx. US\$255m) in 2021, which is 40-times more than the amount saved once the tender requirement was suspended (tenders are currently voluntary).37 This increased public expenditure put additional pressure on Ukraine's already strained budget and thus adversely affected its resilience during the war, including its ability to finance the defence effort. Privatisation efforts also stalled as the war broke out, although this is understandable as the government prioritised other pressing reforms to defend the economy from the war-related shock. The Verkhovna Rada rejected a draft law aimed at simplifying the privatisation of state property under martial law.

²⁸ https://eba.com.ua/en/majzhe-polovyna-kompanij-eva-vidnovyly-povnotsinnu-robotu/

²⁹ https://finclub.net/ua/news/minekonomiky-planuie-zberehty-derehuliatsiiu-biznesu-pislia-viiny.html

³⁰ https://www.kmu.gov.ua/news/uryad-pidtrimav-zakonoproekt-pro-deregulyaciyu-vedennya-biznesu-v-ukrayini

³¹ https://yur-gazeta.com/dumka-eksperta/yak-stati-fop-pid-chas-viyni-poradi-yurista.html

³² https://opendatabot.ua/war

³³ https://tax.gov.ua/en/mass-media/news/579024.html

³⁴ https://tax.gov.ua/en/mass-media/news/577089.html

³⁵ https://zakon.rada.gov.ua/laws/show/169-2022-%D0%BF#Text

³⁶ https://www.epravda.com.ua/columns/2022/05/9/686797/

³⁷ https://www.epravda.com.ua/columns/2022/05/9/686797/



Financial Sector Development

Having faced the unprecedented challenge of a full-fledged war, Ukraine's financial system proved to be institutionally resilient, ensuring money circulation and avoiding panic in the financial markets. Given force majeure circumstances, the banking system had enough liquidity to withstand the blow. Timely temporary measures introduced included fixing the exchange rate, restricting the foreign exchange market, control over the movement of capital, and the financing of the budget deficit through the purchase of "military bonds" by state-owned banks and the NBU.

In response to Russia's invasion, the banking sector saw the liquidation of International Reserve Bank JSC and Prominvestbank PJSC, subsidiaries of Russian financial institutions. Given their relative insignificance in the market (as of January 2022, they owned 2% of net assets in the banking sector), a decline in the sector's overall assets was primarily due to divestment by foreign and private financial institutions. State-owned banks proved the most resilient to shock, with their share of net assets and funds of individuals increasing to 47.8% and 55.9%, respectively.³⁸

Even though consumer demand for credit decreased after the outbreak of the war, moderate demand from corporations remained. In response, the government moved to facilitate corporate lending by improving the conditions of government-subsidised loan schemes. The programme—"Available loans 5-7-9%"—was expanded by lifting all requirements pre-war applicants were subject to.³⁹ Now, any Ukrainian business that needs support can get a loan on

³⁸ https://finbalance.com.ua/news/bankivska-sistema-ukrani-popri-viynu-zumila-zbilshiti-depozitniy-i-kreditniy-portfel

³⁹ https://www.epravda.com.ua/publications/2020/03/6/657777/

favourable terms, and the maximum loan amount has been increased to UAH60m (approx. US\$2m). For the period of martial law and for one month thereafter, these loans are interest-free.⁴⁰

Reforms undertaken in the banking and financial sector ensured the sector's resilience during the war. Redirecting the NBU's monetary policy and strengthening its institutional capacity and regulatory oversight proved important factors in ensuring macro-financial stability during the war, by increasing the financial stability and transparency of banks and ensuring adequate cash reserves. The Ukrainian government and the NBU were proactive in introducing temporary measures to further improve the resilience of the sector. Early in the conflict the NBU held its policy rate at 10% and pegged its exchange rate to offer some form of stability.⁴¹ Fixing the exchange rate and policy rate as well as facilitating state-issued loans ensured the relatively smooth operation of financial institutions, with the banking sector suffering only moderate losses in the first months of the war.⁴² As a result, the sector was able to ensure continuity of services across the board, with pension and social payment obligations fulfilled by Ukrainian banks' clients freely making card transactions abroad, and the Accounting Chamber uninterruptedly serving interbank money transfers.⁴³ In early June 2022, the NBU took the bold step of raising its policy rate from 10% to 25%,44 in an effort to curb rocketing inflation and protect the hryvnia (local currency). The move is designed to slow the decline of

Ukraine's purchasing power and ease the burden on foreign-currency reserves (which are being drained by efforts to defend the value of the fixed currency).

Trade

Progress made to facilitate Ukraine's export and transit capacity stalled as sea ports were either captured (Mariupol, Berdiansk, Skadovsk, Kherson) or blocked (Odessa, Mykolaiv). Railway infrastructure, which is unable to fully replace maritime export routes, is also frequently disrupted by missile attacks. The customs reform has been adjusted to the conditions of war, with zero customs clearance introduced for cars and import restrictions for certain goods (humanitarian aid, food, fuel, etc.) lifted.

The lack of infrastructure upgrades in the past, in particular the modernisation of the railway system, significantly limited Ukraine's resilience to the blockade of its maritime routes, with large railway bottlenecks currently observed at Ukraine's western border and 20m tons of grain currently stranded in the country. 45 Export volumes of Ukrainian grain and flour in May were 2.6 times lower compared with the same period last year, according to the Ministry of Agrarian Policy of Ukraine.⁴⁶ Disrupted maritime shipping led to soaring transportation costs, forcing Ukrainian farmers struggling to free up silos to sell their harvest below global market prices.⁴⁷ The blockade of Black Sea shipping routes not only impaired Ukraine's economic performance,

⁴⁰ https://www.ukrinform.ua/rubric-economy/3433695-urad-znimae-vsi-obmezenna-po-programi-579-smigal.html

⁴¹ https://bank.gov.ua/en/news/all/natsionalniy-bank-ukrayini-vidkladaye-uhvalennya-rishennya-schodo-oblikovoyi-stavki

⁴² https://bank.gov.ua/ua/news/all/bankivskiy-sektor-u-i-kvartali-zberig-visoku-likvidnist-ta-operatsiynu-pributkovist-po-pri-voyenni-diyi--oglyad-bankivskogo-sektoru

⁴³ https://mind.ua/openmind/20239949-yak-pracyue-bankivska-sistema-ukrayini-v-umovah-vijni

 $^{^{44}\} https://bank.gov.ua/en/news/all/natsionalniy-bank-ukrayini-pidvischiv-oblikovu-stavku-do-25$

https://www.world-grain.com/articles/16901-eu-to-create-solidarity-lanes-for-moving-grain-out-of-ukraine#:~:text=BRUS-SELS%2C%20BELGIUM%20%E2%80%94%20The%20European%20Commission,to%20animal%20feed%20and%20fertilizers

https://ukranews.com/en/news/860299-grain-exports-down-2-6-times-in-may-agrarian-policy-ministry

⁴⁷ https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/russias-war-on-global-food-security/



but also undermined the global food supply, thus increasing the risk of a global food crisis, since Ukraine is one of the largest global suppliers of wheat, corn, barley, and rapeseed.⁴⁸

In other sectors, however, the successful diversification of Ukraine's trade networks since 2014—in particular the divergence away from Russia—somewhat limited the direct impact that the outbreak of war had on Ukraine's ability to buy and sell vital commodities and goods. Adjusting customs reform to war conditions also helped to ensure the uninterrupted flow of goods required for military and humanitarian purposes.

This prevented massive shortages among the population and within the army. However, not all changes contributed to the state's resilience. Zero clearance on cars, aimed at easing the import of cars necessary for the army and the population, led to significant budgetary shortfalls. According to the tax committee of the Verkhovna Rada, Ukraine has been losing around UAH100m (approx. US\$3.4m) daily due to the zero-clearance rule.⁴⁹ The increased volume of car imports also put additional pressure on Ukraine's customs service, creating long queues and delaying humanitarian aid cargo.

https://www.reuters.com/markets/us/ukraines-rising-role-grain-exports-complicates-impact-crisis-2022-01-26/

 $^{^{\}rm 49}$ https://itd.rada.gov.ua/billInfo/Bills/pubFile/1280143

Outlook

The post-war moment will be an opportunity for Ukraine. With both domestic and international audiences committed to Ukraine's recovery and development, there is likely to be significant pressure to continue and speed up the implementation of the reform agenda. Continued business reforms could allow Ukraine to further deregulate, privatise lossmaking SOEs, where appropriate, and clarify its procurement processes. Meanwhile, liberalising agriculture and boosting trade infrastructure, while ensuring the financial sector's continued stability, will attract foreign investment and encourage domestic entrepreneurship, driving faster growth and bolstering budgetary revenues while reducing expenditures.

Business Environment

Although significant progress has been made to improve the business environment in Ukraine, particularly with regard to deregulation, creating conditions for businesses to thrive will remain key to improving Ukraine's business environment, supporting the continuity of existing businesses and the creation of new ones once peace is achieved. Further pursuing the privatisation of large and loss-making state-owned enterprises and returning to a cleaner procurement process by reinstating the tender requirement and expanding it to most government deals will drive an uptick in competition across the board and depress government expenditure. Such steps will also allow more Ukrainian entrepreneurs to enter the market and thrive there in the post-war

context. Procedural simplifications regarding auditing, inventories, auctions and property evaluation will make it easier for small and medium enterprises to relocate their facilities or expand by purchasing and investing in stateowned assets. They will also enhance Ukraine's investment climate, making it easier for foreign investors to enter the market post-conflict, further driving productivity and competitiveness.

The post-war moment may present an opportunity to complete the difficult land reform by extending the right to purchase agricultural land to legal entities, including foreign ones (although the passing of such a law would only be possible after a referendum). Opening the path for international capital to flow into Ukrainian agriculture will likely boost productivity across the sector, increasing its competitiveness in the EU market. Turning once again into Europe's breadbasket also presents an unparalleled opportunity for the recovery of Ukraine's economy more broadly and the creation of new domestic revenue streams to finance the postwar reconstruction effort. At the same time, the potential destruction or loss of many metallurgical and machine-building plants and mines in the east of Ukraine will, in the short term, deal a blow to overall economic output and, through the loss of metallurgical exports, the trade balance, as well as budgetary revenues. In the longer term, however, it presents an opportunity to refocus policy efforts and investment in Ukraine's underdeveloped, but more competitive and less capital-intensive light industry, especially pharmaceutical and electrical production, plastic

and rubber manufacturing, furniture, textiles, and food and agricultural products. Such a new focus would drive competitiveness across the board and boost overall output. With time it would also likely be reflected in Ukraine's trade balance and, more immediately, tax revenues.

Financial Sector Development

Progress achieved in the financial sector in the 2014-2021 period allowed it to remain stable when the conflict broke out. Thanks to the NBU's increased institutional capacity, prompt measures were taken when the war broke out to further bolster the financial sector's resilience and ensure its continued operation in conditions of unprecedented stress, with only moderate losses. Ensuring the financial sector's continued stability and transparency is a must for Ukraine's economic recovery, as it serves as the bedrock to the smooth operation of public and private enterprises, trade flows, social payments, and more, in and out of war. Though much-needed in the current extreme conditions, the swiftest possible elimination of currency controls will reinstate competitiveness within the financial sector and the economy more broadly.50 Continuing the crackdown on corruption in the sector once the conflict is over will ensure the efficient use of international support for the reconstruction effort. Once the war is over, the government will also need to consider substantially lowering the share of stateowned banks, with the privatisation of Privatbank, the country's largest lender, and Oshchadbank, a large processor of pensions and social payments. This will drive fair competition and encourage new entrants. Increased competition will help boost access to credit for local enterprises that were forced to relocate, reorient their businesses, reduce their staff, or that lost their source of income. Further improvements to the protection

of creditors at legislative and institutional levels and the creation of a fully-fledged secondary market for troubled debt would further bolster stability and predictability in the financial sector, encouraging foreign investors to renew their engagement with Ukraine. Managing Ukraine's non-performing loan ratio will be an important challenge for the government, as the severe disruption from the war led to a spike in borrowers unable to meet payments.

Trade

Following the expiration of Ukraine's former export strategy in 2021, the government will need to evaluate the strengths and weaknesses of the initiative, which should inform the design and implementation of a new strategy for the years ahead. Increasing the funding and institutional standing of the Entrepreneurship and Export Promotion Office will empower the body to build on its successes over 2018-2021. Similarly, further strengthening the capacity of the Export Credit Agency and developing business representations abroad will help nurture sustained growth in Ukraine's export market. Harmonising trade conditions, meanwhile, and removing non-tariff trade barriers will support the growth in Ukraine's export sector.

Building on achievements to date in the customs area by further increasing transparency and oversight will further bolster budgetary revenues. By contrast, retaining zero customs clearance for some goods would hold revenues back, but this may be a price worth paying for increased competition and innovation in a number of Ukrainian industries. Given the massive disruption to Ukraine's exports due to the blockade of its maritime shipping routes, upgrading the country's transport infrastructure will be key to Ukraine's

⁵⁰ https://www.epravda.com.ua/rus/news/2022/05/20/687260/

ability to recover from the unprecedented export disruptions and increase its overall export and transit capacity. Ensuring trade continuity even if sea ports are not immediately unblocked following the end of the war or if they experience renewed stress later will be critical. First, the modernisation of Ukrainian railways, in particular aligning the rail gauges with EU standards, is essential to make the railway a viable alternative to currently blocked sea trade routes. Next, investment into road and rail infrastructure in the western, northern and south-western directions will allow for larger flows of Ukrainian exports to reach Baltic Sea ports and the Black Sea ports in Romania. Finally, the modernisation of Danube ports would help diversify shipping routes and at least partially ease the burden on sea ports, while guaranteeing continuity of trade in the event of renewed pressure on Black Sea shipping. Diversifying trade partners supplying critical commodities such as potash and diesel will ensure that shortages are avoided and domestic production in crucial sectors, such as agriculture, is uninterrupted.





