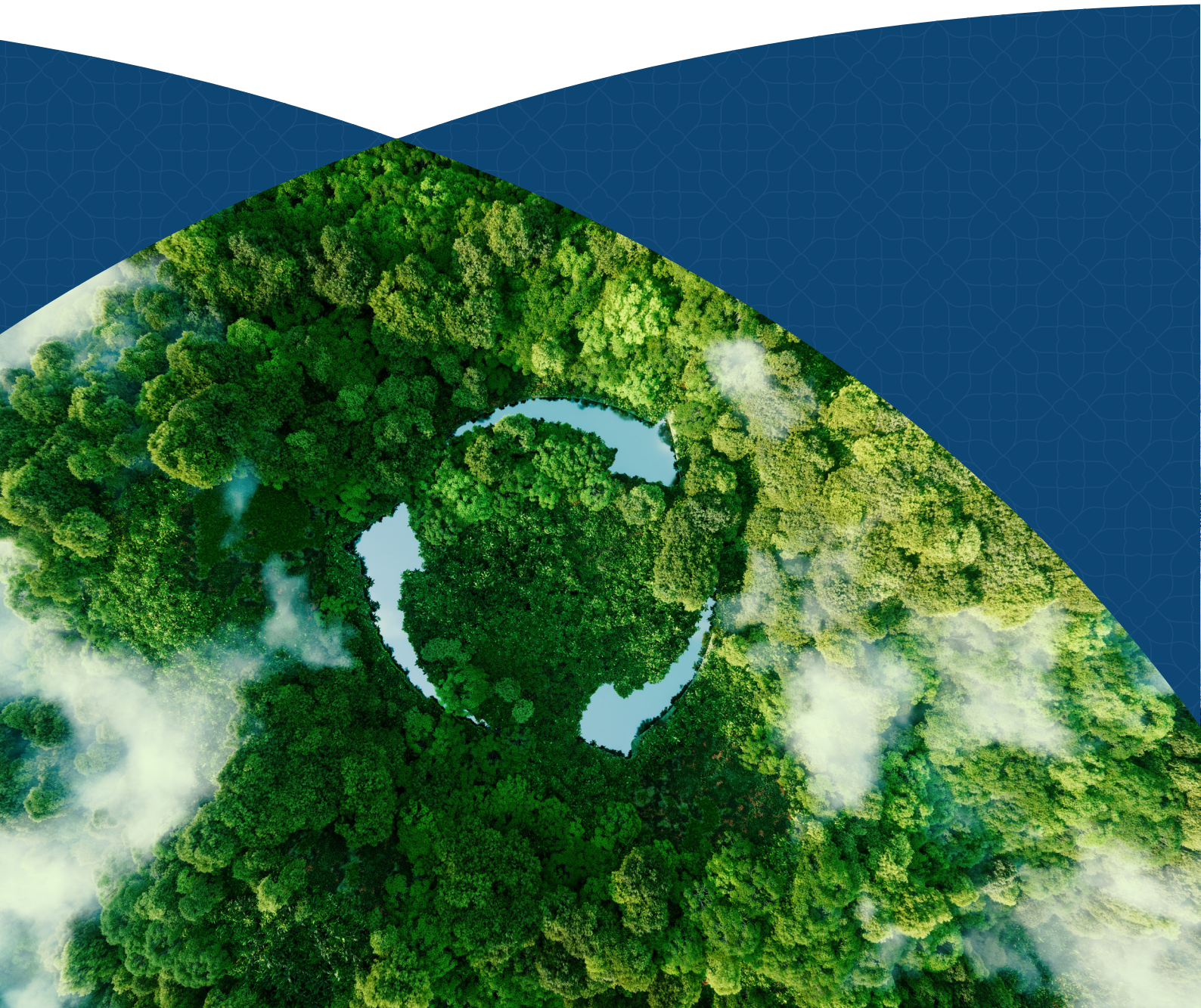




Aligning Policies with Green, Resilient and Just Recoveries in the Middle East



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1. Introduction – An Opportunity to Recover Better

The longer-term economic recovery from COVID-19 offers a unique opportunity to achieve sustainable development, which Middle Eastern countries cannot afford to waste. Countless approaches have been proposed, but what are the best policy options for governments in region aspiring to recover better?

Since the onset of the pandemic, economies in the Middle East have been hit hard by three simultaneous shocks. Two of these are common globally: the threat to human health from COVID-19 and the disruptions to economic activities from the pandemic response. In addition, in 2020, the region's oil producing countries were confronted with an unprecedented oil demand shock resulting from the global economic slowdown, which in turn led to reduced government revenue.

The case for harnessing the COVID-19 economic recovery to put the world on track to delivering on the goals of the Paris Agreement¹ and the Sustainable Development Goals (SDGs) remains compelling. Time is running out to avert dangerous climate change and major ecological risks. Actors as diverse as international organisations, national governments, major businesses, researchers and civil society have already put forth agendas to 'build back better' through policies and investments that support development trajectories that benefit both people and the planet. The global transition to clean energy and sustainable resource consumption, however, presents challenges for the oil producers and exporters of the Middle East, which remain highly exposed to related social and economic transition risks.

Throughout 2020, governments in the Middle East were at various stages of post-pandemic planning. As this report shows, short-term rescue measures in the region supported business-as-usual trajectories, and most countries have not actively promoted green, resilient or just longer-term recoveries. Yet, as it also demonstrates, such policies will be imperative for achieving sustainable development in the region and for ensuring welfare for its people in the future.

1. These goals include limiting global warming to well below 2°C or 1.5°C compared to pre-industrial levels. Achieving these goals will require global GHG emissions to peak as soon as possible and reach net-zero around mid-century.

A Better Recovery Agenda for the Middle East

Globally, the agenda for sustainable recoveries is as diverse as the actors promoting it, with trade unions calling for protecting jobs,² environmental groups promoting nature-based solutions for human wellbeing and environmental health,³ and energy agencies calling for investing in clean energy and sustainable energy transitions.⁴ These various global sustainable recovery agendas, however, share a number of core elements and goals. Building on these shared elements, and specificities of Middle Eastern oil producing countries, this study defines three main objectives for what it defines as ‘better recoveries’ in the region:

- **green:** aligning greenhouse gas (GHG) emissions with climate-safe trajectories and promoting circular economies;
- **resilient:** boosting societies’ resilience to climate and environmental risks, and social and economic resilience to clean energy and production transitions; and
- **just:** ensuring that no-one is left behind in the green transition, and promoting equity and decent jobs for everyone.⁵

COVID-19 and its related economic and oil price shocks have already caused setbacks in the Middle East in many areas of sustainable development, from health to food security to employment to economic diversification. However, few governments have announced policies or strategies that would proactively seek to address these interrelated goals. Many have invested significantly in the immediate health response as well as short-term economic rescue and stimulus,⁶ but a long-term perspective has been missing from both investments and policy discussions.

The Middle East remains at risk of missing a crucial one-off opportunity. The only way to achieve sustainable development is to ensure that policies and investments in the long-term recovery lay the foundation for cleaner and more resilient, prosperous and equal societies. In the context of the region’s major oil-producers, this means accelerating the major shifts needed in economic sectors and jobs, increasing mainstreaming of accounting for environmental costs and risks into decision making, and strengthening social protection and inclusion. Failing to correct course now could put these countries on trajectories of lower economic competitiveness in an increasingly carbon-constrained world, increase their vulnerability to external shocks, and lead to stagnating economic growth and higher unemployment.

Scope and Structure of the Report

This report comprises one part of a MBRSG project aimed at defining key elements for ‘recovering better’ in the Middle East. The project identifies experience-based, context-specific options for policies and investments that can support sustainable recoveries in the region. By doing so, it addresses a gap in systematic, policy-oriented studies on this topic in the region.⁷

2. ITUC, ‘G20: Global trade unions call for urgent and comprehensive action on jobs, recovery and resilience’, press release, 24 August 2020, <https://www.ituc-csi.org/g20-call-for-jobs-recovery-resilience>

3. WWF, ‘Nature-based solutions and the post-COVID recovery’, webinar, 8 June 2020, <https://wwf.panda.org/?364346/Nature-based-solutions-post-COVID-19-recovery>

4. IEA, Sustainable Recovery. World Energy Outlook Special Report (Paris: OECD/IEA, June 2020); IRENA, Post-COVID recovery: An agenda for resilience, development and equality (Abu Dhabi: IRENA, June 2020).

5. These priorities also align with a report from July 2020, in which UN Secretary-General António Guterres defined regional priorities for recovering sustainably, including supporting economic diversification, and investing in green, innovative, circular, low-carbon economic sectors, and more productive and sustainable consumption and production patterns. The report also stressed the need to address underlying inequalities and gaps in social protections. UN, The Impact of COVID-19 on the Arab Region: An Opportunity to Build Back Better, Policy Brief (New York: UN, July 2020).

6. OECD, COVID-19 Crisis Response in MENA Countries, 6 November 2020.

7. A policy brief by Bayoumi has put forward recommendations on how the UAE can support climate action through its recovery policies. A brief by Al-Sarihi has identified co-benefits of green recoveries for the Gulf Cooperation Council countries and provides some targeted recommendations for Saudi Arabia. Moustafa Bayoumi, Climate Action in a Post Covid-19 World: Policy Directions for Sustainable Recovery in the UAE, Policy Brief No. 55 (Dubai: Mohammed bin Rashid School of Government, May 2020); Aisha Al-Sarihi, Post COVID-19: A Potential for Green Recovery in the Arab Gulf States (Bonn: Center for Applied Research in Partnership with the Orient, 20 January 2021).

This report is focused on policies for recovering better, whereas another study identifies where related investments should be directed. Both studies depart from the realisation that sustainable recoveries have not featured prominently in policy discussions across the region, and the conviction that research grounded in the region's sustainable development needs and priorities is needed to help promote and inform related discussions.

The Middle East is diverse. Challenges shared by the entire region include economic and social inequalities, unemployment and unsustainable production and consumption patterns. However, in order to generate more targeted recommendations, this project focuses primarily on the region's major oil-producing and exporting Arab economies, which share a number of specific challenges they will need to tackle alongside the COVID-19 recovery. The most pressing one is increasing their resilience to the global energy transition, including through economic diversification. While the oil producers' ability to respond to this challenge is partly hindered by low oil prices, the need to overcome the challenge is made more urgent than ever by the growing momentum worldwide to align economic development with the Paris Agreement's temperature goals. Beyond the moral imperative,⁸ the region therefore also has a strong economic rationale to steer development to a more sustainable base.

This report sets off, in **section 2**, by identifying the priorities for recovering better in the Middle East, and particularly its largest Arab oil producing economies, namely the Gulf Cooperation Council (GCC) member countries, Egypt and Iraq, which together account for 55% of the region's GDP and 45% of its population.⁹ **Section 3** examines the region's economic response to COVID-19 over a one-year period, from March 2020 through March 2021, and identifies emerging green, resilient and just recovery responses and related gaps.