Progress since 2014

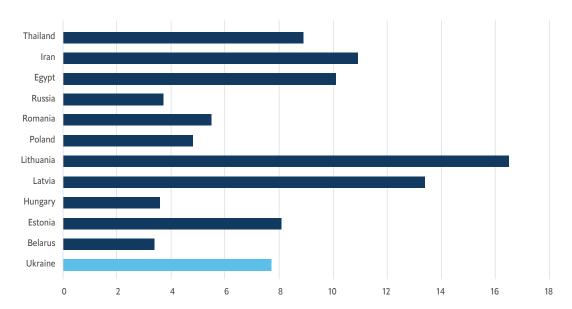
Environmental and energy reforms are key to assuring the long-term security and sustainable growth of the Ukrainian state. While Ukraine has made some progress towards facilitating its green transition (the transition towards an economy that is sustainable, resource efficient and carbon neutral), particularly through efforts to foster renewable energy production, its broader climate policy achievements remain relatively limited. A programme of energy reforms sought to integrate Ukrainian energy and electricity networks with the EU and reduce the energy intensity of the Ukrainian economy, reflecting the critical imperative to safeguard the country's energy security. Despite some progress

in ensuring the sustainable management of Ukraine's forests and the expansion of national nature reserves, significant challenges remain in terms of environmental protection. These include insufficient protections for water resources and unaddressed shortcomings in Ukraine's waste management practices.

Green Transition

Ukraine's ambitions for its green transition were laid out in the government's 'Low Emission Development Strategy of Ukraine until 2050', published in 2017, which declared

Climate Change Performance Index: Climate Policy (0 to 20, 20 = good)



decarbonisation of the energy system to be one of the main objectives of government policy.1 In line with this policy, the 'State Environmental Policy of Ukraine up to 2030'2 set ambitious goals of achieving a 12% renewable share in Ukraine's total energy mix by 2025, and 17% by 2030, while the 'Energy Strategy of Ukraine until 2035' envisioned that renewables would make up 25% of the nation's total energy mix by 2035.3 To achieve this goal, the government introduced initiatives to boost renewable energy production, including the use of generous 'feed-in' tariffs (initially legislated for in 2008, but only properly implemented in 2015),4 under which the state purchases electricity at a higher price from individuals and legal entities that use renewable sources for electricity production. As such, Ukraine has managed to rapidly increase the share of its energy supply from renewable sources every year since 2014, rising from 2.6% to 6.6% in 2020.5 While this growth is impressive, it is important to note that Ukraine's renewable energy production started from a very low base and it continues to lag behind many of its neighbours (the equivalent figure for Poland in 2020, for example, is 16.1%).6 While ongoing steps to introduce a new renewable energy auction system and develop new avenues for greener energy production (including green hydrogen⁷ and biogas8) may facilitate further progress,

Ukraine is likely to struggle to meet its ambitious goal of achieving a 12% renewable share in its total energy mix by 2025.

Ukraine devoted less policy focus to reducing the carbon intensity of other sectors of the economy than it has to boosting renewable energy production.9 While 'Ukraine's 2050 Green Energy Transition Concept'10 highlights the need for Ukraine to decarbonise transport, for example, evidence for the implementation of this in practice is scarce. Similarly, little has been done to decarbonise the steel sector, a cornerstone of Ukrainian industry. As Low Carbon Ukraine reports, 'CO₂ emissions of the Ukrainian steel sector are substantial', and a product of 'relatively unmodernised, Soviet vintage plants'.11 Despite Ukraine's stagnation in this policy agenda, there has been a consistent decrease over time in the carbon intensity of the Ukrainian economy. According to the International Energy Agency, while Ukraine produced 2.3kg of carbon dioxide per unit of GDP (measured in 2015 US\$) in 2014, this figure was just 1.7kg in 2020.12 Unfortunately, this trend likely reflects a general decline in industrial production in the country, rather than the impact of government reforms. Looking forward, it is important to note that while government intervention will be crucial in encouraging the modernisation and

- $^{1} \quad https://unfccc.int/sites/default/files/resource/Ukraine_LEDS_en.pdf$
- ² http://extwprlegs1.fao.org/docs/pdf/ukr190982.pdf
- 3 https://www.kmu.gov.ua/en/news/250210653
- 4 https://www.hg.org/legal-articles/feed-in-tariff-reform-in-ukraine-37965
- ⁵ State Statistics Service of Ukraine. 'Energy Consumption from Renewable Sources for 2007-2020'. www.ukrstat.gov.ua
- https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Renewable_energy_statistics
- https://balkangreenenergynews.com/cms-ukraine-overview-of-the-hydrogen-power-industrys-prospects-in-ukraine/#:~:tex-t=Green%20hydrogen%20is%20now%20set%20to%20become%20one,with%20a%20high%20potential%20for%20producing%20low-carbon%20hydrogen.
- bttps://www.ukrinform.net/rubric-economy/3500644-ukraine-can-completely-abandon-gas-imports-due-to-own-production-operator-chief.html
- ⁹ https://climateactiontracker.org/countries/ukraine/2021-12-13/policies-action/
- Ministry of Energy And Environmental Protection of Ukraine. January 2020. 'Green Energy Transition of Ukraine until 2050'. http://uwea.com.ua/en/news/entry/ukraina-planiruet-osuschestvit-zelenyj-energeticheskij-perehod-k-2050-godu/
- $^{11} \quad https://www.lowcarbonukraine.com/wp-content/uploads/Towards-a-decarbonisation-of-Ukraines-steel-sector.pdf$
- International Energy Agency Data Service. https://www.iea.org/data-and-statistics/data-browser/?country=UKRAINE&fuel=-CO2%20emissions&indicator=CO2ByGDP

decarbonisation of the economy, the role of the private sector will also be key in driving progress.

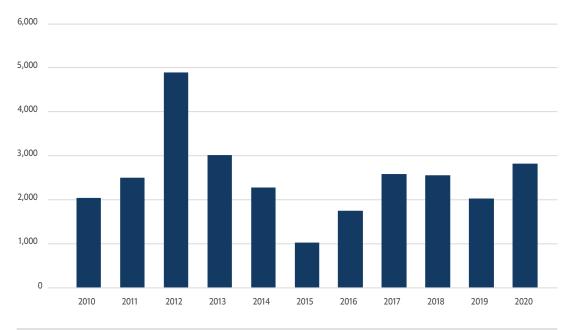
Ukraine's partial success in encouraging renewable energy production has not been reflected in the country's broader climate policy achievements. A number of domestic policy interventions contradicted Ukraine's stated climate ambitions, which include the commitments outlined in the Second Nationally Determined Contribution (to reduce greenhouse gas emissions by 65% compared to 1990 by 2030 and reach carbon neutrality by 2060).13 For example, while Ukraine set goals to reform the coal industry by closing loss-making, heavily subsidised mines, little progress was achieved in reality, with inefficient mines continuing to be subsidised.¹⁴ Furthermore, the government's inability to keep up with payments to renewable energy producers under the feed-in tariff scheme, as well as the

ex-post curtailment of the tariffs in 2020,¹⁵ have threatened future growth in investment in renewables. These deficiencies in Ukraine's climate policy are reflected in its performance in the Climate Change Performance Index, an independent monitoring tool for tracking climate protection performance. In 2022, the index ranked Ukraine at 38th out of 60 countries on its climate policy metric. While this placed Ukraine above Hungary, Belarus and Russia, it still lagged far behind many other emerging economies, including Egypt, Iran and Thailand.¹⁶

Energy Reform

The Ukrainian energy reform programme, launched in 2014, was formally conceptualised in 2017 with the adoption of the 'Energy Strategy of

Quantified fossil fuel subsidies (US\$, million)



¹³ https://unfccc.int/NDCREG

Damir Miljevic. December 2020. Investments into the Past: An Analysis of Direct Subsidies to Coal and Lignite Electricity Production for the period 2018–2019 in the Energy Community Contracting Parties.

https://home.kpmg/ua/en/home/insights/2020/08/fit.html

¹⁶ Climate Change Performance Index 2022.https://ccpi.org/download/climate-change-performance-index-2022-2/

Ukraine until 2035′, which, among other things, aims to enable stable market development, achieve energy security and independence, integrate the state's gas and electricity networks into the EU energy system, transform the coal industry and encourage energy efficiency.¹⁷ This was due to be updated with a revised 'Energy Strategy until 2050', which has unfortunately been postponed due to the war. Reforms have also been driven by the 2017 EU-Ukraine Association Agreement, which includes a number of provisions related to energy, energy security and harmonisation of the Ukrainian legislative framework on energy with that of the EU.

Ukraine enjoyed some significant successes in its energy market transformation. In particular, the unbundling of Ukraine's gas transmission system was completed in 2020, with the goal of boosting market competition and increasing the number of domestic gas suppliers. 18 Similarly, a competitive electricity market was launched in 2019, in line with the EU's third energy package directives.¹⁹ Market reforms also included the partial abolition of cross-subsidies,²⁰ whereby electricity prices were kept low for households at the expense of enterprises, thus easing the burden on businesses. This progress in market transformation helped to align Ukraine's energy system with EU standards, as provided for in the EU-Ukraine Association Agreement.

Ukraine made substantial progress in the realm of energy security. Most notably, Ukraine managed

to wean itself off Russian gas by importing reverse-flow gas from Poland, Slovakia and Hungary.²¹ Furthermore, Ukraine succeeded in diversifying its sources of nuclear fuel and decreasing its dependence on Russian fuel to roughly 50% by replacing it with American fuel supplied by Westinghouse.²² However, insufficient modernisation of Ukraine's energy infrastructure and lingering legal hurdles have slowed Ukraine's progress in integrating into the EU's gas (ENTSO-G) network.

As measured in terms of transmission and distribution losses, the quality of Ukrainian energy infrastructure has deteriorated over time. Although these losses stayed relatively constant between 2015 and 2017, they have risen rapidly since then, and in 2020 accounted for 4.2% of the total primary energy supply.²³ This reflects an urgent need to repair or replace a large portion of Ukraine's power transmission and distribution grids, which are outdated and in poor condition. As posited by the International Energy Agency, stagnation in the quality of Ukrainian energy infrastructure is a result of chronic underinvestment, outdated technologies and inadequate maintenance.²⁴ Underinvestment can be attributed to Ukraine's 'cost-plus' system for regulating tariffs for electricity transmission and distribution services, which provided no incentive for operators to invest in infrastructure improvements.²⁵ The introduction of the new 'Regulatory Asset Base' model in 2021 may go some way in ameliorating this.26

https://www.kmu.gov.ua/en/news/250210653

¹⁸ https://hmarochos.kiev.ua/2020/12/16/anbandling-navishho-v-ukrayinskij-energetytsi-zbilshuyut-konkurentsiyu/

¹⁹ https://www.german-economic-team.com/wp-content/uploads/2021/12/GET_UKR_NL_146_2020_en.pdf

²⁰ https://www.epravda.com.ua/columns/2021/10/1/678326/

²¹ https://foreignpolicy.com/2021/11/17/ukraine-energy-diversification-russia-gazprom/

 $^{^{22} \ \} https://suspilne.media/206675-cornobilska-zona-ta-aes-ci-gotovi-voni-do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vijskovogo-vtorgnenna/do-mozlivogo-vtorgnen-do-mozlivogo-vtorgnen-do-mozlivogo-vtorgnen-do-mozlivogo-vtorgnen-do-mozlivogo-vtorgnen-do-mozlivogo-vtorgnen-do-$

²³ State Statistics Service of Ukraine: Energy balance data time series for the period of 1990-2020. www.ukrstat.gov.ua

²⁴ https://www.iea.org/reports/ukraine-energy-profile/energy-security

https://www2.deloitte.com/ua/en/pages/press-room/deloitte-press/2020/RAB-in-Ukraine.html

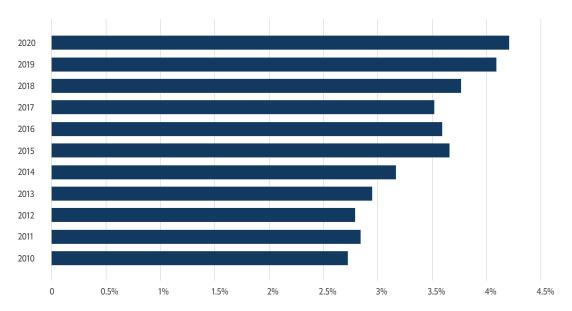
https://www.asterslaw.com/press_center/legal_alerts/ukraine_approves_rab_tariff_for_distribution_system_operators/#:~:- text=The%20RAB%20tariff%20will%20be%20valid%20for%20all,of%20natural%20monopolies%20in%20the%20field%20 of%20electricity%22%3B

Ukraine's economy has long been extremely energy-intensive, consuming considerably more energy per unit of GDP than most of its peers. Government reforms to improve the energy efficiency of the economy included the partial deregulation of pricing in wholesale and retail gas markets in 2015,27 to tackle overconsumption. A 'Warm Loans' programme was established in October 2014 to enable housing cooperatives and individuals to obtain loans for energy efficient measures;²⁸ similarly, a dedicated 'Energy Efficiency Fund' was launched in 2019.²⁹ While these measures had some impact on the energy intensity of the Ukrainian economy—total energy consumption (measured in tonnes of oil equivalent) per unit of GDP (measured in 2005 US\$m) fell from 1185.7 in 2014 to 953 in 2020³⁰ —it is likely that a decline in industrial production's contribution to the economy (following a slump in exports to Russia, a significant market for Ukrainian industrial products) played a larger role.³¹

Environmental Protection

Ukraine's environmental policy was set out in the government's 'State Environmental Policy of Ukraine up to 2030', published in 2019.³² This document outlines the key priorities for environmental protection and sustainability in Ukraine, including protection of water resources and forests, and effective waste management. In line with this strategy, Ukraine made some tangible progress in reforming the forestry market, however, significant challenges remain for the protection of water resources and waste management.