Section 4 surveys past experience and present knowledge and policy agendas focused on green, resilient and just recoveries globally, and synthesises relevant 'better' practices, with an eye on the region's sustainable development needs. **Section 5** presents policy recommendations for governments in the Middle East, building on the findings of the previous sections and inputs from consultations with regional sustainable development stakeholders. The suggested policies focus on the entire economy, and the energy sector (both the industry itself, as well as energy supply and end uses) and aviation and tourism. A description of the study's methodology is included in Appendix 1.

8. The debate over historical responsibility dates back decades. This specific report does not take a stance on the responsibility of Middle Eastern countries regarding climate change mitigation. It adopts a pragmatic approach that assumes that, while poorer countries in particular will need international support for adaptation and mitigation action, it is in the region's countries' national interest to contribute to mitigation to the best of their abilities since climate change is a global commons problem.

9. World Bank, World Bank Open Data, <https://data.worldbank.org/>, accessed 9 February 2021.

2. The Case for Green, Resilient and Just Recoveries in the Middle East

Before the pandemic, progress on sustainable development in the Middle East had already been uneven, across countries and goals. Unless intentional action is taken to align recovery efforts with the 2030 Agenda, the region is unlikely to meet the SDGs. This section presents the state of sustainable development in the region pre-COVID-19, as shown by relevant sustainability indicators. It then explains how COVID-19 has negatively impacted the pursuit of sustainable development, and highlights benefits associated with more sustainable policies and investments. The section concludes by defining what this study means when referring to green, resilient and just recoveries, both in terms of their objectives and related policies and measures.

2.1. State of Sustainable Development in the Middle East pre-COVID-19

Measured by economic size, income levels, stability and demographics, the Middle East is one of the most diverse regions in the world. Figure 1 shows how Middle Eastern countries were performing across the different SDGs prior to the COVID-19 pandemic, based on the 2020 SDG Index, which provides an annual snapshot of how countries are progressing towards the 17 goals. While some countries were well over two-thirds of the way to achieving the best possible outcome across the SDGs, others were only half way there, and were at risk of being left behind in development.¹⁰

Figure 1. Selected Middle Eastern Countries' SDG Performance pre-COVID-19 (SDSN et al.)¹¹

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Score /100
Bahrain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	68.83
Egypt	challenges remain	major challenges remain	major challenges remain	challenges remain	major challenges remain	challenges remain	challenges remain	major challenges remain	major challenges remain	major challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	major challenges remain	challenges remain	68.79
Iraq	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	63.14
Jordan	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	68.05
Kuwait	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	63.14
Lebanon	SDG achievement	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	66.68
Oman	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	69.67
Palestine*	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	n/a
Qatar	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	64.65
Saudi Arabia	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	65.85
Syria	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	59.33
UAE	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	70.30
Yemen	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	challenges remain	52.33

	SDG achievement
	challenges remain
	significant challenges remain
	major challenges remain
	data not available

10. Jeffrey Sachs et al., *The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020* (Cambridge: Cambridge University Press, 2020). The Index is based on approximately 100 official and proxy indicators. Collectively, the 16 countries' major performance gaps relate to SDGs 2 (Zero Hunger), 5 (Gender Equality), 8 (Decent Work and Economic Growth), 10 (Reduced Inequalities) and 13 (Climate Action). The low performance on SDG 2 in the index is explained by high prevalence across the region of obesity and unsustainable use of fertilizers—factors unrelated to food insecurity. (Two red indicators result in a red goal-level score for a country.) Under SDG 6 (Clean Water and Sanitation), the region's performance is impacted negatively by unsustainable freshwater abstraction rates. However, several of the region's countries achieve their water security through desalination, which is not accounted for in the index. This does not mean, however that water use in these countries is sustainable from an environmental perspective.

11. Sources: Jeffrey Sachs et al. *Sustainable Development Report 2020*; Mari Luomi et al., *2019 Arab Region SDG Index and Dashboards Report* (Abu Dhabi and New York: EDA and SDSN, 2019). *) Data for Palestine is from 2019, based on the Arab Region SDG Index. The Global SDG Index does not measure Palestine.

Significant differences in development priorities and capabilities exist between wealthier and more stable countries of the region, on the one hand, and those suffering from conflict, fragility and occupation, on the other. Yemen, for example, is failing to meet even the most basic needs of its people: food and water security, health, education, employment and peace. Sadly, given its low consumption levels, Yemen is the only country that is performing well on climate change metrics. In other words, no country in the region has yet managed to successfully combine economic, social and environmental sustainability in development outcomes.

From an economic recovery perspective, the region's pre-COVID-19 status on five SDGs in particular is preoccupying: in terms of **SDG 8 (Decent Work and Economic Growth)**, the region has seen uneven economic growth and, in many cases, persistently high unemployment levels. In relation to **SDG 10 (Reduced Inequalities)**, major income inequalities remain prevalent. For instance, the GCC countries, which are known to have wide income differences across their population, lack income distribution and poverty headcount data. In addition, most countries in the region do not make data on social safety net programmes publicly available.¹² As a whole, social protection expenditure in the Arab region is the lowest compared to all regions.¹³

Furthermore, owing to its hydrocarbon endowments, the region has some of the world's lowest rates of renewable energy generation and highest per capita carbon dioxide (CO₂) emissions, which greatly impact its progress on **SDG 7 (Affordable and Clean Energy)**¹⁴ and **SDG 13 (Climate Action)**. An added vulnerability for oil producers is that their economies still remain highly exposed to the global low-carbon energy transition associated with implementing **SDG 13**. Progress still needs to be made also towards circular economies (**SDG 12, Responsible Production and Consumption**). Air quality is also a challenge, owing to both environmental factors and the high rates of fossil fuel combustion. Furthermore, most countries are highly reliant on virtual water imports,¹⁵ which could pose risks to food security in the long term as well. Tables 1-3 illustrate the performance of the region's major Arab oil producers on various metrics related to these SDGs, as well as the three dimensions of sustainable recoveries: green, resilient and just.

Table 1. Major Arab Oil Producers' Sustainability Metrics pre-COVID-19 - 'Green' Dimension¹⁶

	Per capita CO2 emissions from fossil fuel combustion (tCO2 and % of global average, 4.4 tCO2, 2018)	Energy intensity of the economy, (tonnes of oil equivalent/1,000 2010 USD and % of global average, 2017)	Renewable energy share in final energy consumption (%; 2017 - nb. global average 17.3%)	Population exposed to air pollution levels exceeding WHO guideline value (PM 2.5, % of total, 2017); household and ambient air pollution mortality rate (per 100,000 pop. 2016)	Municipal solid waste generated (kgs/day/capita, latest available year 2008-2017 - nb. global average 0.74 kg)
Bahrain	19.2 (436%)	0.222; 187%	n/a	100%; 40.1	1.83
Egypt	2.3 (52%)	0.092; 77%	5.54%	100%; 108.9	0.65
Iraq	4.0 (91%)	0.107; 90%	0.43%	100%; 75.1	1.00
Kuwait	21.2 (482%)	0.128; 108%	n/a	100%; 103.8	1.60
Oman	14.2 (323%)	0.153; 129%	n/a	100%; 53.9	1.20
Qatar	31.3 (711%)	0.143; 120%	n/a	100%; 47.4	1.30
Saudi Arabia	14.6 (332%)	0.134; 113%	0.02%	100%; 83.7	1.40
UAE	20.0 (455%)	0.109; 92%	0.21%	100%; 54.7	1.60

12. The SDSN's 2020 SDG Index imputes Gini coefficient data for the UAE from a study by Brookings.

13. In 2010-2015, Arab countries' social protection averaged 2.5% of the GDP. UN, Social protection response to the COVID-19 crisis in the MENA/Arab States region (Regional UN Issue-Based Coalition on Social Protection, July 2020).

14. The SDSN 2020 SDG Index does not include renewable energy generation data for all but two Middle Eastern countries.

15. Virtual water trade (also known as trade in embedded or embodied water), is the hidden flow of water in food or other commodities and services from one place to another in the form of imports and exports. See: <https://waterfootprint.org/en/water-footprint/national-water-footprint/virtual-water-trade/> for more details.

16. Emissions and renewable energy: IEA, Data and Statistics, <https://www.iea.org/data-and-statistics>; energy intensity: IEA, 'Energy intensity', <https://www.iea.org/reports/sdg7-data-and-projections/energy-intensity>; air pollution: World Bank, World Development Indicators, <http://wdi.worldbank.org/>; waste: World Bank, What A Waste database <https://datacatalog.worldbank.org/dataset/what-waste-global-database>, all accessed 6 February 2021.

Table 2. Major Arab Oil Producers' Sustainability Metrics pre-COVID-19 - 'Resilient' Dimension¹⁷

	Vulnerability to climate disruptions and readiness to leverage adaptation investment (ND-GAIN score and rank, 2018)	Water withdrawals per capita (m3, 2013-2017); freshwater withdrawal (% of renewable water resources, 2014)	Imported groundwater depletion per capita (m3, 2010)	Food import dependence (Global Food Security Index, indicator score 0-100; 0 = high dependence, 2019)	Working poor at PPP\$3.20 a day (% of total employment, 2019)
Bahrain	51.4/100 (70)	291 (206%)	112	0.0	n/a
Egypt	45/100 (107)	804 (160%)	3	17.0	11.9%
Iraq	41.5/100 (126)	1,027(93%)	19	n/a	6.8%
Kuwait	50.3/100 (73)	308 (2,604%)	43	0.1	0.6%
Oman	54.2/100 (58)	401 (106%)	98	1.7	0.2%
Qatar	56.1/100 (48)	335 (473%)	148	0.1	0.1%
Saudi Arabia	55.4/100 (51)	705 (1,243%)	27	2.4	0.1%
UAE	61.3/100 (28)	421 (2,347%)	41	0.1	0.4%

Table 3. Major Arab Oil Producers' Sustainability Metrics pre-COVID-19 - 'Just' Dimension¹⁸

	Crude oil and natural gas production and shares of global total (million barrels/day; billion m3, 2019)	Export product concentration index (degree of concentration of goods exported, 2019)	Hydrocarbon share of government revenue; (2018) fiscal breakeven oil price (per barrel, 2018)	Total and youth unemployment (% of total labour force, estimate for 2019)	Female and male labour force participation rates (2019 - nb. global averages 47%; 74%)
Bahrain	n/a; 16.9 (0.4%)	0.296 (e)	82%, US\$118	0.7%; 4.6%	45%; 87%
Egypt	0.7 (0.7%); 64.9 (1.6%)	0.142 (e)	n/a; n/a	10.8%; 31.1%	19%; 71%
Iraq	4.8 (5.0%); 10.8 (0.3%)	0.916 (e)	n/a; US\$49	12.8%; 25.1%	12%; 74%
Kuwait	3.0 (3.1%); 18.4 (0.5%)	0.669	90%; US\$48	2.2%; 15.8%	50%; 88%
Oman	1.0 (1.0%); 36.3 (0.9%)	0.413	78%; US\$101	2.7%; 13.2%	36%; 84%
Qatar	1.9 (2.0%); 178.1 (4.5%)	0.484 (e)	83%; US\$50	0.1%; 0.4%	57%; 95%
Saudi Arabia	11.8 (12.4%); 113.6 (2.8%)	0.590 (e)	68%; US\$84	5.9%; 28.6%	22%; 78%
UAE	4.0 (4.2%); 62.5 (1.6%)	0.264 (e)	36%; US\$78	2.3%; 7.3%	52%; 93%

17. Climate adaptation: ND-GAIN, 'Rankings', <https://gain.nd.edu/our-work/country-index/rankings/>; water data: FAO, Aquastat <http://www.fao.org/aquastat/>, Carole Dalin et al., 'Groundwater depletion embedded in international trade', *Nature*, Vol. 543 (30 March 2017); food security: EIU, 'Global Food Security Index', <https://foodsecurityindex.eiu.com/>; poverty: UNDP, 'Human Development Data Center', <http://hdr.undp.org/en/data>, all accessed 6–7 February 2021.