Transmission and distribution losses (thousand toe) as % of total primary energy supply



²⁷ https://energypost.eu/ukraine-reform-gas-sector/

²⁸ https://climatepolicydatabase.org/policies/warm-loans-program

²⁹ https://eefund.org.ua/en

World Energy Council: Energy Trillema Index. 2021. https://trilemma.worldenergy.org/#!/energy-index

https://carnegieeurope.eu/2018/02/06/reforming-ukraine-s-energy-sector-critical-unfinished-business-pub-75449

http://extwprlegs1.fao.org/docs/pdf/ukr190982.pdf

Prior to the publication of the 'State Environmental Policy of Ukraine up to 2030', Ukraine had already achieved some significant success in enhancing the protection of its natural environment. This was crucial given the manifold threats to Ukrainian nature, including deforestation, urban expansion and industrial activity. Particular progress was made from 2014 to 2016, when the area of protected land in Ukraine grew from 1,688,500 hectares to 1,997,400 hectares.³³ Unfortunately, the adoption of Ukraine's reformed state environmental policy in 2019, as well as the 2021 launch of a programme to plant one billion trees,34 made little difference to the expansion of nature reserves and protected areas, which remain mostly unchanged since 2017.

Ukraine has significant natural resources, which have the potential to provide the country with high environmental, social and economic value. However, mismanagement of these resources poses an obstacle in realising this potential. In particular, corruption and illegal logging in timber supply chains have historically threatened the sustainability of the forestry sector. This corruption reflects systemic issues in forest governance; in fact, Earthsight labelled mechanisms for the sale of timber 'fundamentally flawed and non-transparent' in 2018.35 Encouragingly, implementation of a new legislative and regulatory framework partially digitalised and opened up the forestry market, requiring electronic auctions for wood sales through ProZorro (an electronic system that enables open access to public procurement opportunities in Ukraine). These electronic auctions have, in the pilot phase, taken 25% of the wood

market out of the shadows,³⁶ though a resolution extending the pilot to the entire wood market has so far not been approved.

Less progress has been apparent in water protection. In June 2021, the Ministry of Environment published a draft "Strategy for the Development of Water Policy of Ukraine - Water Strategy of Ukraine", focused on meeting the economic needs of the population and industry. However, the strategy has not been adopted on the grounds of it failing to meet the formal requirements for this type of legislation.³⁷ While the Cabinet of Ministers' October 2021 'Strategy of Environmental Safety and Adaptation to Climate Change' set out intentions to improve the protection of water resources (for example, by reducing discharges of contaminated wastewater into water bodies),38 implementation has been interrupted as a result of the current conflict.

Finally, progress in waste management reform has been slow. A package of laws related to waste management were still being prepared for their second reading in February 2022, despite their first reading taking place in 2020. Unfortunately, these laws include some highly controversial provisions that may have detrimental impacts on environmental protection; for example, they exclude the scrap metal market.³⁹ Nonetheless, one successful measure in the sphere of waste management has been the adoption of the Law "On Restrictions on the Circulation of Plastic Bags in Ukraine" in 2021;⁴⁰ implementation of this law began with a ban on the free distribution of plastic bags in December 2021.

³³ Statistical Yearbook of Ukraine. 2020. http://ukrstat.gov.ua/druk/publicat/kat_u/2021/zb/11/Yearbook_2020_e.pdf

³⁴ https://open4business.com.ua/ukrainian-presidential-program-for-planting-1-bln-trees-in-ukraine-completed-by-3/

³⁵ https://www.earthsight.org.uk/media/download/784

https://e-tender.ua/news/rinok-derevini-chi-dopustit-vlada-monopolizaciyu-prodazhu-981

³⁷ http://epl.org.ua/announces/analiz-proyektu-vodnoyi-strategiyi-ukrayiny/

³⁸ https://zakon.rada.gov.ua/laws/show/1363-2021-%D1%80#Text

³⁹ https://www.epravda.com.ua/columns/2021/10/20/678894/

⁴⁰ http://epl.org.ua/announces/oglyad-progresu-provedennya-osnovnyh-ekologichnyh-reform-za-pershyj-rik-roboty-mindovkil-lya-ukrayiny/

Resilience in 2022

The state of reforms in the energy and environmental sectors during the war is a highly mixed picture. On the one hand, enhanced energy security resulting from diversified energy imports has been key to Ukraine's national resilience. Indeed, the integration of the electricity system with that of the EU has been significantly accelerated as a result of the Russian invasion. On the other hand, reforms in several important areas, including fossil fuel use and environmental protection, which were stalling before the war, were shelved or reversed once it broke out. Urgently addressing these once the war is over will be key to ensuring the sustainability of Ukraine's recovery.

Green Transition

Ukraine's green transition has been significantly undermined by the Russian invasion. Regarding legislation, the conflict interrupted the development of several ambitious new climate policies, including a framework law for the 'Low Emission Development Strategy of Ukraine until 2050', 41 as well as a new 'Energy Strategy until 2050'.

According to the Ukrainian Association of Renewable Energy, the war also threatened Ukraine's decarbonisation efforts through the total or partial physical destruction of renewable energy production facilities. The Association reports that, as of March 11th 2022, 47% of the installed capacity of renewable energy is located in areas where active hostilities are currently underway. For example, the Zaporizhia, Kherson, Mykolaiv and Odesa regions boast the greatest wind potential in Ukraine and are also focal points of the Russian attack. Some 89% of wind farms are in areas where fighting is taking place, and another 9% in close proximity. More than half of Ukraine's wind farms have already stopped operating, and cases of destruction of wind turbines, solar panels and power lines have been recorded.

High dependency on fossil fuels, including imported commodities and products, proved to be a source of vulnerability during the conflict. The fuel shortage in Ukraine—a result of Russian attacks on the Kremenchuk Refinery and a number of large oil depots, the blockade of sea routes and the suspension of supplies from Belarus—highlighted the insufficient level of decarbonisation of the energy sector, as well as Ukraine's continued dependence on imports of refined products. Rebuilding and further expanding low-carbon capacities and continued progress on decreasing carbon intensity will be critical for fuelling the post-conflict recovery while progressing towards the key climate objectives and targets outlined in Ukraine's Second Nationally Determined Contribution.

⁴¹ https://www.rnbo.gov.ua/ua/Ukazy/4856.html

⁴² https://uare.com.ua

Energy Reform

The Russian invasion put Ukraine's energy system under significant pressure. Critical infrastructure has been damaged, while the budget saw shortfalls amounting to €200m as, according to Ukraine's energy minister, 30% of households and 40-50% of enterprises did not pay their energy bills over the first months of the war.⁴³ At the same time, lack of reform in the coal industry placed additional pressure on Ukraine's strained budget, with the state continuing to subsidise unprofitable coal mines. Many mines suspended operations due to the hostilities; the majority of coal mines are located in the Donetsk and Luhansk regions and are now heavily affected by the conflict.

However, progress in energy reforms generally supported Ukraine's resilience during the war. The transition to imports of reverse-flow gas from Europe yielded positive results, as it shielded Ukraine from abrupt interruptions in gas supply. Similarly, diversification of nuclear fuel sources helped Ukraine's nuclear industry withstand the shock posed by the war and ensured the uninterrupted supply of electricity to the population. This was despite the Russian occupation of one of Ukraine's four nuclear power plants, Enerhodar (as well as, temporarily, the decommissioned Chernobyl facility). Ukraine's progress towards increasing energy efficiency also continued, with the Energy Efficiency Fund providing grants worth more than UAH180m (approximately US\$6m) to Ukrainian households over the first three months of the war.44

Most importantly, the war accelerated Ukraine's integration into the EU's single electricity

network, ENTSO-E. Initially, Ukraine was expected to join ENTSO-E by the end of 2022, after a series of isolated mode periods. Russia started the invasion hours after the state's energy system entered a planned three-day isolated mode. Given that Ukraine was not able to reconnect with Russia's energy system at the end of the trial, the European Commission launched emergency synchronisation, making Ukraine's power system part of ENTSO-E ahead of schedule.⁴⁵ Accelerated integration into the unified European electricity system constitutes a large leap towards energy independence from Russia and Belarus and grants the country's electricity producers access to European markets. In particular, initiation of electricity exports to Europe provided strong evidence of the resilience of the Ukrainian electricity sector, and its potential to contribute to European energy security in future.46

Environmental Protection

Unfortunately, the war has exacerbated deficiencies in environmental reforms in Ukraine. In fact, the conflict directly contributed to the degradation of natural resources and the pollution of the environment, threatening Ukraine's long-term sustainable development and the resilience of achievements made so far. The Ukrainian government worked to record environmental crimes committed by Russian troops in Ukraine. A digital resource has been created to inform the population about the quality of air and water, as well as the level of radiation in areas where relevant monitoring can be carried out.⁴⁷ The

https://forbes.ua/inside/defitsit-benzinu-obval-energorinku-ta-zupinka-tranzitu-rosiyskogo-gazu-yak-vse-tse-polagoditi-in-tervyu-ministra-energetiki-germana-galushchenka-14052022-6004?fbclid=lwAR3WD3emOnv8iTVMG0GtgQ-BPIWViT-VSiDZMZ6lcgnPdMNoEL7bVMimGcp4

⁴⁴ https://eefund.org.ua/za-period-dii-voennogo-stanu-fond-energoefektivnosti-kompensuvav-uchasnikam-programi-energo-

⁴⁵ https://www.epravda.com.ua/news/2022/03/16/684140

⁴⁶ https://ukranews.com/en/news/861811-entso-e-agrees-on-phased-expansion-of-ukrainian-electricity-exports-to-europe

⁴⁷ https://www.dw.com/uk/defitsyt-palnoho-v-ukraini-pid-chas-viiny-abo-koly-znyknut-cherhy-na-zapravkakh/a-61834974



public can also use the platform to submit and record information about potential threats to the environment. This resource, therefore, provides a quantitative assessment of the environmental consequences of the invasion, which will allow Ukraine to hold Russia to account in the future.

Despite the threat to environmental protection efforts posed by the war, the Ukrainian government continued its legislative work in this area. For instance, the government continued work on the draft law 'On the National Register of Emissions and Transfer of Pollutants',⁴⁸ which Ukraine was required to pass when it ratified

the Kyiv Protocol to the Aarhus Convention. This committed Ukraine to pursuing its environmental policy openly, interacting with citizens and involving them in the policymaking process. However, under the auspices of martial law, the Verkhovna Rada (Ukrainian Parliament) also introduced measures that may be detrimental to environmental protection, with the intention of supporting the state's defence capabilities and the rapid recovery of infrastructure. These include the partial suspension of the environmental tax⁴⁹ and the abolition of environmental impact assessment procedures for nominated activities.⁵⁰

⁴⁸ https://mepr.gov.ua/news/39191.html

⁴⁹ https://cms.law/en/ukr/publication/ukraine-tax-relief-measures-for-businesses-introduced-for-the-duration-of-martial-law

https://ecopolitic.com.ua/en/news/verhovna-rada-sprostila-ekologichne-zakonodavstvo-na-period-voiennogo-stanu-3/

Outlook

The Russian invasion threatened much of the progress Ukraine has made in its reforms of the energy and environmental sectors. It also diverted the government's attention from policy areas that had already been long neglected, such as environmental protection. However, Ukraine's post-war recovery will present an unprecedented opportunity, and ample incentives, to pursue a broad, ambitious reform agenda across these sectors. Expanding renewable energy production capacities and exploring hydrogen cooperation with the EU will bring the country closer to carbon neutrality. Encouraging energy-efficient reconstruction will bolster Ukraine's energy security and resilience in the face of possible future tensions with Russia and Belarus. Finally, initiatives to protect the environment, such as through reforms in forestry and waste management, will ensure that economic recovery is sustainable in the long term. Crucially, given likely constraints on public funds after the war, Ukraine's success in these reforms will be contingent on effective collaboration with the private sector, whose investment in Ukraine's recovery will be integral to its success. Attracting private investment will require innovative government policy, such as new approaches to encouraging public-private partnerships in green infrastructure projects.

Green Transition

The war in Ukraine and its consequences for the country's energy sector focused attention on the country's overreliance on fossil fuels. Now, more than ever, clear incentives exist to encourage the development of new, greener sources of energy. For instance, Ukraine could consider, in line with EU trends, exploring the role of hydrogen in decarbonising the economy.51 The EU's Hydrogen Strategy already notes that Ukraine is a priority partner in this area, given its high potential for producing low-carbon hydrogen.⁵² Indeed, as the initiation of electricity exports to the EU following ENTSO-E integration demonstrated,53 growth in the green hydrogen industry, through the framework of EU-Ukraine cooperation, has the potential to foster a new source of income for the Ukrainian economy.54

The production of large volumes of «green» hydrogen requires an increase in the share of renewables in electricity production and in the energy mix more broadly. Given the devastating effect of the Russian invasion on Ukrainian renewable energy production capacities, rebuilding these capacities will likely emerge as a key focus area of Ukraine's reconstruction effort. As well as restoring lost and damaged capacity,

bttps://www.energypartnership-ukraine.org/fileadmin/user_upload/ukraine/media_elements/Green_Hydrogen_in_Ukraine. pdf#:~:text=Green%20hydrogen%20is%20now%20a%20priority%20of%20Ukraine%E2%80%99s,and%20as%20such%20decarbonize%20the%20national%20energy%20system.

⁵² https://ec.europa.eu/energy/sites/ener/files/hydrogen_strategy.pdf

⁵³ https://ukranews.com/en/news/861811-entso-e-agrees-on-phased-expansion-of-ukrainian-electricity-exports-to-europe

https://ukraineinvest.gov.ua/news/06-06-22-2/

accelerated expansion of the renewable energy sector beyond what previously existed should also be prioritised. This will play a crucial role in ensuring the sustainability of Ukraine's economic development, as well as safeguarding its future energy independence and security. To this end, Ukraine must encourage private investment in increasing the storage capacity of the Ukrainian electricity grid—a key infrastructure enabler for renewable energy—through initiatives like public-private partnerships. The establishment of transparent market relations and fair competition in the renewable energy market will also create additional incentives for the development of renewable energy sources and bring Ukraine closer to the goal of carbon neutrality.

Post-war reconstruction will create an opportunity for Ukraine to prioritise tackling climate change, with more resources dedicated to the implementation of thus-far declarative objectives. In particular, Ukraine must make tangible progress towards achieving its ambitious Second Nationally Determined Contribution objectives. This will help the country to secure further international support and investment for the reconstruction effort by showcasing Ukraine's commitment to the global fight against climate change. In a similar vein, introducing an emissions trading system (ETS)—on which consultations were announced by the Ministry of Ecology and Natural Resources in December 2021—could constitute the first real step towards the decarbonisation of Ukrainian industry. This would promote a gradual transition from an environmental tax to the allocation of limited quotas to key industries (energy, metallurgy, chemistry, etc.), following the example of the European Union's ETS.

Energy Reform

Improving energy efficiency remains key to making Ukraine's post-war economy less energyintensive, more sustainable and more competitive in EU and international markets. Once the war is over, Ukraine can focus on accelerating progress towards long-standing efficiency goals. Strictly applying energy efficiency standards when reconstructing buildings affected by the war will help to reduce overall energy consumption. In fact, rebuilding from scratch will give Ukraine the opportunity to take much more ambitious strides in improving the energy efficiency of buildings: the structures destroyed by Russian forces have largely been relatively energy-inefficient, with most of them having been built at least four decades ago.55 By using the most energy-efficient building materials and construction methods, a large portion of infrastructure and housing stock can be rapidly modernised. Furthermore, the resumption and expansion of Ukraine's 'Warm Loans' programme could encourage Ukrainians to invest in the energy efficiency of their own households, such as through the purchase of efficient heating equipment.⁵⁶,⁵⁷ Such initiatives will help Ukraine to satisfy more of its energy demand through domestic production, contributing to Ukraine's energy security postconflict, and bolstering its resilience to potential renewed stress from Russia and Belarus.

Profound reform of the coal industry will help to alleviate the pressure on the state budget from subsidising loss-making coal mines. The reorganisation of state-owned enterprises, liquidation of loss-making mines and privatisation and modernisation of profitable coal mines will increase the sector's competitiveness and contribution to the economy. In fact, this process

⁵⁵ https://www.rand.org/blog/2022/04/rebuilding-ukraine.html

https://www.ukrinform.net/rubric-economy/3226668-more-than-2000-ukrainian-families-take-advantage-of-warm-loans-program-this-year.html

https://voxukraine.org/en/energy-efficiency-of-residential-buildings-there-are-successes-but-they-are-few/



has arguably already begun. Many outdated mines have been destroyed as a result of the war: some will need to close permanently, while those that can be rebuilt will naturally be modernised and developed to be less carbon-intensive. As set out in the Cabinet of Ministers' 2021 'Concept of the State Target Programme for Fair Transformation of Coal Regions up to 2030',58 these changes will need to be accompanied by measures to mitigate their adverse socio-economic impacts. These should include programmes to retrain coal mine staff and invest in the diversification of local economies. While coal is not a sustainable source of energy and Ukraine will undoubtedly seek

to reduce its role in its energy mix in the long term, the modernisation of profitable coal mines will also help Ukraine to safeguard its energy independence in the short- and medium-term.

Investment into oil refineries will similarly help Ukraine decrease its reliance on imports of refined oil products (from Russia and Belarus), thus preventing fuel shortages should imports come under stress in the future. Further diversification of the sources of nuclear fuel and significant investment into nuclear waste management will also help decrease the state's dependence on other countries and strengthen the industry's resilience to external shocks.

https://www.ukrinform.net/rubric-economy/3380501-two-projects-on-transformation-of-coal-regions-to-be-implement-ed-this-year.html#:~:text=As%20reported%2C%20on%20September%2022%2C%202021%2C%20the%20Cabinet,in%20 Volyn%2C%20Dnipropetrovsk%2C%20Luhansk%2C%20Donetsk%2C%20and%20Lviv%20regions.

Environmental Protection

Resumption of the waste management reform, stalled prior to the war, will play an important role in Ukraine's recovery. The war has exacerbated pre-existing problems with waste management: large amounts of damaged and destroyed military equipment are now scattered across the country in places where hostilities took place, along with construction waste from destroyed buildings. Ukraine's Law on Scrap Metal⁵⁹ does not prohibit selling scrap metal of military origin, and licensing for the collection and selling of scrap metal has long been abolished. Given the hazardous nature of military waste, amendments to the relevant legislation indicating that all such waste is the property of the state and outlawing its handling without permission will help prevent casualties. Construction waste, on the other hand, has the potential to be reused in the restoration of damaged structures and manufacture of building materials, an idea the Ukrainian government is already looking into, according to the Minister of Communities and Territories Development of Ukraine. 60 Initiatives to assure the safe storage and disposal of waste that is not suitable for reuse will be critical in minimising the environmental impacts of the war in the long term.

Finally, the expansion of Ukraine's forestry reform would, in the spirit of the fight against corruption, help to strengthen trust with Western partners contributing to Ukraine's reconstruction. Expanding the ProZorro timber sale system will minimise the risks of corruption and ensure equal access to all participants in the wood market, which boasts total annual sales of UAH12bn (approx. US\$410m).⁶¹

The war with Russia has threatened the progress of Ukraine's environmental and energy reform agenda. However, as was demonstrated by the Ukrainian electricity grid's recent integration with ENTSO-E, the appetite for continued reform remains. In fact, Ukraine's reconstruction effort will establish numerous incentives and opportunities for progress. Effective implementation of the reform agenda will ensure Ukraine's long-term sustainable development, as well as its resilience in the face of potential future stresses. In particular, tackling climate change, improving energy efficiency and protecting the environment will be critical in securing international support and investment—a crucial enabler of Ukraine's recovery from the current crisis.

⁵⁹ https://zakon.rada.gov.ua/laws/show/619-14#Text

https://www.facebook.com/oleksiy.chernyshov/posts/390985999698369

⁶¹ https://e-tender.ua/news/rinok-derevini-chi-dopustit-vlada-monopolizaciyu-prodazhu-981



Progress since 2014

Governance reforms are essential to strengthening the capacity, stability and democratic legitimacy of the Ukrainian state. To this end, the Ukrainian government has implemented a wide-ranging programme of reforms since 2014. This is particularly evident in digital transformation, through which the government has set out to improve the provision of digital public services and enhance cybersecurity. An ambitious decentralisation project also strengthened the powers of local authorities, with the establishment of a new administrative-territorial structure that served as the basis for all other sectoral reforms (including in education, healthcare and public finances). Crucially, Ukrainian policymakers also focused on anti-corruption and the rule of law, including through initiatives to establish new anti-corruption institutions, reform the judiciary and improve access to civil justice.



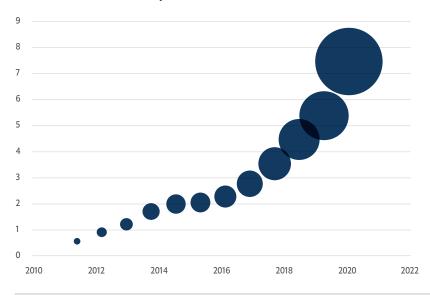
Digital Transformation

Ukraine's impressive progress in digital transformation was spearheaded by the Ministry of Digital Transformation, established in August 2019. Perhaps most notable amongst the Ministry's reforms is the standardisation and unification of eServices within a single efficient, user-facing digital ecosystem called Diia (State and Me). The Diia platform, which aims to bring all public services online by 2024, 1 already allows Ukrainians to register births, demonstrate their covid-19 vaccination status, apply for business permits and manage their taxes. By some measures, Ukraine outpaced the rest of the world in digital transformation—in April 2021, it became the first country where digital passports are considered legally equivalent to physical IDs. These successes are reflected in Ukraine's consistent improvement in the provision of digital public services, as measured by the United Nations' E-Government Development

Index. Ukraine's score on the index jumped by almost 0.1—a substantial amount—between 2018 and 2020,² reflecting the launch of the Diia app and web portal by the Ministry of Digital Transformation. Ukraine's rating on the United Nations E-Participation Index further reflects this ambitious programme of reform, almost doubling between 2014 and 2020.³

To ensure that all Ukrainian citizens are able to make the most of the nation's digital transformation, the government prioritised measures to improve access to the internet, particularly in rural areas. In July 2020, the Ministry of Digital Transformation announced a four-year programme to increase high-speed internet availability to cover 95% of Ukraine's population. ⁴ To this end, in partnership with internet service providers, the Ministry ran an 'internet subvention' programme to connect rural communities and social institutions (such as schools) to high-speed internet, ⁵ The government also sought to improve

Ukraine's ICT Services Exports (current US\$, billion)



- ¹ https://ukraineworld.org/articles/belarus/e-state-ukraine-and-digitalisation-reform
- ² United Nations E-Government Development Index.
- ³ United Nations E-Participation Index.
- 4 https://thedigital.gov.ua/ministry
- ⁵ https://www.ukrgate.com/eng/?p=20131

the population's digital literacy through digital education programmes. In 2019, a national digital education platform was created (Diia.Digital Education), hosting more than 75 different courses in an innovative learning format (edutainment), digital literacy tests and other teaching materials. As of November 25th 2021, more than 1 million people were using the platform.⁶ This initiative was also a significant success: in 2021, the share of Ukrainians with no digital skills shrank from 15.1% to 11.2%, while the share of those possessing basic and above digital skills reached 52.2% (5.2 percentage points higher than in 2019).⁷

Ukraine also made significant efforts to grow the size and competitiveness of its digital economy. Ukraine's ambitions in this regard were set out in a new legislative and regulatory framework, established through the laws "On Stimulating the Development of the Digital Economy in Ukraine",8 and "On amending the Tax Code of Ukraine to stimulate the development of the digital economy in Ukraine".9 Ukraine also adopted a Law on Virtual Assets¹⁰ to bring the virtual asset market out of the shadows and take steps to legally regulate the adoption of blockchain technology in public administration. Diia.City, launched in 2021, created a unique tax and legal space for IT companies in Ukraine, with benefits including low tax rates, flexible employment conditions for IT specialists, guarantees on IP rights protection and tools that facilitate access to investments. The

success of these measures is demonstrated by the extremely rapid growth in the value of Ukraine's ICT services exports, which more than tripled between 2014 and 2021.¹¹ It is also reflected in the increase in employment in the sector. In 2021, the estimated number of ICT specialists in Ukraine was around 220,000, twice the level five years previously.¹²,¹³

Access to open data (information that the general public can access, use and share) is key to increasing government transparency and accountability. It can also support the growth of innovative IT firms. EasyWay, for example, is a Ukrainian business that supplies information on public transport routes in Ukrainian cities, using open public data. 14 The Ukrainian government introduced a number of initiatives to make the most of open data's potential, including the launch of an open data portal in 2014 (estimated to receive between 110,000 and 115,000 unique monthly visitors) and the implementation of a certified training programme to educate civil servants about open data (which over 16,000 officials have completed).15 Ukraine's efforts to increase the accessibility and effective use of open data are reflected in a substantial improvement in its ranking on the European Commission's Open Data Maturity Index, having leapt from 17th place to 6th between 2020 and 2021.16 This places Ukraine in the index's 'trend-setter' cluster, meaning that it 'has an advanced

⁶ https://osvita.diia.gov.ua/en/news/1-000-000-ukrainciv-navcaetsa-na-diacifrova-osvita

Digital Literacy of the Population of Ukraine. Report on the Results of the National Survey, 2021. https://osvita.diia.gov.ua/uploads/0/2623-research_eng_2021.pdf

bttps://www.rada.gov.ua/en/news/News/212632.html#:~:text=Adopted%20the%20Law%20of%20Ukraine%20No.%204303%20%E2%80%9COn,services%20in%20Ukraine%27s%20total%20GDP%20to%2010%20percent.

⁹ https://tax.gov.ua/en/mass-media/news/546168.html

¹⁰ https://www.pwc.com/ua/en/publications/tax-and-legal-alert/2022/virtual-assets-market-in-Ukraine.html

¹¹ World Bank Data Bank. https://data.worldbank.org/indicator/BX.GSR.CCIS.CD?locations=UA

https://www.ukrinform.net/rubric-economy/3211616-ukraine-planning-to-increase-number-of-it-specialists-to-half-a-million-by-2024.html

https://clockwise.software/blog/outsource-software-development-to-ukraine/

¹⁴ https://www.eway.in.ua/en/cities/kyiv

https://data.europa.eu/sites/default/files/landscaping_insight_report_n7_2021.pdf

¹⁶ Ibid

open data policy in place with a strong coordination of open data activities throughout all levels of government'.