18. Oil and natural gas: BP, *Statistical Review of World Energy 2020* (2020); UNCTAD, UNCTADSTAT, <https://unctadstat.unctad.org/EN/>; World Bank Group, *Gulf Economic Update: Economic Diversification for a Sustainable and Resilient GCC*, Issue 5/DEC2019; IMF, 'Statistical Appendix', n/d; labour: Marek Dabrowski and Marta Domínguez-Jiménez, *Economic crisis in the Middle East and North Africa*, Policy Contribution 02/21, (Brussels: Bruegel, 2021); ILO, 'Population and labour force', <https://ilostat.ilo.org/topics/population-and-labour-force/>, all accessed 7 February 2021.

COVID-19 recoveries add an additional layer of complexity for those Middle East oil producers with high oil and natural gas export revenue dependence, including the Gulf oil exporters (see Table 3). The first factor is the procyclicality of investments: in times of low oil prices, government spending tends to go down and be more risk-averse in terms of funding diversification in new sectors.¹⁹

The second challenge is that low oil prices have in the past led governments to pursue diversification into areas that lead to higher emissions, which in turn increases their exposure to future carbon pricing-related competitiveness risks. A study by the World Bank found that the lower oil prices since 2014-2015 drove an increase in 'brown' diversification: the shares of emission-intensive industries, such as refineries, petrochemical, metal and cement industries, thermal power plants and airlines, grew in all GCC countries, except in Kuwait, at least through 2017.²⁰ CO₂ emissions trends in the latter part of the 2010s suggest this period may have seen less carbon-intensive diversification,²¹ and some ambitious clean diversification megaprojects and renewable energy plans and programmes were set in motion in this period. Even so, economists have suggested that policies and investment decisions pre-COVID-19 'remain[ed] skewed toward maintaining comparative advantage in the traditional, unsustainable industries and products'.²²

2.2. The Impacts of COVID-19 and the One-off Investment Opportunity

COVID-19 is first and foremost a health crisis: during the first year of the pandemic, more than 100,000 related deaths were reported in the region.²³ Its broader social and economic repercussions, however, have touched every single person. The economic shock caused by the COVID-19 pandemic is prompting governments around the world to develop recovery plans that will shape economies and societies for years, if not decades, to come. In April 2021, the International Monetary Fund (IMF) estimated that the region's economy had contracted by 3.5% in 2020.²⁴ The International Labour Organization (ILO), additionally, has estimated that the equivalent of 5 million full time jobs were lost through the same year in the Arab region.²⁵

As people lose their income, over 14 million additional people are expected to fall into poverty bringing the total to 115 million in the Arab region.²⁶ Countries with large expatriate populations saw high numbers of repatriations as a result of job losses and a lack of social protection for non-nationals: a recent report estimates that the GCC countries' total population declined by 4% in 2020 due to expatriates leaving the region.²⁷

Oil producing countries suffered a dual economic shock as oil demand reached unprecedentedly low levels resulting in prices falling to the lowest figures on record, with GDPs contracting in almost all economies in 2020 (see figure 2). In the US, oil prices traded below zero briefly in April 2020. The average OPEC basket price for 2020 fell to two-thirds of its 2019 value.²⁸ Low oil prices drove countries in the Middle East to announce government spending cuts: Saudi Arabia, for example, announced a plan to reduce spending in 2021 by 7.1% while the UAE announced cuts of 5.3%.²⁹

19. Stakeholder interview, March 2021.

20. Low oil prices also resulted in more diversified exports in most GCC countries (due to lower oil revenues). The study also suggests that 'export shares from sectors with low environmental footprint in Oman and Qatar [rose] modestly, but this may [have] include[d] goods and services tied to hydrocarbon supply chains'. World Bank Group, Gulf Economic Update.

21. Nicholas Howarth et al., Saudi Arabia's 2018 CO₂ Emissions Fall Faster Than Expected, Instant Insight, 19 January 2020, Riyadh: KAPSARC.

22. World Bank Group, Gulf Economic Update, 43.

23. The figures are for the MENA region, excluding Turkey and Israel. MEED, '8 February: Covid-19 cases cross 5 million-mark in Mena', <https://www.meed.com/latest-news-on-the-pandemics-economic-impact>, accessed 11 February 2021.

24. The figure is for the MENA region. International Monetary Fund, Regional Economic Outlook: Middle East and Central Asia, April 2021.

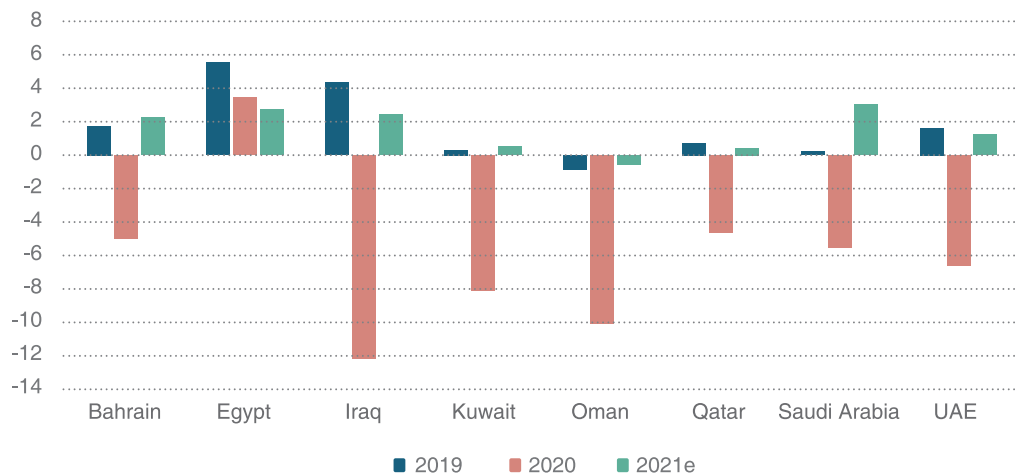
25. ILO, ILO Monitor: COVID-19 and the world of work. Seventh edition (Geneva: ILO, 22 January 2021).

26. UN, The impact of COVID-19, 14.

27. S&P Global Ratings, 'Expat Exodus Adds to Gulf Region's Economic Diversification Challenges', 15 February 2021, <https://www.spglobal.com/ratings/en/research/articles/210215-expat-exodus-adds-to-gulf-region-s-economic-diversification-challenges-11800970>, accessed 3 March 2021.

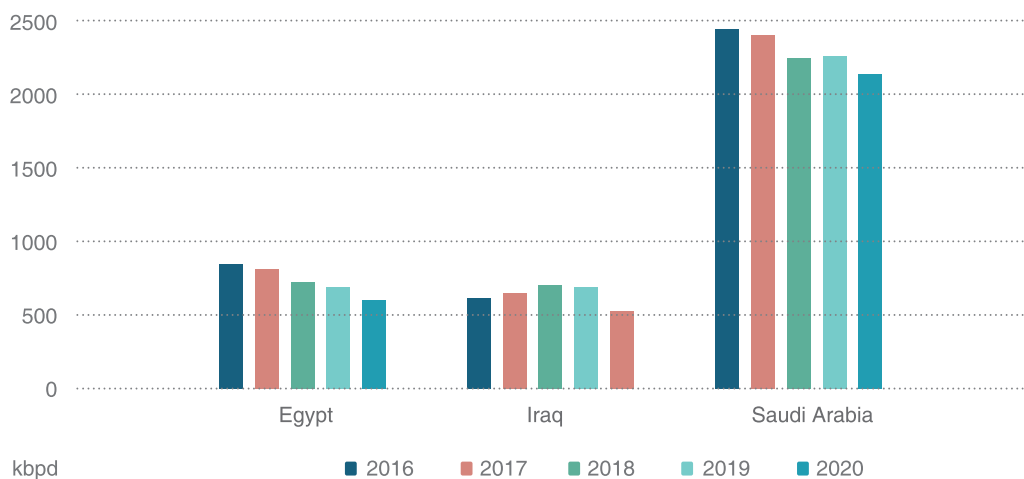
28. OPEC, 'OPEC Basket Price', https://www.opec.org/opec_web/en/data_graphs/40.htm, accessed 12 March 2021.

29. Arab News, 'Saudi Arabia looks to cut spending in bid to shrink deficit', 1 October 2020; S&P Global, 'UAE cuts 2021 federal spending by 5.3% on low oil prices, COVID-19', 2 November 2020, <https://www.spglobal.com/platts/en/market-insights/latest-news/oil/110220-uae-cuts-2021-federal-spending-by-53-on-low-oil-prices-covid-19>, accessed 5 March 2021.

Figure 2: Annual Percent Changes in Real GDP Growth in Selected Middle Eastern Countries 2019-2021e³⁰

In the Middle East, as elsewhere, the pandemic had a dampening impact on oil demand in 2020, as shown in Figure 3. Notably, in some countries domestic demand had already been falling, albeit at slower rates, for several years, mainly owing to lower oil prices, and COVID-19 further added to this trend.

Natural gas-powered electricity generation, however, continued to expand in some countries of the region in 2020 despite the economic shock, in contrast to the opposite happening globally (see Figure 4).³¹ This is likely to have been caused by different factors in different countries, with the likeliest explanations including continued switching from oil to natural gas (e.g. in Iraq) and increased household demand due to pandemic-related limitations on summer travel in countries with large expatriate populations (e.g. in the UAE).³² This illustrates the diversity of national circumstances in the region and, consequently, underscores the need for context- and sector-specific policies and approaches to curb emissions post-COVID-19.