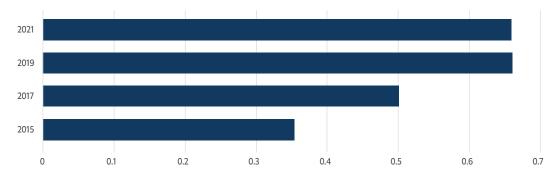
Given the ambitiousness of Ukraine's digital transformation programme, it is important that corresponding improvements are made in terms of cybersecurity. To this end, Ukraine established a National Coordination Centre for Cybersecurity in 2016, tasked with developing and implementing state policy on cybersecurity. To enhance the nation's capacity to counter cyberthreats, Ukraine collaborated with international partners, including the NATO Cyber Defence Trust Fund. This collaboration included cyber defence exercises with NATO partners to prepare for the event of a major cyber attack on national defence infrastructure.¹⁷ Ukraine's progress in this field is shown in the International Telecommunication Union's Global Cybersecurity Index, which recorded steady improvement in Ukraine's cybersecurity between 2015 and 2019.18 However, Ukraine's score on the index decreased between 2019 and 2021. This deterioration

reflects the major leaks of citizens' data from state entities that occurred in 2020, as well as vulnerabilities that were highlighted in Ukrainian cyber defence systems during escalating Russian cyber-attacks, 19 397,000 of which were recorded in 2020 alone. 20

Decentralisation and Public Administration

Ukraine's decentralisation programme has been a top priority for successive administrations since 2014, comprising a package of reforms to transfer power and resources to local authorities. A core component of this has been the establishment of amalgamated hromadas, formed through the voluntary merger of the pre-existing smaller communities. These new administrative units were given increased powers, resources, and responsibilities than their predecessors, with the intention of strengthening local self-government and improving the provision of public services. This programme has been a clear success:

International Telecommunication Union: Global Cybersecurity Index (0 to 1, 1 = good)



¹⁷ https://thegfce.org/cybersecurity-in-ukraine-national-strategy-and-international-cooperation/

International Telecommunications Union: Global Cybersecurity Index. https://www.itu.int/en/ITU-D/Cybersecurity/Pages/global-cybersecurity-index.aspx

¹⁹ https://iwpr.net/global-voices/cyberattacks-undermine-ukraines-security

https://www.theguardian.com/world/2022/jan/14/ukraine-massive-cyber-attack-government-websites-suspected-rus-sian-hackers

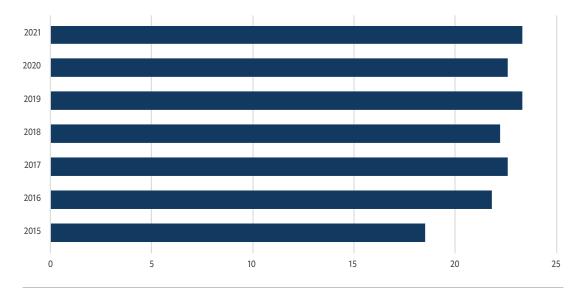
the number of people living in amalgamated hromadas grew from 1.4 million in 2015 to 11.3 million in 2019,²¹ representing significant growth in the number of communities willing to take part in the decentralisation process. In 2020, the administrative reform was fully realised and nationwide local elections were conducted in all hromadas, except those located in the temporarily-occupied territories in Donetsk and Luhansk oblasts, and Crimea.

Another key part of Ukraine's decentralisation reform has been fiscal decentralisation, whereby local budgets were assigned part of state taxes with the aim of incentivising budget equalisation, expanding the base of local budget revenues, improving budget policy and strengthening the budgetary autonomy of local self-governments. These changes in funding were also designed to account for the transfer of competencies to local

governments, which included competencies in healthcare, education and the emergency services. The success of this fiscal decentralisation reform is demonstrated in the degree of funding that has transferred to local budgets. From 2015 to 2019 the share of local budget revenues in the consolidated budget of Ukraine grew steadily, before plateauing at around 23.3%.²² In turn, this resulted in growing levels of public confidence in, and satisfaction with, the performance of local authorities, as evidenced by the results of the 2021 edition of the International Republican Institute's annual municipal survey of Ukraine.²³

Regarding Ukraine's public administration, the state implemented an extensive programme of civil service reforms since 2014. A new, pro-European civil service law came into force in May 2016,²⁴ and was followed by a number of measures designed to increase the efficiency and effectiveness

Share of local budget revenues (excluding inter-budget transfers) in the consolidated budget of Ukraine %



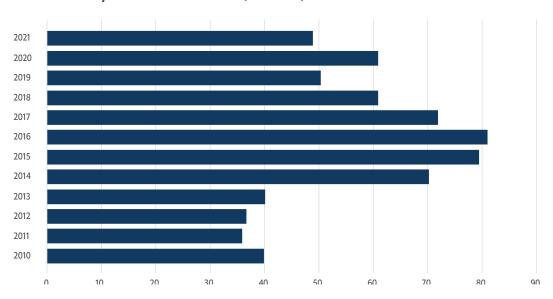
²¹ Ministry of Communities and Territories Development of Ukraine. https://decentralization.gov.ua/uploads/library/

²² Ministry of Communities and Territories Development of Ukraine. https://decentralization.gov.ua/uploads/library/ file/800/10.01.2022.pdf

²³ https://www.iri.org/resources/annual-municipal-survey-of-ukraine-reveals-satisfaction-with-local-governments/

https://www.globalgovernmentforum.com/ukraine-launches-civil-service-reform-programme/

Ukraine Ministry of Finance: Public debt (% of GDP)



of the civil service. To remedy government officials' concerns about structural instability and unfairness in the management of the civil service, reforms were enacted to protect civil servants from unfair dismissal, as well as safeguard their political impartiality.²⁵ A single portal for recruitment (career.gov.ua) was set up to ensure competitive, merit-based recruitment for all civil service positions. Furthermore, to incentivise a higher quality of performance amongst civil servants, government salaries were increased to improve their competitiveness compared to the private sector.²⁶ However, significant problems remain, including a lack of common rules or criteria for public policy implementation, and an obscure salary structure that leads to unjustified imbalances in remuneration between civil servants.²⁷ Ukraine's 'Strategy for Public Administration Reform until 2025'28 seeks to

complete the reform of the civil service by remedying these issues, including through further reform of civil servant remuneration.

One of the key challenges Ukraine's government faced post-2014 was the management of its finances, particularly its public debt. In response, the government made improvements to the management of public finances, including a 2015 debt restructuring, the introduction of 3-year budget planning and the adoption of a more prudent fiscal policy under the guidance of the International Monetary Fund (IMF). These measures have been a tangible success, as reflected in Ukraine's public debt as a percentage of GDP. Having risen steadily from 2014 to 2016 (from 70.2 to 81.0%), it was brought back under control, standing at 48.9% of GDP in 2021.²⁹

²⁵ https://neweasterneurope.eu/2018/05/17/reforming-civil-service-ukraine-salaries-core-issue/

²⁶ Ibid

²⁷ https://www.kmu.gov.ua/storage/app/sites/1/reform%20office/01_strategy_eng.pdf

https://www.kmu.gov.ua/en/news/uryad-zatverdiv-strategiyu-reformuvannya-derzhavnogo-upravlinnya-ukrayini-do-2025-roku?=print

²⁹ Ministry of Finance of Ukraine: Public Debt (% GDP). https://index.minfin.com.ua/finance/debtgov/

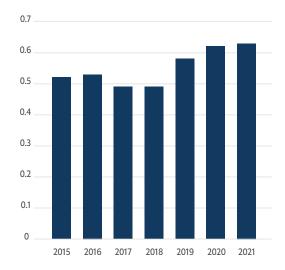
Rule of Law and Anti-Corruption

As one of the most significant challenges impeding Ukraine's development, corruption has been a major issue of concern for successive Ukrainian governments. The anti-corruption agenda has been promoted through a number of newly established institutions, including the National Agency for Prevention of Corruption, responsible for corruption prevention, and the National Anti-Corruption Bureau (NABU) which is responsible for pre-trial investigations of corruption. The Specialised Anti-Corruption Prosecutor's Office (SAPO) was established to uphold public prosecution in criminal proceedings investigated by the NABU, while the Higher Anti-Corruption Court was set up in 2019 as a permanent, specialist court dealing with high-level corruption offences investigated by the NABU. Finally, the Asset Recovery and Management Agency was created to trace and locate assets that have been illegally withdrawn from Ukraine, as a result of corruption or other crimes.

The establishment of Ukraine's anti-corruption infrastructure was reflected in international assessments of anti-corruption efforts. For instance, Transparency International's Corruption Perception Index records mostly consistent improvements in perceptions of corruption from 2014 to 2021.³⁰ However, Ukraine's gains have been relatively small, and the country continues to lag behind neighbours, including Belarus, Moldova and Romania. This may be a result of consistent attempts to weaken the independence and capacity of anti-corruption institutions. For example, the SAPO has been left without a head since August 2020, thus eroding the effectiveness of criminal investigations into corruption.³¹

Another key component of Ukraine's reform programme has been reform of the judiciary. Progress in this area has been mixed. While the launch of judicial reforms by the Verkhovna Rada (parliament) in 2016 (including the adoption of the Law «On the Judiciary and the Status of Judges»)32 was a welcome development, the implementation of these reforms has been lacking. In particular, persistent deficiencies in the bodies tasked with governing and reforming the judiciary, including the High Qualification Commission of Judges (HQC) and the High Council of Justice (HCJ), have slowed progress.³³ This is reflected in international assessments, such as Freedom House's 'Nations in Transit' report, in which Ukraine has stagnated with respect to assessments of reforms of the judicial framework.34 However, the adoption of two presidential bills in 2021, which provide for reform of the HQC and HCJ with the involvement

World Justice Project, Rule of Law Index (0 to 1, 1 = good)



³⁰ Transparency International: Corruptions Perceptions Index.https://www.transparency.org/en/cpi/2021

³¹ https://ti-ukraine.org/en/blogs/long-awaited-head-of-sapo/

³² http://judges.org.ua/eng/article/law.htm

https://voxukraine.org/en/the-reform-index-166-judicial-reform-and-the-digital-economy/

³⁴ Freedom House: Nations In Transit. https://freedomhouse.org/country/ukraine/nations-transit/2022

of independent, international experts, bodes well for progress after the war, once the reform programme is resumed.³⁵

Most encouragingly, Ukraine saw significant improvements in the accessibility and affordability of civil justice. The Ministry of Justice's establishment of a 'Supervisory Board of the Coordination Centre for Legal Aid Provision'

in August 2019 was largely successful.³⁶ This board is tasked with ensuring the effective provision of free legal aid in Ukraine, which is a cornerstone of an accessible and affordable civil justice system. Achievements in this area were reflected in Ukraine's consistent year-on-year improvements in the accessibility and affordability metric of the World Justice Project's Rule of Law Index.³⁷



³⁵ https://www.ukrinform.net/rubric-polytics/3360795-ukraine-set-to-complete-judicial-reform-zelensky.html

 $^{^{36}\} http://qala.org.ua/wp-content/uploads/2019/09/BAR-Eng_FINAL.pdf$

³⁷ World Justice Project: Rule of Law Index.https://worldjusticeproject.org/rule-of-law-index/country/2017-18/Ukraine/Civil%20 Justice/

Resilience in 2022

Digital Transformation

Since the advent of the full-scale Russian invasion, the Diia platform exhibited remarkable success in ensuring the continuity of its operations. It even managed to launch a number of new services, which include fundraising (enabling donations to the charitable fund «Come back alive», as well as gathering funds through the President of Ukraine's UNITED24 platform), a portal for filing reports on damaged and destroyed property and a portal for registering internally displaced person status. The Ministry of Digital Transformation also set up eVorog (eEnemy), a chat bot on the Telegram messenger service, through which Ukrainians can report the movement of Russian occupants.38 Crucially, Diia.City continued to generate capital inflows into the country and contribute to the digital sector's growth: despite the Russian invasion, 205 IT companies applied for (and obtained) residency status in Diia. City as of April 27th 2022.39

The continued operation of Ukraine's digital infrastructure also reflects its resilience in the face of ongoing Russian cyber attacks, which, while damaging, have been less disruptive than

feared.⁴⁰ For example, while hackers succeeded in shutting down some of the satellite links provided by Viasat (an American firm) to the Ukrainian armed forces on the day of the Russian invasion, the response of Ukraine's cybersecurity apparatus proved highly effective, limiting the cyber attack's impact on the ground.41 Ukraine's active cooperation with the private sector also facilitated continuity of connectivity and infrastructure. This included the Ministry of Digital Transformation's cooperation with Elon Musk in establishing internet connectivity via Starlink⁴² satellites, as well as collaboration with Ukrainian mobile phone operators to provide free national roaming within Ukraine (such that customers can seamlessly switch between operators).43

Historic enhancements to Ukraine's telecommunications network and improvements in the accessibility of the internet proved critical to Ukraine's resilience during the war. While digital infrastructure— particularly broadband networks—suffered significant damage by the Russian military during the current conflict, overall connectivity remained relatively strong. ⁴⁴ This connectivity has been critical in supporting the military, general public and internally displaced persons during a period of unprecedented stress.