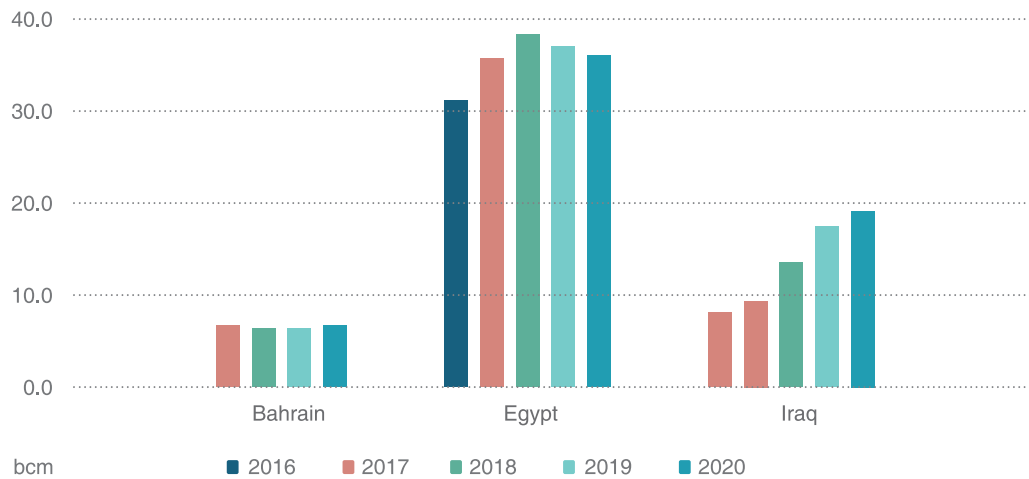
Figure 3. Total Oil Products Demand in Selected Countries³³

30. IMF, Datamapper, 'Real GDP growth, annual percent change', <https://www.imf.org/external/datamapper/>, accessed 7 March 2021.

31. Estimates for total energy demand or GHG emissions in 2020 were not available at the time of writing. For the eight Arab oil producing countries that the study focuses on, data for oil demand via JODI was only available for Egypt, Iraq and Saudi Arabia. Data for natural gas use in electricity and heat generation via JODI was only available for Bahrain, Egypt and Iraq.

32. The UAE has not provided data for JODI on natural gas supply/demand, but officials have indicated that COVID-19 related travel restrictions, which limited travel abroad for holidays led to an increase in household electricity demand.

33. JODI, JODI-Oil, <http://www.jodidb.org/>, accessed 12 March 2021.

Figure 4. Natural Gas Deliveries to Power and Heat Generation in Selected Countries³⁴

Globally, COVID-19 lockdown measures had a major positive short-term impact on GHG emissions: GHG emissions worldwide are estimated to have decreased by 8.8% in the first half of 2020 compared to the same period in 2019.³⁵ However, with economic activity resuming in many parts of the world through the year, scientists estimate that global CO₂ emissions increased slightly in the second half of the year, resulting in a 6.4% decrease over the entire year, compared to the previous one.³⁶

Despite the hiatus, CO₂ concentrations in the atmosphere continued to increase, reaching yet another record high of 410.5 parts per million in 2020.³⁷ Also, despite the significant year-on-year decrease in emissions, COVID-19 did not yet put the world on a trajectory to preventing global warming of more than 1.5°C above pre-industrial levels, which according to the UN Environment Programme (UNEP) would require annual reductions of 7.6%.³⁸ Based on pledges made under the Paris Agreement by the end of 2020, total GHG emissions in 2030 would be 0.5% below 2010 levels, while a 45% reduction would be needed for staying below 1.5°C.³⁹

While the window still remains open for staying below 2°C, which requires global GHG emissions to fall by 2.7% per year on average for the next decade, the recent gains will be short-lived unless quick action is taken. Most worryingly, global CO₂ emissions in December 2020 were estimated to have already climbed 2% above the levels of December 2019.⁴⁰

At the same time, the climate crisis is not the only source of environmental risks. Humans are destroying biodiversity at unprecedented and accelerating rates, with 25% of all plant and animal species now threatened with extinction.⁴¹ Protecting biodiversity is vital for avoiding the next pandemic, as almost three of every four emerging infectious diseases in humans come from other animals. Land-use change and wildlife exploitation increase infectious disease risk and destroys the ecosystems on which life on earth depends on.

Economic recovery from COVID-19 offers a one-off opportunity for governments to correct these misalignments with the Earth's climate and ecosystems. COVID-19-related fiscal spending by governments have been of unprecedented scale. By early March 2021, global recovery spending had amounted to roughly US\$14 trillion, or 12% of global GDP in 2020.⁴² Significantly more will still

34. JODI, JODI-Gas, <http://www.jodidb.org/>, accessed 12 March 2021.

35. Jeff Tollefson, 'COVID curbed carbon emissions in 2020-but not by much', *Nature* 589, 343 (2021) <https://doi.org/10.1038/d41586-021-00090-3>

36. Ibid.

37. WMO, 'Carbon dioxide levels continue at record levels, despite COVID-19 lockdown', press release, 23 November 2020.

38. UNEP, Emissions Gap Report 2019 (Nairobi: UNEP, 2019).

39. UNFCCC, Nationally determined contributions under the Paris Agreement: Synthesis report by the Secretariat, FCCC/PA/CMA/2021/2, 26 February 2021.

40. IEA, Global Energy Review: CO₂ Emissions in 2020, 2 March 2021, <https://www.iea.org/articles/global-energy-review-co2-emissions-in-2020>, accessed 7 March 2021.

41. OECD, Biodiversity and the economic response to COVID-19: Ensuring a green and resilient recovery, Policy Brief (Paris: OECD, 28 September 2020).

42. IMF, Fiscal Monitor Update, January 2021, January 2021, <https://www.imf.org/en/Publications/FM/Issues/2021/01/20/fiscal-monitor-update-january-2021>, accessed 8 March 2021.

be needed for longer-term recovery, and for tackling climate change and achieving the SDGs. Before the pandemic, the estimated financial needs for achieving the SDGs globally were US\$5-7 trillion a year.⁴³

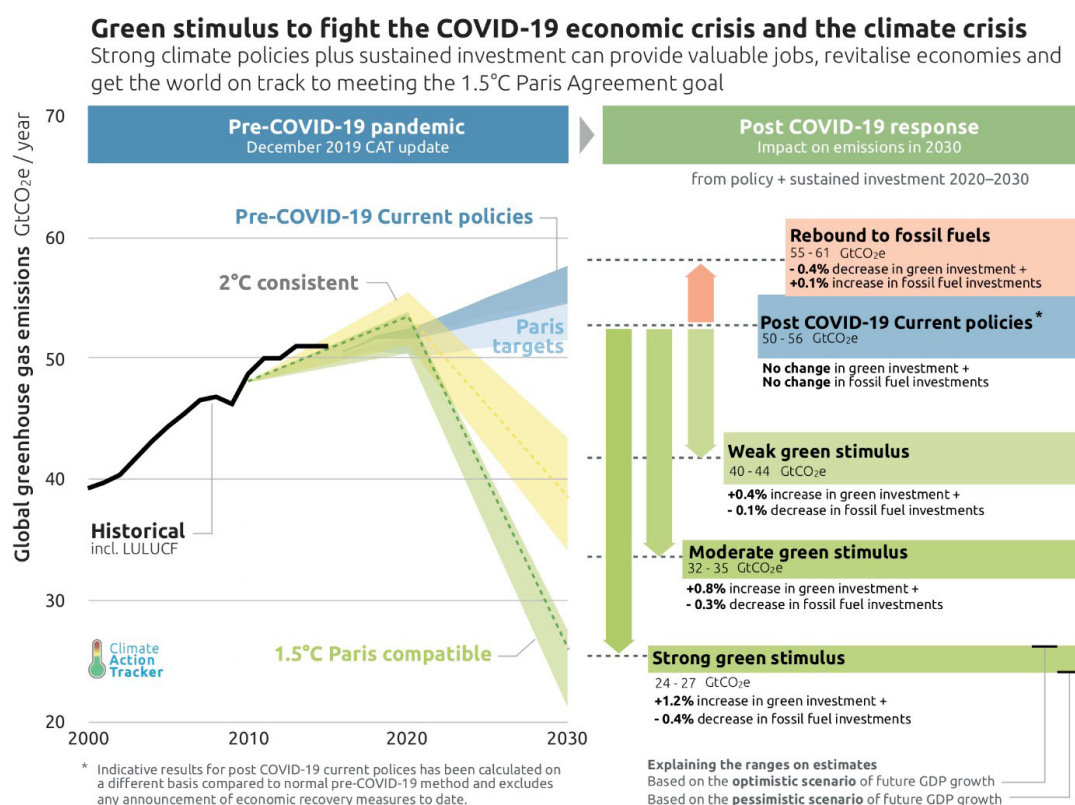
In 2020, the International Energy Agency (IEA) estimated that a sustainable recovery, which focuses on boosting economic growth, creating jobs and building more resilient and cleaner energy systems, would require global investments of approximately US\$1 trillion annually over the next three years.⁴⁴ The International Renewable Energy Agency (IRENA) estimated that US\$15 trillion in additional investments by 2050 would be needed to set the world on a more climate-friendly path above current plans and policies.⁴⁵

Despite calls for stimulus packages that support a green transition, to date, global COVID-19 fiscal spending has primarily supported the global status quo of high-carbon economic production.⁴⁶

2.3. Opportunities and Benefits of Better Recoveries

There is a strong case to adopt policies that revive the economy from the impacts of COVID-19 while advancing the SDGs and the implementation of the Paris Agreement. The UNEP, for example, has demonstrated in its 2020 Emissions Gap Report how recovery measures can simultaneously support a rapid, employment-intensive and economically cost-effective economic recovery and a low-carbon transition. In order for this to happen, policies and spending should be targeted at supporting low-carbon and renewable energy, low-carbon transport, zero-energy buildings and low-carbon industry. At the same time, additional focus is needed on research and development (R&D) of zero-emissions technologies, reforming fossil fuel subsidies and implementing nature-based solutions such as large-scale landscape restoration and reforestation.⁴⁷ The Climate Action Tracker has estimated that with adjustments to investment spending of 1% or less the world could be put on track to achieving the emission reduction goals of the Paris Agreement (Figure 5).

Figure 5. Potential Contributions of Recovery Spending to Global GHG Emission Reductions Consistent with the Paris Agreement⁴⁸



43. Vanessa Fajans-Turner, 'Filling the finance gap', SDGs: Transforming Our World (UNA-UK), 19 June 2019.

44. IEA, Sustainable Recovery.

45. IRENA, Global energy transformation: A roadmap to 2050 (2019 edition) (Abu Dhabi: IRENA, 2019).

46. Vivid Economics, Greenness of Stimulus Index (Vivid Economics, Finance for Biodiversity Initiative, February 2021).

47. UNEP, Emissions Gap Report 2020 (Nairobi: UNEP, 2020).

48. Climate Action Tracker, A government roadmap for addressing the climate and post COVID-19 economic crises (2020), <https://climateactiontracker.org/publications/addressing-the-climate-and-post-covid-19-economic-crises/>, accessed 13 March 2021. Copyright © 2020 by Climate Analytics and NewClimate Institute. Permission for reproduction obtained from the NewClimate Institute.

A green, resilient and just recovery could also generate significant benefits for the Middle East region. IRENA's 2019 analysis of Gulf Cooperation Council (GCC) countries suggests that implementing existing GCC renewable energy deployment plans by 2030 alone could save 354 million barrels of oil equivalent in fossil fuel consumption in the power sector (equal to a 23% decrease over a baseline).⁴⁹ This would result in an emission reduction of 136 million tonnes (Mt) of CO₂, equal to the current annual combined emissions of Oman and Bahrain.⁵⁰ Furthermore, the region could create more than 220,500 direct jobs and reduce water withdrawal for power production and associated fuel extraction by 11.5 trillion litres (a 17% decrease).⁵¹

A study by C40 Cities on 100 cities across the globe, including Dubai, found that green and just COVID-19 recoveries have the potential to create more than 50 million sustainable jobs by 2025 and generate wider economic benefits of US\$275 billion over the next decade, compared to a business-as-usual recovery. They could also save hundreds of thousands of lives by reducing air pollution, including preventing over 270,000 premature deaths.⁵² Deaths attributable to exposure to fine particulate matter (PM2.5) generated by fossil fuel combustion accounted for 6.5% of all deaths in the Middle East in 2018.⁵³

For governments in the Middle East, the benefits of greening the economy recoveries and supporting transitions to carbon-neutral economies, while harnessing economic, ecological and health benefits, therefore seem clear.

2.4. Green, Resilient and Just Recoveries – Policies and Objectives

Several terms that emphasise the importance of a better recovery have emerged since the start of the pandemic. These include green recovery, building back better, and sustainable recovery.⁵⁴ Despite the use of different terms, most calls are aligned on focusing on the need to advance greener, circular, just and resilient economies.

Compared to the 2009 Great Recession, there is now a significantly greater urgency to bend the curve on global GHG emissions and halt biodiversity destruction. At the same time, over the past decade, the climate change resilience/adaptation and social justice agendas have gained increasing prominence globally (see also section 4.1). Much of the policy discussion around sustainable recoveries has therefore also sought to integrate and address related challenges and priorities.

For the purposes of this study, the overarching objectives of better recoveries in the Middle East are therefore defined as:

- Aligning GHG emissions with climate-safe trajectories;
- Promoting circularity in products, materials and sources to achieve circular economies;
- Enhancing societies' resilience to climate, biodiversity and other environmental risks, and protecting people from environment-related economic shocks by increasing environmental resilience and adaptation capacity;
- Ensuring no-one is left behind in the transition to green economies and energy systems, and promoting economic and social equity while doing so; and
- Laying the institutional foundations for sustainable development through information sharing and a whole-of-society approach.⁵⁵

Better recoveries will look different depending on the economic sector. This study zooms in on the energy sector - including energy supply and demand. Among the main goals for the region are:

- Transitioning energy systems to zero emissions or emissions neutrality;
- Increasing the rate of electrification;
- Improving energy efficiency on both the supply and demand sides;

49. IRENA, Renewable Energy Market Analysis: GCC 2019 (Abu Dhabi: IRENA, January 2019).

50. PIK dataset, total GHG, excluding LULUCF, 2017. World Resources Institute et al., Climate Watch, <https://www.climatewatchdata.org>, accessed 18 February 2021.

51. IRENA, Renewable Energy Market Analysis: GCC.

52. C40 Cities, Technical Report: The Case for a Green and Just Recovery (New York: C40, 2020).

53. Karn Vohra et al., 'Global mortality from outdoor fine particle pollution generated by fossil fuel combustion: Results from GEOS-Chem,' Environmental Research (2021): 110754.

54. Organisations and entities using these various terms, which are also cited in this study, include the IEA, ILO, IMF, OECD, various UN agencies, Vivid Economics, World Bank and the World Resources Institute, among many others.

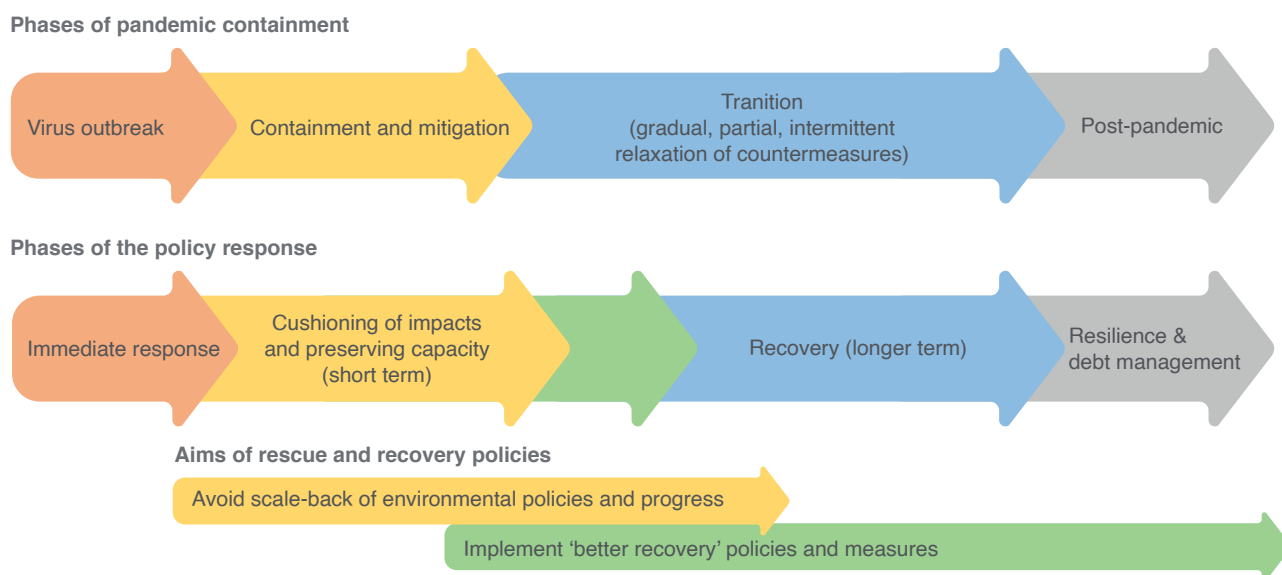
55. This final point was highlighted among the key policy recommendations for the Arab region in: UN, The Impact of COVID-19. Others are highlighted across sustainable recovery literature from 2020 onwards.

- Enhancing the resilience of the energy sector to climate change-related shocks; and
- Ensuring just workforce transitions in areas/jobs that are in permanent decline.

The study will also briefly examine aviation and tourism, which have been hit exceptionally hard by the COVID-19 crisis worldwide. For tourism and aviation, objectives for better recoveries include: aligning sectoral emissions with zero carbon or carbon neutrality; transitioning aviation into carbon neutrality through efficiency and clean fuels; minimising negative environmental impacts on the environment and nature from tourism; strengthening social safety nets and retraining for aviation and tourism sector workers in the medium term; and ensuring sustainable jobs by increasing sectoral resilience to external shocks.

It is important to make two distinctions in recovery policy-related concepts. The first one is between short-term rescue measures, such as social benefits or liquidity support to businesses, which are aimed at maintaining pre-crisis economic activity, and longer-term recovery measures, which can be used to steer development to new trajectories. Figure 6 illustrates these different phases of recovery policy in relation to the phases of pandemic containment. To enable sustainable recoveries, policies in the containment phase should as a minimum seek to avoid causing further environmental harm. With COVID-19 in 2020, this was often not the case - the absence of environmental conditionalities in airline bailouts being the prime example.⁵⁶

Figure 6. Phases in the COVID-19 Recovery Response and Related Policy Objectives⁵⁷



In 2021, the focus of many governments shifted to longer-term recovery measures. The second distinction relates to these recovery measures, which are the focus of this study and which can be classified into fiscal and non-fiscal policies and measures (also called policy tools), as well as broader policies (such as quantitative targets or plans, strategies and visions). None of these are specific to economic recoveries alone. Instead, the main difference between pre- and post-COVID-19 crisis from a policy design perspective is that, given that large-scale of investments that will be needed to revive economies, the crisis represents a time-bound 'opportunity' to employ these tools more effectively. The distinction is particularly important for countries with limited fiscal space, but also important in understanding how fiscal spending can be used in various ways.

56. In some cases, governments could choose use short-term rescue measures to redirect investments to greener activities. However, in practice, they fail to utilise these opportunities.

57. Adapted from: Shardul Agrawala et al., What policies for greening the crisis response and economic recovery? Lessons learned from past green stimulus measures and implications for the COVID-19 crisis, OECD Environment Working Paper No. 164 (Paris: OECD, 27 May 2020), 33.

3. Early Recovery Efforts in the Region

The year 2020 saw limited progress towards ‘better’ development trajectories in the Middle East. This section takes stock of economic rescue and recovery efforts in region in the first year of the COVID-19 pandemic, with a particular emphasis on large, oil-producing Arab countries. It presents a detailed overview of government rescue and recovery fiscal spending and policies and assesses their contributions to green, resilient and just recoveries.

Alongside the direct impacts of the pandemic, the region’s revenues in 2020 were impacted by both low oil prices and OPEC+ production quotas. In the GCC and Iraq, government revenues were estimated to have fallen by 54% and 69%, respectively, compared to 2019. While the GCC countries were able to implement a total of US\$194 billion in overall stimulus, spending in countries with more limited fiscal space was dominated by health expenditures.⁵⁸

Economic shocks were the hardest in the second quarter of 2020, which was marked by both stringent lockdowns in many Middle Eastern countries and record-low oil prices, resulting in a negative impact on both oil and non-oil economic activity.⁵⁹ Measured by business confidence and mobility data, activity began picking up in the third quarter of 2020.⁶⁰ Recovery in the hardest hit sectors -tourism, including related (air) transport, accommodation, wholesale and retail services - will take longer.

Similar to the drivers of economic shocks, the driving forces of economic recovery in the Middle East are both external and internal: they relate to global oil demand (and in some cases international tourism), on the one hand, and domestic demand, on the other. Boosting the latter will largely depend on domestic government measures, including fiscal spending and economic and labour market policies. At the same time, faced with the prospect of increasing debt, governments could decide to reduce instead of increase fiscal spending, or continue to allow for large expatriate outflows as a strategy to ‘outsource’ unemployment,⁶¹ which in turn could slow down recoveries. At the start of 2021, there were uneven expectations for recovery: the UN estimated that middle-income Arab countries would achieve the highest growth rates, of 4-5%, followed by the GCC countries, at 2%, and least developed countries, at 0.5%.⁶² Some market analysts suggested that GCC economies might not return to pre-COVID-19 levels until 2023.⁶³

58. UN, World Economic Situation and Prospects, 2021 (New York, UN, 25 January 2021).

59. IMF, Policy Tracker - Policy Responses to COVID-19, <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#S>, updated 5 February 2021, accessed 10 February 2021.

60. PwC Middle East, PwC ‘Middle East Economy Watch 2020 Q3 - Recovery begins, but long term challenges remain’, 8 December 2020, <https://www.pwc.com/m1/en/media-centre/2020/economy-watch-2020-q3-recovery-begins-but-long-term-challenges-remain.html>, accessed 12 February 2021.