³⁸ https://t.me/evorog_bot

³⁹ https://dou.ua/lenta/news/205-residents-of-diia-city/

⁴⁰ https://www.economist.com/science-and-technology/2022/03/26/the-degrading-treatment-of-ukraines-internet

⁴¹ https://www.bbc.co.uk/news/technology-60796079

⁴² https://www.politico.eu/article/elon-musk-ukraine-starlink/

https://visitukraine.today/blog/163/ukrainian-mobile-operators-launch-national-roaming

⁴⁴ https://www.economist.com/science-and-technology/2022/03/26/the-degrading-treatment-of-ukraines-internet



Decentralisation and Public Administration

The current conflict has highlighted the substantial improvement in the capacity of local communities since the onset of Russian aggression in 2014. The ability of local communities to organise and mobilise resistance has been particularly evident, with community budgets becoming a significant source of funding for the military and for assisting internally displaced people.

Local communities in occupied territories also demonstrated successes in ensuring the continuous provision of public utilities and secondary education under Ukrainian curricula, despite significant pressure from Russian occupying forces. The unified and digitised

treasury system assisted with these efforts, as it allows for the payment of salaries and social programmes even in occupied territories. For example, Yana Litvinova—mayor of Starobilsk in Luhansk oblast—explained in a Facebook post on March 5th that the local authority was managing to continue social payments to citizens despite the Russian occupation. 45

However, the war exacerbated instances of incomplete reform. A number of local communities proved to be institutionally and financially incapable of providing communal and social services during the conflict. Furthermore, the overlap of powers between regional and district state administrations created problems, especially in districts where coordination between different territorial bodies and agencies is still weak.

⁴⁵ https://www.facebook.com/YanaLitvinovaMayor

Overall, the way the country has been governed during the war has sometimes run counter to the principles of decentralisation: for example, when central authorities adopted regulations related to local tax and fee exemptions (previously the prerogative of local councils). Similarly, under the terms of martial law, the powers of local councils have been limited and superseded by higher level public bodies and officials. Although these measures are likely necessary in the context of the war, it is critical that they do not become the norm once the war is over.

Rule of Law and Anti-Corruption

Anti-corruption reforms have made the Ukrainian system of government procurement more efficient and transparent. This proved particularly important in the realm of defence. Nadiya Bigun—who became head of procurement at Ukroboronprom, Ukraine's state-owned defence conglomerate, in 2019—enacted sweeping reforms of Ukraine's defence procurement, which had previously been highly opaque. These included announcing all government tenders on ProZorro (an electronic system that enables open access to public procurement opportunities in Ukraine), apart from those that constitute an immediate national security issue, as well as centralising procurement for goods including electricity, heating and diesel fuel. As well as saving Ukroboronprom over UAH1bn (around US\$40m) in under two years, these reforms also ensured that military spending was targeted towards purchases of the most effective equipment and arms.46 The corresponding impact on the financial resilience and operational effectiveness of the Ukrainian military during the current conflict should not go understated.

Given instances of embezzlement of humanitarian aid that have been reported in recent months (such as by BBC News Ukraine),⁴⁷ renewed efforts to eradicate corruption within the Ukrainian military and logistics infrastructure played an important role in securing continued support from international allies. For example, on May 23rd a telegram chatbot named 'Stop Ostap' was set up to identify fraudulent activities taking advantage of the influx of aid and charity.⁴⁸ Furthermore, to assure Western partners that their support would be utilised with transparency and integrity, each delivery of military aid has been supervised by an independent intelligence officer from the Ukrainian Security Service.49 Given the critical role played by international funding and military aid in supporting Ukraine's resistance, the necessity of maintaining focus on anti-corruption efforts within Ukrainian institutions is clear.

Unfortunately, deficiencies in the judicial system continue to pose a challenge, and negatively impacted Ukraine's resilience during the war. A lack of progress in reforming key self-regulation bodies (namely, the High Council of Justice and High Qualification Commission of Judges), an inadequate judicial oversight system and the unenforceability of many court decisions (as highlighted by the European Court of Human Rights in the case 'Burmych and Others v. Ukraine')50 contributed to a corrosive lack of trust in the judiciary. It is vital that this is addressed to ensure public confidence in the courts' ability to pass judgements fairly and effectively on investigations of corruption related to the conflict, such as those concerning humanitarian aid.

⁴⁶ https://www.open-contracting.org/2021/12/08/armed-with-open-data-how-ukraine-saved-billions-on-defence-procurement/

⁴⁷ https://www.bbc.com/ukrainian/features-61584802

⁴⁸ https://www.bbc.com/ukrainian/features-61584802Ibid.

⁴⁹ https://www.voanews.com/a/ukraine-s-anti-corruption-campaigners-see-no-misuse-of-western-military-aid/6587614.html

⁵⁰ https://www.coe.int/en/web/execution/-/burmych-and-others-v-ukraine

Outlook

Ukraine has made significant progress in reforming governance, which enabled state institutions to maintain operations despite the systemic shock caused by the Russian invasion. Nevertheless, endemic corruption is yet to be eradicated, judicial reforms remain incomplete and some of Ukraine's progress in promoting local governance has been reversed under the terms of martial law. It is vital for Ukraine's long-term prosperity and stability that these challenges are addressed, with the foundations laid for a governance structure that is emphatically modern, transparent and democratic. Ukraine should also seek to build on its success in digital transformation, which has the potential to become an enabler of reforms across sectors. A solid foundation for the realisation of this ambition already exists, given Ukraine's existing network of Chief Digital Transformation Officers across all line ministries and regional administrations.

Digital Transformation

Given the extent of the damage to internet and telecommunications infrastructure inflicted by Russia, there will be an immediate need post-conflict to restore mobile and fixed broadband coverage across the country. Growth in access to high-speed internet should also be facilitated through the launch of 5G infrastructure. The wealth of digital public services available through the Diia platform must also be migrated onto the Diia mobile app to make them more accessible,

given the high usage of mobile phones in Ukraine. Crucially, to ensure Ukrainian society's future resilience against threats, an important priority will be to increase the promotion of digital education materials on disinformation, fact-checking, cyber hygiene and general media literacy. To increase their reach, these should also be integrated into the standard school curriculum.

Diia.City will provide a solid foundation for future growth of Ukraine's digital industry. To make the most of this opportunity, Diia. City should work to support the development of a broader tech ecosystem, which will require new digital payment systems, cloud data centres and cybersecurity infrastructure. The government should also explore the potential of the virtual asset market (including digital coins and non-fungible tokens), which has the potential to become a high-growth component of Ukraine's digital economy.⁵¹ Importantly, this will require the implementation of rigorous financial monitoring procedures to prevent anti-money laundering. Ukraine should also continue to pursue integration into the EU Digital Single Market. This will reduce barriers to EU-Ukraine digital trade, thereby accelerating the growth of Ukraine's digital economy. To do so, Ukraine must continue the systematic implementation of the Roadmap on Ukraine's integration into the EU Digital Single Market. This will require harmonisation of Ukraine's regulations on issues such as e-commerce, protection of intellectual property rights, protection of personal data and e-payment systems.52

https://www.kmu.gov.ua/en/news/parlament-uhvaliv-zakon-pro-virtualni-aktivi-zgidno-z-propoziciyami-prezidenta?=print

 $^{^{52}\} https://freepolicybriefs.org/2021/02/15/ukraines-integration-single-market/$

Decentralisation and Public Administration

The decentralisation programme has been one of the success stories of Ukraine's governance reform efforts. Local governments and communities have played a vital role in the resistance against the Russian invasion across the country. They will also have a vital role to play in Ukraine's post-conflict recovery. The immediate postwar priority will be to rebuild critical public infrastructure and services under the jurisdictions of the local self-governments. This will require significant allocation of funding to local budgets to remedy their exhausted finances. It is also essential that pre-war democratic governance processes are restored across the board, reversing the temporary measures implemented under martial law. Furthermore, it is essential that the final decentralisation reforms are completed in line with the government's initial commitments. These include the separation of powers between the state and local self-governments by defining them in the Budget Code, the reform of local state administrations and the formalisation of procedures for supervision over the legality of acts of local self-government.

Rule of Law and Anti-Corruption

Despite some tangible progress, significant improvements are needed to tackle the systemic corruption that continues to pervade Ukraine governance and society. Success in this regard

will be key to encouraging foreign investment in Ukraine's recovery, as well as to building Ukrainians' trust in public institutions. Both of these will be necessary to ensure the long-term prosperity and political stability of the country. To this end, the government should complete planned anti-corruption legislation, strengthen the independence of reformed anti-corruption institutions and ensure that a new head of the SAPO is appointed as soon as possible. Furthermore, robust anti-corruption processes will need to be established for the handling of humanitarian aid, the National Recovery Fund and funds for compensations and reparations. This will ensure that much-needed capital for Ukraine's recovery will be allocated fairly and efficiently.

Finally, the post-conflict recovery will necessitate the investigation of various crimes committed during and in the aftermath of the conflict. These have the potential to include international war crimes. It is critical that these processes are set up in a transparent and constitutional manner, and are designed in a collaborative way with key domestic and international actors. To facilitate the investigation of these crimes, completion of planned reforms of the judicial system should be among the government's top priorities. To this end, increasing the professionalism and integrity of judges (including through planned reforms of the High Council of Justice and High Qualification Commission of Judges), improving the judicial oversight system and increasing the effectiveness and efficiency of judicial proceedings will all be essential.



Progress since 2014

Social policy reforms are critical to developing a prosperous, democratic and open society in Ukraine. To this end, successive administrations have enacted reforms across healthcare, education and human rights, albeit with varying degrees of success. This is particularly evident in health reforms, through which the government set out to improve access, affordability and preventive healthcare. Reforms to the education system, meanwhile, included efforts to modernise the curriculum, increase the autonomy of educational institutions and extend the uptake of vocational education and training. Finally, progress in the protection of human rights, such as through initiatives to safeguard freedom of the media, played a key role in enshrining the status of democratic and pluralistic values in Ukrainian society. However, many challenges remain, and continued progress in social policy reforms will be critical to Ukraine's post-conflict recovery.



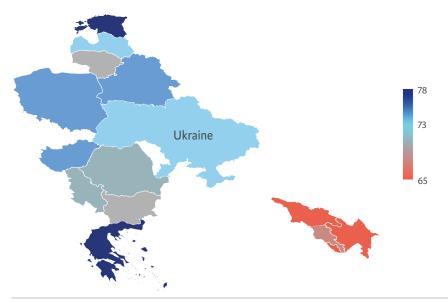
Health

Ukraine's healthcare reform programme was launched in 2015, with the publication of the 'National Health Reform Strategy for Ukraine 2015-2020'.1 This strategy document set out the government's ambitions for the health system, including initiatives to remedy Ukraine's low life expectancy (compared with other European nations), reduce the level of private expenditure on health and strengthen the role played by primary care. The EU-Ukraine Association Agreement placed additional requirements for reform; for example, with respect to infectious disease surveillance, integration of earlywarning notification systems within the EU and tackling the prevalence of risk factors for noncommunicable diseases (especially tobacco, alcohol and road accidents).

Ensuring that healthcare is affordable is a major priority for any healthcare system. However, high levels of private expenditure on healthcare—

particularly on medicines—have been especially concerning in Ukraine,² given their potentially catastrophic impacts on the physical and financial health of Ukrainian citizens. These high levels of household spending principally arose as a result of systemic financial inefficiencies in the healthcare sector and the high cost of pharmaceutical products. As such, the government instituted a number of reforms to remedy these issues. For example, the National Health Service of Ukraine (NHSU) was set up in 2017 to administer funds allocated for financing health services, with the goal of improving the efficiency with which healthcare funds are used.3 In addition, Ukraine adopted a 'Programme of Medical Guarantees', which defined the basic benefits package that all Ukrainian citizens would be entitled to, including emergency care, primary care, childbirth services and palliative care.4 Under this system, the NHSU was made responsible for contracting public and private medical providers to deliver the medical services





- https://healthsag.org.ua/wp-content/uploads/2015/03/Strategiya_Engl_for_inet.pdf
- ² ibid
- $^3\ \ https://ukraineworld.org/articles/reforms/new-ukrainian-health-sare-system-scratch-successful-changes$
- https://documents1.worldbank.org/curated/en/704581639720587025/pdf/Ukraine-Health-Financing-Reform-Progress-and-Future-Directions-Overview.pdf

provided under the programme. This helped to reduce the fragmentation of health financing and created a more-effective mechanism for ensuring that medical services covered by the programme would be provided for free.⁵ The programme is due to grow further, as more specialised services are absorbed into it. In tandem with these reforms, the government introduced an 'Affordable Medicines Programme' in 2017, to reduce household spending on medicines for asthma, cardiovascular diseases, and type 2 diabetes, through the provision of free medicines for these diseases.⁶ Unfortunately, according to data from the World Health Organisation (WHO), these reforms are yet to improve the overall affordability of healthcare: in 2019, 8.3% of Ukrainians were still spending more than 10.0% of their total household budget on healthcare.7 While it will likely take time for these wide-ranging reforms to fully bear fruit, their ambitiousness promises meaningful improvements in healthcare affordability in the future.