61. S&P Global Ratings, ‘Expat Exodus’.

62. UN Regional Commissions New York Office, ‘ESCWA: The Arab region faces two scenarios for 2021’, 29 December 2020, <https://www.regionalcommissions.org/escwa-the-arab-region-faces-two-scenarios-for-2021/>, accessed on 13 March 2021.

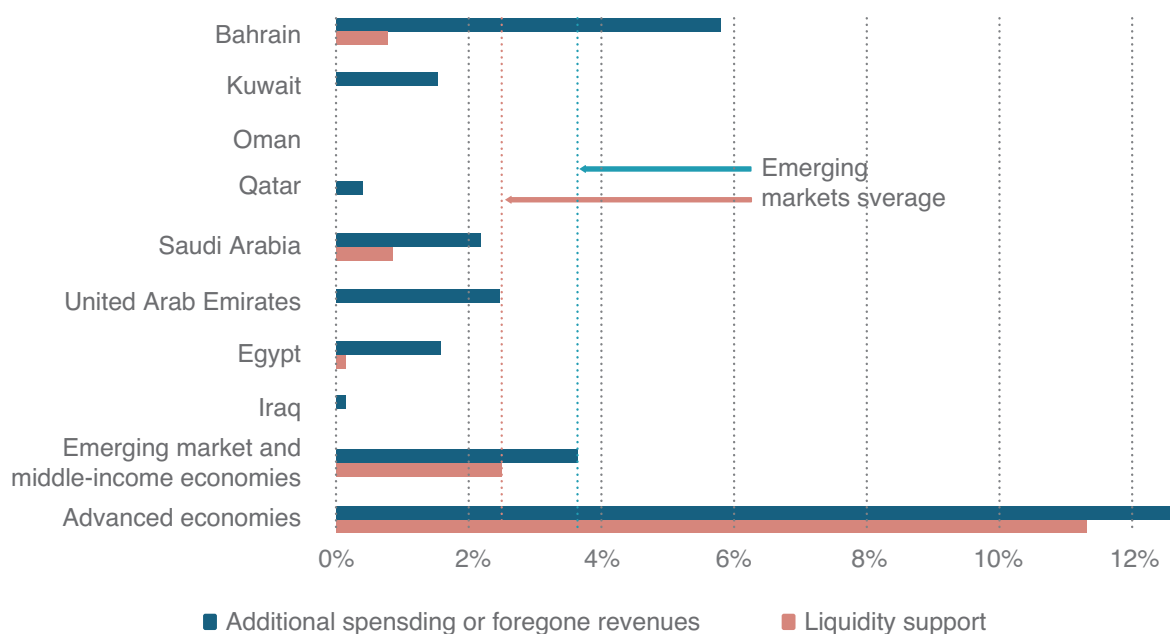
63. PwC Middle East, PwC ‘Middle East Economy Watch 2020 Q3’.

3.1. Overall Rescue and Recovery Spending in Arab Oil-producing Countries

Since the start of the COVID-19 pandemic in March 2020, the health response (health sector measures and restrictions of social activities) and the immediate economic aid and stimulus efforts dominated policy responses in the region.

However, on average, Arab oil producers' COVID-19 crisis fiscal spending as a share of GDP has been lower than that of other emerging economies and significantly less than of advanced economies. By the end of 2020, emerging market and middle-income economies' additional spending and foregone revenue resulting from the pandemic was on average 3.6% of their GDPs, and equity, loans and guarantees 2.5%. For comparison, Saudi Arabia's spending in this period totalled 2.2% and 0.8%, respectively. Figure 7 illustrates IMF estimates on the fiscal response by the GCC countries, Egypt and Iraq.

Figure 7. COVID-19 Fiscal Response in Selected Middle Eastern Countries, End of 2020 (% of GDP)⁶⁴



Note: When data is unavailable, the figure shown is zero.

Through 2020, economic rescue measures, rather than longer-term recovery policies, generally remained governments' main focus in the region.⁶⁵ Table 4 presents a summary of types of fiscal measures adopted and announced in the eight Arab oil-producing countries, based on the IMF's and KPMG's policy trackers, through February 2021.

64. IMF, Fiscal Monitor: Database of Country Fiscal Measures in Response to the COVID-19 Pandemic, Excel file, <https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>, accessed 9 February 2021.

65. Based on Oxford University estimates, as of November 2020, total rescue spending as a share of GDP in Egypt, Iraq, Saudi Arabia and the UAE stood at 1.8%, 0.1%, 10.3% and 3.3%, respectively. Spending in recovery-oriented measures only totalled 0.3%, 2.3%, 0.5% and 0.0%, respectively. Oxford University Economic Recovery Project, Oxford Economic Stimulus Observatory, <https://recovery.smithschool.ox.ac.uk/tracking-spending-overview/>, accessed 8 February 2021.

Table 4. COVID-19 Policy Responses in Selected Middle Eastern Countries, as of 8 February 2021⁶⁶

	Short-term fiscal measures	Longer-term measures
Bahrain	Salary support to Bahraini citizens, utility support to Bahraini citizens and companies, fee and rent waivers for companies and industrial entities, liquidity funds to support SMEs, social benefits for lower-income families, reductions in government agencies' expenditure and delays in capital expenditure	-
Egypt	Increases in pensions, cash transfer programmes, irregular worker support, loans to citizens to incentivise consumption, mortgage guarantee fund, energy cost reductions for industries, tax relief and loan-related support to companies, fuel discount, stimulus financing and loans to aviation and tourism, Corona tax on salaries (1%) and pensions (0.5%) allocated to support hard-hit sectors and SMEs	Plans to increase strategic food reserves, low-cost financing for housing units, soft loans from banks at zero/low interest rates for replacing old cars with natural gas-powered vehicles
Iraq	Budget reductions in 'non-essential' sectors to fund the health sector, private sector cash transfer scheme, loan-related support to SMEs	-
Kuwait	Deferral of private sector social security payments, fee exemptions for selected sectors, unemployment support for Kuwaiti citizens, concessional loans to SMEs, increases in government agencies' budgets	-
Oman	Support to maintaining employment, loan rescheduling, fuel subsidies and utility payment deferrals for Omani citizens, utility payment postponements, exemptions of taxes, fees and fines for companies, loan-related support to SMEs	-
Qatar	Support to various hard-hit sectors, rent exemptions for SMEs, utility fee waivers, salary support to COVID-19-affected workers, cuts in non-Qatari government employee's salaries, customs duty exemptions for food items, among others	Easing of foreigner sponsorship rules, minimum salary, enhanced enforcement of labour protections
Saudi Arabia	Private sector relief, including concessional financing for SMEs, utility bill discounts for commercial, industrial and agricultural sectors, salary support to Saudi citizens, VAT and customs duties increases	-
UAE	Government fee exemptions for the private sector, acceleration of existing infrastructure projects, utility subsidies, credit guarantees and temporary loan and rent deferrals for SMEs, reductions and suspensions in government fees and penalties	-

3.2. The Climate Impact of Rescue and Recovery Spending

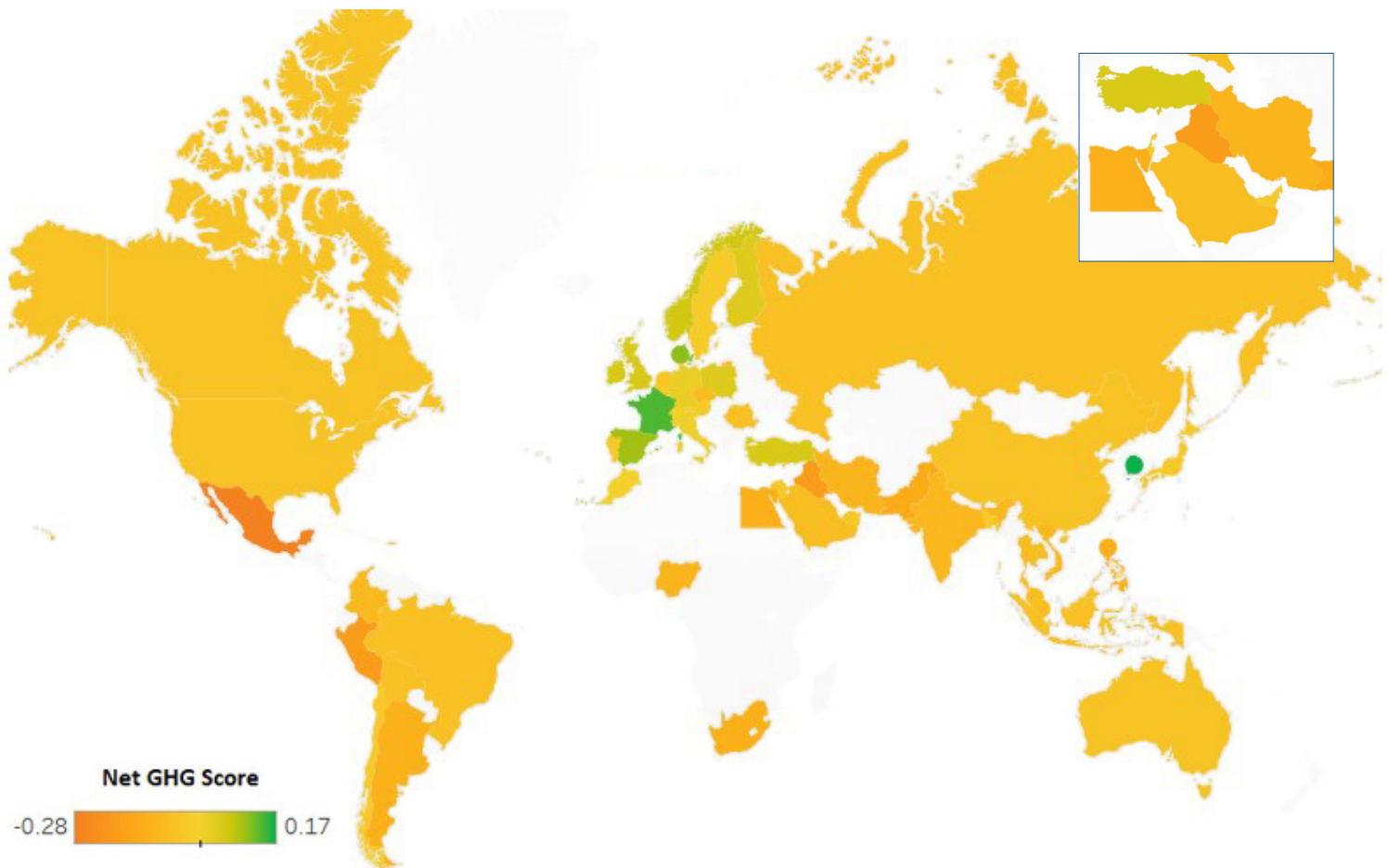
Worldwide, with the exception of Europe, the tally of 'brown' versus 'green' fiscal crisis spending has been heavily in favour of the former. Based on an estimate by Vivid Economics, the implementation of stimulus measures announced in Saudi Arabia and Turkey (the only Middle Eastern countries included) by February 2021 would have a highly net negative environmental impact. Saudi Arabia, for example, which generates practically all of its electricity from natural gas and oil products, reduced electricity payments for various sectors and halved the domestic price of petroleum.⁶⁷

The Oxford University-led Global Recovery Observatory tracks four Arab oil producers (Egypt, Iraq, Saudi Arabia and the UAE). The observatory estimates the overall GHG impact of total fiscal crisis spending (rescue + recovery) in these countries, expressed as a 'net GHG score', as of November 2020, as negative. In other words, their total crisis spending up until this point will increase the countries' emissions relative to a no-intervention baseline.⁶⁸ Similarly, the observatory's net GHG score for the recovery-specific portion of crisis spending for most of the region's countries is negative, as of March 2021. Figure 8 illustrates these scores in a global context.