Reforms also sought to improve the quality of care provided by the Ukrainian healthcare system. For example, decentralisation reforms initiated in 2017 aimed to enhance the role played by local governments, given their more intimate understanding of the healthcare needs of their populations than the central government. To this end, hospital districts were created as the basic geographical unit of the healthcare system, to be loosely governed by hospital councils comprising representatives from

local authorities, the medical establishment and other stakeholders.8 Primary care provision was strengthened through the introduction of a 'family doctor' system, which gave patients the right to choose their primary care provider—previously they were obliged to obtain free primary care from a designated site based on their registered address.9 As the salary of family doctors is tied to the number of patients who register with them, this reform created strong incentives for primary care providers to offer a higher-quality service. Digital technologies were also deployed to improve the quality of healthcare provision; for example, through the use of e-referral systems for patients requiring non-emergency specialised care, as well as digital covid-19 certificates in the government's Diia application.10 Encouragingly, the net effect of these reforms appears to have been a slow but consistent improvement in healthcare outcomes in Ukraine. For example, while life expectancy in Ukraine still lags behind many of its European neighbours, it has increased by almost two years since 2014 (from 70.29 to 71.96, according to the US Bureau of Census).11 Furthermore, while Ukraine's infant mortality rate (7.44 per 1,000 live births in 2021) is higher than in neighbouring Romania (6% in 2020) and Poland (4.33% in 2020), it is lower than it was in 2014 (8.29%), and significantly lower than in 1991 (13.7%).¹² These positive trends have arisen despite a decline in the number of medical practitioners, which fell by roughly 6,000 from 2014 to 2020 (to 180,000).13

https://documents1.worldbank.org/curated/en/704581639720587025/pdf/Ukraine-Health-Financing-Reform-Progress-and-Future-Directions-Overview.pdf

⁶ https://en.moz.gov.ua/affordable-medicines

⁷ https://www.who.int/data/gho/data/indicators/indicator-details/GHO/population-with-household-expenditures-on-health-greater-than-10-of-total-household-expenditure-or-income-(sdg-3-8-2)-(-)

⁸ https://uacrisis.org/en/52744-gospitalni-okrugy

⁹ https://ukraineworld.org/articles/reforms/new-ukrainian-health-sare-system-scratch-successful-changes

https://www.kmu.gov.ua/en/news/ukrayinski-covid-sertifikati-v-diyi-oficijno-viznani-yes

¹¹ UN Population Data

¹² US Bureau of Census

 $^{^{13}\} Statistical\ Yearbook\ of\ Ukraine\ http://ukrstat.gov.ua/druk/publicat/kat_u/2021/zb/11/Yearbook_2020_e.pdf$

Public health and preventive healthcare constitutes the backbone of a successful healthcare system. For Ukraine, which has historically featured among Europe's weakest performers in terms of child immunisation, this is particularly pertinent. Thanks to significant investment, Ukraine has seen huge improvements in coverage of a number of essential vaccinations since 2014, including those against measles, tuberculosis and polio.14 While a latest polio vaccination campaign, due to start on 1 February 2022, has been interrupted, the government's commitment to tackling immunisation bodes well for the future of public health in Ukraine. Furthermore, to improve the quality of preventive healthcare in Ukraine, the government sought to address a number of risk factors responsible for poor health outcomes. This is essential to reduce the burden of disease amongst the Ukrainian population, as well as reduce pressure on the national healthcare system in the long term. For example, a new tobacco control law signed in January 2022 will ban the use of tobacco products in all enclosed public spaces.15

The Covid-19 pandemic tested the resilience of Ukraine's healthcare system. The government's pandemic response began with the approval of the 'Covid-19 National Action Plan' on February 3rd 2020, which made the Chief State Sanitary Doctor responsible for intersectoral coordination within the government. The National Action Plan also laid the groundwork for the design of regional pandemic response strategies, the development of standard medical interventions against the virus and the procurement of necessary medical and diagnostic equipment. These initiatives, supported

by reforms to strengthen the accessibility and quality of healthcare, helped to prevent the Ukrainian health system's collapse under the pressures of the pandemic.¹⁷ In fact, in September 2020, the World Health Organisation paid tribute to the power of Ukraine's healthcare reforms in supporting the nation's pandemic response, reporting that "the transformation of health services to ensure that patients can be tested and treated for Covid-19 free of charge is just one of the many positive steps the Ukraine Government has taken. It demonstrates the Government's commitment to Universal Health Coverage".¹⁸

Education

Reforms to Ukraine's system of compulsory education began from a relatively strong starting point, with Ukraine performing well compared to many of its peers. This strength was recognised in the OECD's Programme for International Student Assessment (PISA) index. With a score of 462.7 in 2018, Ukraine outranked a number European Union members, including Romania (428), Bulgaria (426.7) and Greece (453.3).19 Nevertheless, academic corruption, outdated curricula and underpaid teachers presented a major challenge to the quality of compulsory education provided to Ukrainian schoolchildren. As such, a number of government reforms sought to remedy these problems, including the adoption of a new Law on Education in 2017 and the development of 'The New Ukrainian School' programme.²⁰ These reforms devolved responsibility for education to local governments, expanded the autonomy of educational

¹⁴ https://immunizationdata.who.int/pages/profiles/ukr.html

¹⁵ https://untobaccocontrol.org/impldb/ukraine-new-tobacco-control-law-adopted/

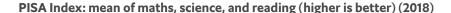
https://eurohealthobservatory.who.int/publications/i/health-systems-in-action-ukraine

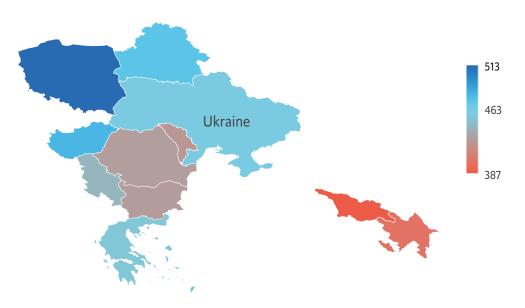
⁷ ibid.

https://www.who.int/news-room/feature-stories/detail/ukraine-working-towards-universal-health-coverage-while-responding-to-covid-19

¹⁹ https://www.oecd.org/pisa/publications/PISA2018_CN_UKR.pdf

https://mon.gov.ua/eng/tag/nova-ukrainska-shkola





institutions and modernised the content of compulsory education. This helped to establish a de-bureaucratised, modern compulsory education system that will more effectively equip Ukrainian schoolchildren with the skills and competencies necessary to thrive in the 21st Century.

The Covid-19 pandemic tested the resilience of Ukraine's system of compulsory education, interrupting students' learning process, impeding social development and interfering with the accurate assessment of learning outcomes. This challenge was compounded by deficiencies in the digital literacy of teachers and parents, who were unprepared for facilitating homeschooling online, and a widespread lack of proper equipment. Despite these challenges, the education system's response to the pandemic was impressive. The All-Ukrainian Online School, set up by the Ministry of Education and Science, established a national e-platform for distance and blended learning for students from grades

5 to 11.²¹ It hosted video lessons, tests and materials for independent work in 18 different subjects. The platform also provided pedagogical support for teachers, with a number of e-courses designed to help improve their digital literacy.

Higher education reforms, guided by the Bologna Process (that Ukraine joined in 2005) and the 2014 Law on Higher Education,²² aimed to integrate Ukraine's universities into the European and global educational community. In particular, reforms sought to encourage the development of innovative research, reduce corruption in higher education institutions, improve the quality of education provided to students and introduce transparent and competitive conditions for entry to universities. The Ukrainian parliament legislated for a package of measures to achieve these goals in 2017. These measures increased student involvement in the governance of universities, improved the transparency of universities' finances, enforced term limits for university deans

https://www.kmu.gov.ua/en/news/za-pershij-misyac-roboti-platformoyu-vseukrayinska-shkola-onlajn-skoristalisya-maizhe-5-mln-raziv

https://www.ilo.org/dyn/natlex/natlex4.detail?p_isn=105562



and presidents, introduced higher penalties for plagiarism and created a new performance-based system for university financing.²³ Crucially, building on a reform initiated in 2014, they also promoted greater academic autonomy, ensuring that universities could operate free from political influence. Nevertheless, despite these wideranging successes, significant challenges remain, particularly in aligning university curricula with the labour market, encouraging independent and digital assessments, and ensuring integrity and equality of access.

Technical and vocational education and training (TVET) is crucial to ensure that the skills of the workforce are well aligned to the needs of the labour market, with corresponding impacts on employment rates and productivity. Unfortunately, unlike compulsory education,

progress in TVET reforms has been relatively lacking. The TVET reform programme was launched in 2020, with the publication of the 'Concept of Modern Vocational Education 2027'.24 This aimed to restructure the TVET system in Ukraine, with the goal of modernising curricula and increasing the number of students enrolling in TVET. To this end, a work-based dual training system (similar to that which exists in Germany) was recently introduced to attract more prospective students by offering educational programmes that consist of 30% theoretical instruction and 70% practical training.25 Unfortunately, despite this reform agenda, TVET remains unpopular amongst young Ukrainians. In fact, while 182,000 Ukrainians graduated from TVET institutions in 2014, this figure dropped to just 112,400 in 2021.26

²³ https://wenr.wes.org/2019/06/education-in-ukraine

²⁴ https://www.kmu.gov.ua/en/reformi/rozvitok-lyudskogo-kapitalu/reforma-osviti

²⁵ https://wenr.wes.org/2019/06/education-in-ukraine

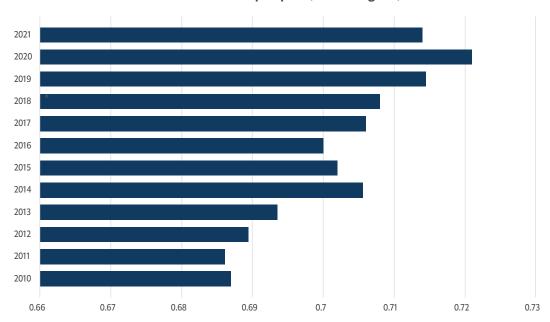
²⁶ State Statistics Service of Ukraine. https://view.officeapps.live.com/op/view.aspx?src=http%3A%2F%2Fwww.ukrstat.gov.ua%2Foperativ%2Foperativ2022%2Fosv%2Fosv_rik%2Fzpto_90_21_ue.xlsx&wdOrigin=BROWSELINK

Human Rights

Safeguarding Ukrainian citizens' human rights and civil liberties is key to the nation's development as a modern, democratic state. In particular, Ukraine made significant progress in assuring the development of a vibrant civil society, which enjoyed increasing freedom to criticise the government and vested political interests. Encouraging reforms included the cancellation of a requirement for anti-corruption activists to submit asset declarations, which opponents argued unjustly interfered with their ability to carry out their work.²⁷ In fact, the 2020 edition of the Civil Society Organisation(CSO) Sustainability Index for Central and Eastern Europe and Eurasia argued that non-government organisations (NGOs) in Ukraine were among the most stable and effective in the region.²⁸

The government also instituted a number of reforms safeguarding freedom of the media in Ukraine. This is especially pertinent given the difficult balance that exists between promoting media freedom and protecting against the destabilising impact of Russian disinformation campaigns. To enhance media freedoms, several sets of laws have been passed since 2014 related to media transparency (introducing detailed definitions of ownership and interest in media companies, alongside financial disclosure requirements for owners), access to public information and open data (facilitating more detailed investigative journalism) and the protection of journalists.²⁹ Furthermore, Suspilne—an independent public broadcaster was established in 2017, with an emphasis on objectively reporting news stories with care, accuracy and transparency.30

World Economic Forum, Global Gender Gap Report (0 to 1, 1 = good)



*No data published for 2019, straight line average applied as Economist Impact estimate.

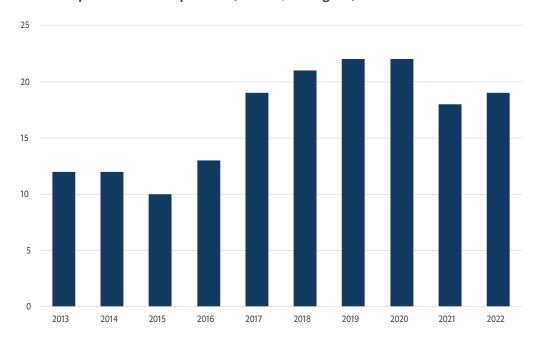
²⁷ https://freedomhouse.org/country/ukraine/freedom-world/2022

²⁸ https://storage.googleapis.com/cso-si-dashboard.appspot.com/Reports/CSOSI-Europe_and_Eurasia-2020.pdf

²⁹ https://www.razomforukraine.org/projects/policyreport/media-in-ukraine/

³⁰ https://www.bbc.co.uk/blogs/bbcmediaaction/entries/aa372ddf-659b-4d14-bc8b-a38e96ed6fca

ILGA Europe-Rainbow Europe Index (0 to 100, 100 = good)



Unfortunately, while the media landscape in Ukraine has improved since 2014, the majority of media companies remain owned or influenced by political and vested interests. Freedom of the media also continues to be threatened by attacks against journalists, which remain relatively frequent compared with other democratic European countries: according to Ukraine's National Union of Journalists, roughly 100 Ukrainians employed in the media industry were physically assaulted in 2021. In 2019, Vadym Komarov—a journalist known for his coverage of corruption in Ukraine—died in hospital after being attacked by an unidentified assailant.