66. IMF, Policy Tracker; KPMG, Government and institution measures in response to COVID-19, Update 49, 2 December 2020. Note: Measures related to the health sector and monetary measures are excluded from the table.

67. Vivid Economics, Greenness of Stimulus Index.

68. Oxford University Economic Recovery Project, Oxford Economic Stimulus Observatory, <https://recovery.smithschool.ox.ac.uk/tracking/>, updated 23 November 2020, accessed 8 February 2021.

Figure 8. Net GHG Score of Recovery-related Fiscal Spending (March 2021, Oxford)⁶⁹

As of March 2021, the Oxford Observatory's database of large economies' major rescue and recovery measures⁷⁰ contained 51 policies for **Egypt**, including 8 recovery policies.⁷¹ 'Dirty' rescue measures have included funding for aviation. A EGP3.5 billion (US\$ 224 million) natural gas pipeline extension project is also estimated to have negative impact on the country's emissions performance. In **Iraq**, among 22 policies (including 7 recovery policies),⁷² two government-funded power sector projects valued at more than US\$1.2 billion will provide much-needed upgrades to the country's electricity infrastructure, but also perpetuate the use of fossil fuels in the power sector. **Saudi Arabia's** 19 listed policies⁷³ include two recovery policies: a support scheme for e-commerce and a US\$4 billion tourism development fund. None of these is expected to have an impact on the country's baseline emissions. Growth of the tourism sector obviously supports economic diversification, however. In the **UAE**, for which the database lists 19 policies (including 6 recovery-related ones)⁷⁴, none of the measures is similarly estimated to impact baseline emissions.

There are currently no trackers that would survey or quantify the impact of rescue and recovery spending on the other areas of 'better recovery', namely circularity, climate and/or environmental resilience and workforce transitions. The databases reviewed for this study (IMF, KPMG, Oxford Observatory and others)⁷⁵ contained few policies with related impacts for the region's countries.

69. Brian O'Callaghan et al. Global Recovery Observatory (Oxford University Economic Recovery Project, 2021), <https://recovery.smithschool.ox.ac.uk/tracking/>, updated 10 March 2021, accessed 13 March 2021.

70. Brian O'Callaghan et al. Global Recovery Observatory - Excel file, <https://recovery.smithschool.ox.ac.uk/wp-content/uploads/2021/03/20210310-Global-Recovery-Observatory--publicv3.xlsx>, updated 10 March 2021, accessed 13 March 2021.

71. These policies cover a broad range of sectors, from healthcare sector relief to funding for energy infrastructure, social housing, the aviation and tourism sectors, and to cash subsidies and tax exemptions.

72. Policies listed include a major port project, funding for medicines, and various emergency funding and aid schemes for individuals.

73. Policies included in the database include various types of short-term support to businesses.

74. The database list stimulus packages for various sectors by Dubai, but seems to omit many by in other emirates and at the federal level.

75. One additional Database is the Platform for Redesign 2020 (<https://platform2020redesign.org/>). However, this is a voluntary database where countries submit the inputs without any further quality check. Additionally, no Middle Eastern countries are included (except Iran, Israel and Palestine which are beyond the scope of this study).

Among the few developments identified that support circularity, in January 2021, the UAE adopted the Circular Economy Policy 2021-2031, which mandates the development of circular public procurement policies, supporting access to sustainable finance and raising awareness on business models that support the circular economy, among others.⁷⁶ The Egyptian government passed a waste management law that seeks to increase recycling rates and restricts the manufacture, import and export of single-use plastics.⁷⁷

Supporting climate resilience were the launch of a UNFCCC National Adaptation Plan (NAP) process in Iraq in September 2020 and the publication of the UAE's second Paris Agreement nationally determined contribution (NDC) in December 2020. The NAP process supports climate-resilient planning and the identification of adaptation priorities.⁷⁸ The UAE submitted a new NDC in December 2020, which refers to a Climate Adaptation Program containing measures in various sectors.⁷⁹ More broadly related to environmental resilience and biodiversity protection, Dubai announced in March 2021 its seventh urban master plan 'Dubai 2040 Urban Plan', which includes a goal to dedicate 60% of the emirate's land area to nature reserves and rural natural areas.⁸⁰

3.3. International Financing and Broader Policy Developments

In countries where the role of international technical and financial support is more pronounced, UN entities partnered with governments, launching programmes aimed at sustainable or green recoveries in a more holistic manner. The NAP in Iraq is developed in partnership with UNEP and funded with a US\$2.5 million grant from the Green Climate Fund.⁸¹ In October 2020, Iraq and UNEP also signed a memorandum of understanding (MoU) aimed at accelerating the implementation of environmental SDGs, which includes work to support the government's 'post-COVID-19 response [in] areas related to environmental sustainability'.⁸² A month later, two externally-supported programmes totalling €220 million (US\$276 million) were launched in Egypt: one project will help small and medium-sized enterprises (SMEs) green their value chains by investing in advanced technologies and climate mitigation and adaptation solutions. The other provides financing to SMEs in various sectors to invest in energy and water-efficient and renewable energy technologies.⁸³

Some Arab aid donors have also contributed to supporting green and resilient recoveries in poorer developing countries. Qatar and the Global Green Growth Institute (GGGI) signed a three-year agreement totalling US\$9.9 million to support projects in the Caribbean, Pacific and Africa, focusing on green entrepreneurship and climate-smart agriculture.⁸⁴

In terms of broader policies, Egypt is the only major Arab economy to have explicitly announced economy-wide green recovery efforts, which include green bonds (see next section) and the introduction by the Ministry of Planning of environmental standards to mainstream climate change considerations into ministries' investment plans. The country's Prime Minister has also announced that a green recovery plan and a new environmental strategy are forthcoming, and the Ministry of Environment is reported to be working on both renewable energy and climate change strategies.⁸⁵

In some countries, economic pressures have resulted in changes in government, potentially negatively impacting the prospects of sustainable recoveries. For example, in Oman's mid-2020 government consolidation, the Ministry of Environment and Climate Affairs was demoted to an environmental authority and its climate change affairs delegated to the Civil Aviation Authority.⁸⁶

76. WAM, 'Transition to circular economy will enable UAE to unlock new sustainable economic, Belhaif Al Nuaimi', press release, 26 January 2021.

77. UNEP LEAP, 'Egypt: Waste Management Law No.202 of 2020', <https://leap.unep.org/countries/eg/national-legislation/waste-management-law-no202-2020>, accessed 16 February 2021.

78. UNEP, 'Iraq launches National Adaptation Plan process for climate change resilience', press release, 21 September 2020.

79. UAE Government, Second Nationally Determined Contribution of the United Arab Emirates (December 2020).

80. Dubai Media Office,

81. UNEP, 'Iraq launches National Adaptation Plan'.

82. UNDP, 'Iraq's environmental sustainability prioritized in new UNEP/UNDP agreement', press release, 22 October 2020.

83. IISD, 'Two programs support green recovery in Egypt', Sustainable Recovery 2020, <https://www.iisd.org/sustainable-recovery/news/two-programs-support-green-recovery-in-egypt>, 13 November 2020.

84. GGGI, 'QFFD and GGGI conclude agreements on four projects...', press release, 10 December 2020.

85. Al Ahram, 'Between investments and the green recovery... The Ministry of Environment presents its plan to face the impact of COVID-19 (translation - original in Arabic)', 2 October, <http://gate.ahram.org.eg/News/2498063.aspx>, accessed 4 March 2021; Al Ahram, 'The Ministry of Environment presents to the IMF Egypt's steps towards a green recovery', 12 November 2020, <http://gate.ahram.org.eg/News/2527802.aspx>, accessed 14 March 2021.

86. Mari Luomi, Gulf States' Climate Change Policies Amid a Global Pandemic, Issue Paper 6 (Washington D.C., AGSIW, 25 September 2020); Aisha Al-Sarihi, 'Oman's Tradition of Environmental Protection Runs Into Economic Headwinds', AGSIW blog, <https://agsiw.org/omans-tradition-of-environmental-protection-runs-into-economic-headwinds/>, 27 October 2020.

In other countries, external events also drove positive changes in governance: in the UAE and possibly Bahrain, climate change policy may receive more attention going forward with the nomination of new climate change envoys, in the wake of the US election victory of Joe Biden, who has indicated that climate change would be at the top of his agenda.

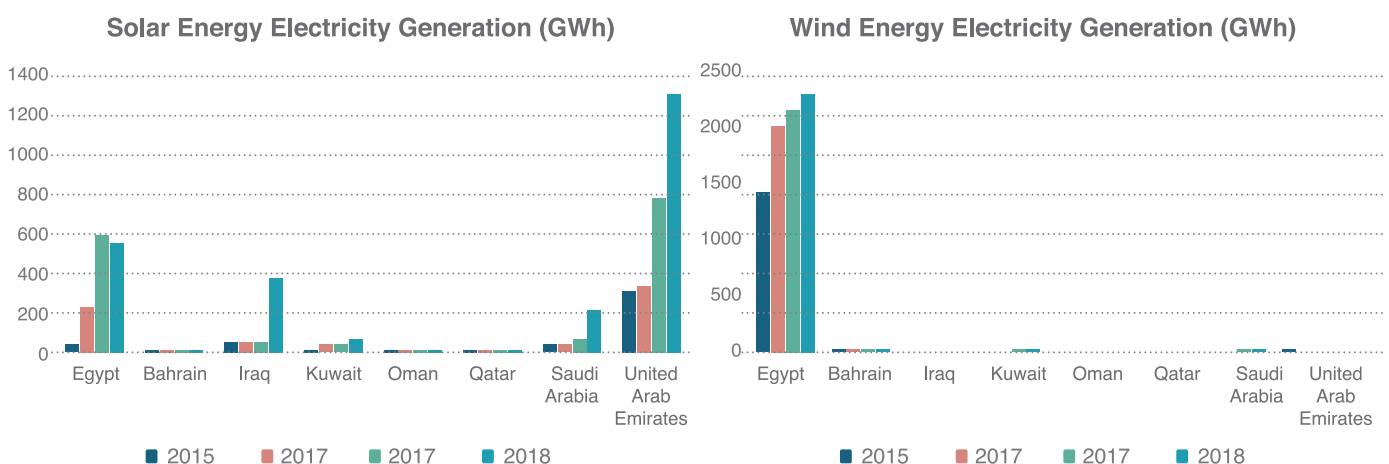
3.4. Energy Sector and Energy-related Developments in 2020 and Recovery Measures