The Ukrainian government instituted reforms to ensure equal rights and opportunities for women,

including through its accession to the Biarritz partnership in 2020.34 In particular, Ukraine made significant progress in tackling genderbased violence, following the government's 2019 pledge to eradicate it by 2030.35 The government sought to realise this commitment by establishing new funding initiatives to help local governments fund support services, as well as by ensuring access to legal aid for survivors of violence. Nevertheless, broader progress toward gender equality has been slow. According to the World Economic Forum's Global Gender Gap report, Ukraine's progress in gender equality has stagnated. In 2021, Ukraine's score of 0.714 placed it 74th globally, below Belarus, Georgia and Moldova (but above Russia).36

 $^{^{31}\ \} https://www.razomforukraine.org/projects/policyreport/media-in-ukraine/$

³² https://www.indexoncensorship.org/2022/02/ukraine-media-fight-battles-on-all-sides/

https://cpj.org/2019/06/ukrainian-journalist-vadym-komarov-dies-six-weeks/

³⁴ https://www.coe.int/en/web/kyiv/-/status-of-a-member-of-the-biarritz-partnership-is-another-chance-for-ukraine-to-achieve-equality-in-ensuring-rights-and-opportunities-for-men-and-wome

https://www.unfpa.org/news/ukraine-steadfast-tackling-gender-based-violence-despite-pandemic-related-increases

 $^{^{\}rm 36}$ https://www.weforum.org/reports/global-gender-gap-report-2021



The extent to which marginalised groups are protected from discrimination is a crucial consideration when evaluating the status of human rights in Ukraine. The 'National Strategy for Barrier-Free Environment in Ukraine until 2030', adopted in 2021, aims to enhance inclusion of marginalised and vulnerable groups in Ukrainian society, including the elderly, young people, people with disabilities, and people with infant children.³⁷ Moreover, in October 2021, the President signed a law that legally defines and combats antisemitism, including through prohibition of denial of the Holocaust.³⁸ In the years since 2014, Ukraine has established a

number of initiatives targeted at safeguarding the rights of the LGBTQ population in Ukraine. These include a 2015 amendment of the Labour Code to ban sexual orientation and gender identity discrimination at work³⁹ as well as the provision of police protection for gay pride parades in Kyiv, Odesa and Kharkiv.⁴⁰ However, as indicated by Ukraine's ranking in ILGA Europe's Rainbow Europe Index, this progress stagnated in recent years.⁴¹ For example, while Ukraine's Parliament registered bills that propose protection from hate crimes on the grounds of sexual orientation or gender identity, these have not yet been passed.⁴²

³⁷ https://www.undp.org/ukraine/press-releases/cabinet-ministers-ukraine-adopts-national-strategy-barrier-free-environ-ment-ukraine

³⁸ https://freedomhouse.org/country/ukraine/freedom-world/2022

https://www.hrw.org/news/2015/11/17/dispatches-ukraine-bans-anti-lgbt-discrimination-work

⁴⁰ https://www.dw.com/en/ukraine-holds-its-biggest-ever-gay-pride-parade/a-49319080

⁴¹ https://www.ilga-europe.org/rainboweurope/2021

⁴² https://gay.org.ua/en/blog/2020/05/12/ukraine-new-lgbti-hate-crime-bill-is-real-test-for-european-commitment/

Resilience in 2022

Health

The Russian invasion placed significant pressure on Ukraine's healthcare system, which was still dealing with the aftermath of the Covid-19 pandemic prior to the war. In particular, the war inflicted significant damage on physical infrastructure and severely restricted access to quality healthcare and medicines in those areas most exposed. Many healthcare facilities have been destroyed by Russian attacks, while the distribution of critical medical supplies has become difficult due to damaged transport infrastructure. On April 7th, the WHO recorded the hundredth Russian attack on healthcare since the start of the war, including attacks on both hospitals and ambulances.⁴³ Preventative healthcare and public health measures have understandably been de-prioritised during the conflict, with potentially devastating impacts on vaccination rates for polio and other diseases.44

However, the healthcare system exhibited substantial resilience despite these challenges. The reformed health financing system, through the NHSU, enabled rapid distribution of funds from the government to individual providers. Many healthcare providers saved sufficient financial resources to manage cash flow issues, while additional hospital capacity helped to

compensate for destroyed facilities. Changes to Ukraine's primary care system allowed patients to access health services no matter where they were registered prior to the war and consolidation of the health workers movement meant that doctors were able to advocate for policies that allowed them to continue working, despite their temporary displacement during the war.

Education

The war has also had a highly damaging impact on Ukraine's educational system. As of May 21, more than 1000 educational institutions had been destroyed by the Russian army, and many others have been closed. 45 As the war continues, more than 13,000 schools have instituted remote learning,⁴⁶ given the danger posed by the conflict, as well as the volume of children and teachers who have been forced to flee abroad. Meanwhile, schools have been repurposed to serve as shelters for orphans and internally displaced persons, presenting an obstacle to their reopening.⁴⁷ Further development and reforms of the educational system, such as the opening of new TVET Education and Practice Centres, have been suspended. The impacts of these disruptions to the provision of education across all levels are likely to be felt for years to come.

 $^{^{43}\} https://www.who.int/news/item/07-04-2022-who-records-100th-attack-on-health-care-in-ukraine$

https://time.com/6155963/polio-ukraine-war/

⁴⁵ https://edition.cnn.com/europe/live-news/russia-ukraine-war-news-05-21-22/h_5b2d3c517f58feb4f99dbcdc221bfdbf

⁴⁶ https://www.nytimes.com/2022/04/13/world/europe/ukraine-schools-war.html

⁴⁷ https://blogs.ucl.ac.uk/ceid/2022/04/27/how-do-we-count-the-education-impacts-of-the-war-in-ukraine/

Fortunately, however, the All Ukrainian School Online platform developed during the covid-19 pandemic has played a major role in supporting the resilience of the education system. Containing over 2,200 video lessons, tests and self-learning materials, the platform facilitated the continuation of compulsory education, despite school closures. Pedagogical materials have also been translated into numerous languages (including German, Polish, Hungarian and English), to help teachers across Europe facilitate the education of Ukrainian children who have been forced abroad.⁴⁸

police officers and servicemen, which introduces liability for the public insult of police officers, military or border guards.⁵² Finally, while under martial law there has not been a general ban on peaceful assemblies, however local military administrations may prohibit assembly, and, in reality, they have been completely prohibited during curfews and in areas of hostilities.⁵³

Human Rights

The Russian invasion undermined Ukrainians' ability to exercise their civil liberties, including freedoms of expression and the media. Journalists currently operate under the risk of substantial physical harm, with multiple individuals having been killed since the start of the war.⁴⁹ The Russian invasion also forced the temporary curtailment of Ukrainians' economic, social and cultural rights more broadly. While the imposition of martial law is legitimate in the context of the war, it has placed significant restrictions on Ukrainians' rights. For example, on March 20th, the Ukrainian President signed a decree that combines all national television channels into one platform, to implement a 'unified information policy'.50 Similarly, in April, the State Special Communications Service cut digital broadcasting by the three biggest opposition TV channels— Espresso, Priamyi and Channel 5.51 In May, the Ukrainian Parliament passed the first reading a draft law on protecting the honour and dignity of



⁴⁸ https://mon.gov.ua/eng/news/presentation-ukrainian-online-school-use-abroad

⁴⁹ https://www.bbc.co.uk/news/world-europe-60729276

https://www.reuters.com/world/europe/citing-martial-law-ukraine-president-signs-decree-combine-national-tv-channels-2022-03-20/

https://global.espreso.tv/monomarathon-why-did-the-authorities-disable-channel-5-priamyi-and-espreso

⁵² https://ccl.org.ua/en/news/why-protect-police-officers-from-insults-in-wartime-in-ukraine/#:~:text=Why%20protect%20police%20officers%20from%20insults%20in%20wartime,martial%20law%2C%20although%20it%20is%20unrelated%20to%20it.

https://www.reuters.com/world/europe/ukraine-military-orders-38-hour-curfew-southern-zaporizhzhia-city-says-official-2022-03-19/

Outlook

Ukraine's emergence from the current conflict will present a unique opportunity for progress in the social sphere. Across health, education and human rights, the Ukrainian government has the opportunity to build on pre-conflict reform progress, as well as remedy areas that have experienced stagnation or regression.

Health

The survival and recovery of Ukraine's healthcare system will be critical in assuring the nation's social and economic prosperity post-conflict. To this end, the continuation of Ukraine's pre-war healthcare reform programme will be essential. In particular, this programme of reform will depend upon effective coordination between national institutions (such as the Ministry of Health and the NHSU) and local self-governments within the framework of a decentralised healthcare system. The importance of decentralisation reflects the diversity of impacts of the war on different regions of the country, as well as the need to respond with agility to changing health needs, which include the ongoing repercussions of the covid-19 pandemic, and mitigate longstanding inefficiencies within the healthcare system.

A priority target for future healthcare reforms will be the reconstruction and expansion of primary healthcare facilities across the country. This is in part due to the significant damage to physical infrastructure and primary healthcare facilities that the war has inflicted on Ukraine. However, it also reflects a continuation of the pre-war

healthcare reform programme, which sought to increase the quality of healthcare provided by strengthening the role of primary healthcare providers (including through family doctors, general practitioners and paediatricians).

The re-establishment of effective primary healthcare provision across the country will be critical in tackling a number of healthcare challenges that Ukraine will face after the conflict. These include reducing the prevalence of behavioural risk factors amongst the population (such as smoking, alcohol consumption and poor diet) and tackling localised areas of poor vaccination coverage (particularly for polio, measles and tuberculosis). Furthermore, as part of the expansion of primary healthcare, an accelerated rollout of mental health and rehabilitation services across the country will be crucial in remedying longstanding deficiencies in access to adequate care for those suffering from mental illness.

Finally, Ukraine will need to build on its prewar progress in improving the affordability of healthcare. Ukraine's 'Affordable Medicines Programme', introduced in 2017, allowed for rapid improvements in the affordability of medicines to treat cardiovascular disease, type 2 diabetes and asthma; future reforms should seek to further improve access to a broader range of pharmaceutical products. This will play a key role in improving healthcare outcomes and reducing out-of-pocket healthcare expenditure, which remains a particular problem for poorer Ukrainians.

Education

Prior to the conflict, Ukraine introduced wide-ranging reforms to its compulsory education system, as set out in the 2017 Law on Education. Completion of this reform programme, as well as significant financial investment in restoring damaged educational facilities, will be crucial to the recovery of the education system post-conflict. In fact, school curricula will likely need to be reviewed in light of refugees' experiences of education systems abroad (which are often more inter-disciplinary and practice oriented), with a likely growth in demand for similar approaches in Ukraine. The government should also seek to prioritise the development of profession-oriented secondary schools (grades 10 to 12), with a view to improving the employability of school graduates. This phase of the reform programme will require large public investments in creating new educational and municipal infrastructure, developing new educational content and retraining teachers.

Similarly, the Ukrainian government will need to resume reform of technical vocational education and training (TVET), as set out in Ukraine's 'Concept of Modern Vocational Education 2027', which was interrupted by the conflict. This process will include the establishment of new multi-functional TVET centres, equipped with modern facilities and curricula as well as the reconstruction of destroyed TVET institutions. It will also require the government to encourage public-private partnerships within the framework of a dual TVET system, which was in the process of being introduced before the war. Successful implementation of this reform is key to ensuring that Ukraine's education system is well aligned with labour market needs, to improve productivity and long-term economic growth.

Human Rights

Ukraine made significant progress in protecting the human rights of its citizens, including through advancements in freedom of the media as well as the introduction of legal protections for marginalised groups. However, some regression has been apparent as a result of the current conflict. While some restrictions to human rights in the context of the war are legitimate—and necessary—Ukraine needs to ensure that as soon as circumstances allow, these restrictions end. In particular, the Ukrainian Parliament will need to use its oversight function to hold the government accountable for reinstating these rights following the end of martial law.

To demonstrate its strong commitment to safeguarding civil liberties, the government will have an opportunity to institute measures that expand the freedom of assembly beyond what existed before the war. These measures include adopting legislation that clearly defines the duties and responsibilities of local authorities and the police during peaceful assemblies, providing adequate security for public assemblies throughout Ukraine, ensuring the protection of participants irrespective of their political views, providing law enforcement personnel trained in handling rallies and protests in line with international human rights standards and conducting effective investigations of incidents where violence or the threat of violence have been used to suppress the freedoms of association and peaceful assembly.

Finally, it is essential to emphasise that Ukraine must adopt an inclusive and participatory approach to recovery, with the full involvement of diverse stakeholders from civil society. Reparations will constitute a key part of this process. As such, it is vital that the victims of crimes that have occurred during the war are listened to when designing the content of Ukraine's recovery programme, and plans for its implementation.

Education

Prior to the conflict, Ukraine introduced wide-ranging reforms to its compulsory education system, as set out in the 2017 Law on Education. Completion of this reform programme, as well as significant financial investment in restoring damaged educational facilities, will be crucial to the recovery of the education system post-conflict. In fact, school curricula will likely need to be reviewed in light of refugees' experiences of education systems abroad (which are often more inter-disciplinary and practice oriented), with a likely growth in demand for similar approaches in Ukraine. The government should also seek to prioritise the development of profession-oriented secondary schools (grades 10 to 12), with a view to improving the employability of school graduates. This phase of the reform programme will require large public investments in creating new educational and municipal infrastructure, developing new educational content and retraining teachers.

Similarly, the Ukrainian government will need to resume reform of technical vocational education and training (TVET), as set out in Ukraine's 'Concept of Modern Vocational Education 2027', which was interrupted by the conflict. This process will include the establishment of new multi-functional TVET centres, equipped with modern facilities and curricula as well as the reconstruction of destroyed TVET institutions. It will also require the government to encourage public-private partnerships within the framework of a dual TVET system, which was in the process of being introduced before the war. Successful implementation of this reform is key to ensuring that Ukraine's education system is well aligned with labour market needs, to improve productivity and long-term economic growth.

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