Globally, the COVID-19-induced reduction in energy consumption was the primary factor behind the estimated 6.4% total fall in GHG emissions in 2020 compared to 2019.⁸⁷ On average, 81% of GHG emissions in the Middle East come from energy.⁸⁸ Climate Action Tracker, which assesses emission reduction policies in key economies, estimates that GHG emissions in Saudi Arabia and the UAE fell in 2020 by 3-6% and 6-9%, respectively, but notes that none of the fiscal spending measures announced in 2020 in either country directly addressed emissions.⁸⁹

According to the IISD's Energy Policy Tracker, by March 2021, 41% of energy-related recovery spending in the world's 30 major economies had been allocated to fossil fuels and only 37% to clean energy, on average. The database lists three policies for Saudi Arabia: in April 2020, electricity costs for commercial, industrial and agricultural sectors were reduced by 30%⁹⁰ and payments for commerce and industries were postponed. In May 2020, fuel prices were reduced by 50%.⁹¹ As shown in Table 4, various other countries across the region also reduced utility and fuel costs as part of their short-term relief and stimulus spending. In Egypt and the UAE, energy prices were reduced for the industrial and, in the case of the UAE, commercial sectors.⁹²

Some scholars have suggested that lower oil revenues could translate into lower levels of investment in renewable energy in the GCC.⁹³ Overall, renewable energy projects already in the pipeline pre-COVID-19 proceeded largely as planned through 2020,⁹⁴ and the Middle East and North Africa region is collectively expected to add 4.12 GW of new renewables capacity in 2021.⁹⁵ (Figure 9 shows the evolution of solar and wind energy generation in the six oil-producing countries pre-pandemic.)

Figure 9. Solar and Wind Power Generation in Arab Oil-producing Countries in 2015-2018⁹⁶



87. Tollefson, 'COVID curbed carbon emissions in 2020'.

88. Average for 15 countries, with LULUCF, 2017. World Resources Institute et al., Climate Watch.

89. Climate Action Tracker, 'Saudi Arabia', <https://climateactiontracker.org/countries/saudi-arabia/>, updated 22 September 2020; 'UAE', <https://climateactiontracker.org/countries/uae/>, updated 27 November 2020.

90. The total cost of this was estimated at SAR 0.9 billion, or US\$240 million. Climate Action Tracker, 'Saudi Arabia'.

91. IISD et al., [energypolicytracker.org](https://www.energypolicytracker.org/), <https://www.energypolicytracker.org/>, accessed 13 March 2021.

92. New Climate Institute, Overview of recently adopted mitigation policies and climate-relevant policy responses to COVID-19 (Cologne: NCI, October 2020).

93. Ruba Husari, speaking at a webinar on 'After Covid-19: Economic Recovery in the Middle East', Middle East Institute, 2 November 2020.

94. Luomi, Gulf States' Climate Change Policies.

95. S&P Global, 'Commodities 2021: Middle East renewables on rebound after project delays', 11 December 2020, <https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/121120-commodities-2021-middle-east-renewables-on-rebound-after-project-delays>, accessed 15 February 2021.

96. IRENA, Renewable Energy Statistics 2020 (Abu Dhabi: IRENA, 2020).

Government officials in Egypt, which has put in place a 42% renewables target for 2035, reported having approved close to 700 'green' projects in 2020, with a total investment value of US\$28.6 billion, which include renewable energy projects, an electric train project and a green hotel certification programme.⁹⁷ In September 2020, the Egyptian government issued its first green bond, totalling US\$750 million, to finance clean transport and renewable energy projects.⁹⁸ In 2021, an Egyptian automaker announced plans to start manufacturing electric vehicles (EVs) in collaboration with a Chinese manufacturer.⁹⁹

Saudi Arabia sustained rhetoric around its goal of generating 50% of electricity from renewables by 2030, originally announced in January 2020.¹⁰⁰ The country's smart city project NEOM also announced a US\$5 billion renewable energy-powered green hydrogen plant project in July 2020.¹⁰¹ However, according to industry sources, due to falling regional solar prices and related price (re) negotiations, the country failed to commission any new solar energy projects in 2020.¹⁰² In January 2021, Abu Dhabi announced a hydrogen alliance among three state-owned enterprises, aimed at accelerating production and consumption within the country and positioning Abu Dhabi as an exporter.¹⁰³

The UAE's second NDC, announced in December 2020, includes its first economy-wide emission target, for 2030. Most of the efforts towards the UAE's NDC will come from the power sector. Climate Action Tracker's ambition assessment, however, continues to rank the NDC as 'highly insufficient'.¹⁰⁴ At the time of writing, no other Middle Eastern countries had announced enhanced NDCs since the start of the pandemic.

3.5. Tourism and Aviation Developments in 2020 and Recovery Measures

Aviation has been one of the sectors hardest hit by the pandemic. The industry group ATAG estimates that the direct and indirect (including tourism) contribution of aviation to employment and economies could at least temporarily be reduced to half of its pre-pandemic levels of 3.4 million jobs (4.5% of all employment) and US\$213 billion (7.6% of the Middle East region's total GDP). The economies of Egypt, Jordan, Lebanon, Saudi Arabia and the UAE are particularly dependent on aviation and tourism. In 2019, tourism contributed 9-16% of these economies' GDPs.¹⁰⁵ Figure 10 shows the World Travel and Tourism Council's estimates for the direct, indirect and induced contributions of tourism to the GDP in selected oil-producing economies in the region pre-COVID-19.

While domestic aviation is in most Middle Eastern countries only a minor contributor to GHG emissions, many host some of the world's major airlines. In the absence of technological alternatives, emissions from aviation have been expected to grow two to four-fold by 2050, making the sector one of the few sources of rapidly increasing emissions in the world, if left unabated.¹⁰⁶

While tourism too has important negative environmental impacts (through its impact on nature and its natural resource use), aviation's contribution to climate change was significantly more debated during the pandemic in many countries, most prominently in Europe. In the Middle East, however, there were few calls for environmental conditionalities from environmental groups or consumers to be attached to airline stimulus and rescue spending.¹⁰⁷

97. Rania Al-Mashat and Sérgio Pimenta, 'Greening Egypt's economy and what it means for the MEA region', FDI Intelligence, 27 January 2021, <https://www.fdiintelligence.com/article/79361>, accessed 14 February 2021.

98. Middle East News Agency, 'Egypt issues first Green bonds at \$750 million value', 30 September 2020.

99. Ahram Online, 'Egypt signs framework agreement with China's Dongfeng to produce electric cars', 18 January 2021, <https://english.ahram.org.eg/NewsContent/3/12/399091/Business/Economy/Egypt-signs-framework-agreement-with-Chinas-Dongfe.aspx>, accessed 2 March 2021

100. Matthew Martin et al., 'Saudi Arabia Aims to Become Next Germany of Renewable Energy', Bloomberg Green, 27 January 2021, <https://www.bloomberg.com/news/articles/2021-01-27/saudi-arabia-aims-to-become-the-germany-of-renewable-energy>; Joanne Serrieh, 'Saudi Arabia, other G20 leaders emphasize importance of clean energy, sustainability', Alarabiya News, 22 November 2020, <https://english.alarabiya.net/News/gulf/2020/11/22/G20-G20-leaders-global-organizations-emphasize-importance-of-Circular-Carbon-Economy->, both accessed 14 February 2021.

101. Air Products, 'Air Products, ACWA Power and NEOM Sign Agreement for \$5 Billion Production Facility in NEOM...', press release, 7 July 2020.

102. Max Hall, 'Saudi Arabia commissioned no solar projects last year', PV Magazine, 11 January 2021.

103. Mubadala, 'Mubadala, ADNOC and ADQ form alliance to accelerate Abu Dhabi Hydrogen leadership', press release, 17 January 2021.

104. While several gigawatts of solar and nuclear energy are in the pipeline, a large (2.4 GW) coal-fired plant is expected to come online in 2023 which, if not equipped with carbon capture and storage, would negatively impact the country's power sector emissions footprint. Climate Action Tracker, 'CAT Climate Target Update Tracker, UAE', <https://climateactiontracker.org/climate-target-update-tracker/uae/>, updated 29 December 2020.

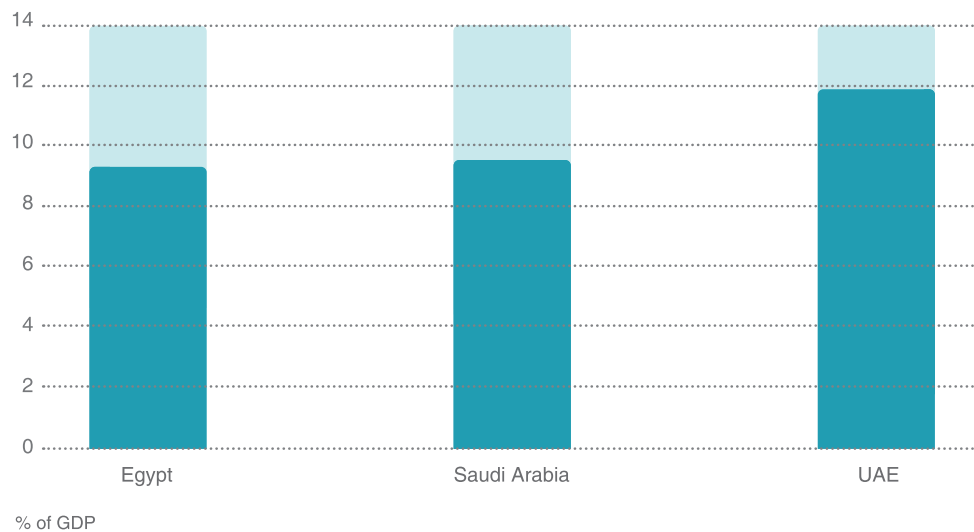
105. ATAG, Aviation Benefits Beyond Borders (Air Transport Action Group, September 2020).

106. The share of international aviation of global CO₂ emissions was estimated to be 2.5% in 2018. The ICAO has projected that fuel consumption from international aviation could grow 2.4–3.8 times between 2015 and 2050. International aviation has accounted for approximately 65% of global aviation emissions. Gregg G. Fleming and Ivan de Lépinay, 'Environmental Trends in Aviation to 2020', Environmental Trends in Aviation to 2020 (Montreal: ICAO, 2019).

107. Brian O'Callaghan et al., Global Recovery Observatory – Excel file.

Through 2020, various Middle Eastern countries announced sizeable stimulus and rescue packages for airlines. In Egypt, for example, EgyptAir was granted a EGP2 billion (US\$128 million) loan and the price of aviation fuel has been reduced at least through the end of 2021.¹⁰⁸ GCC governments announced financial support to local airlines, but the amounts have not been disclosed. Press reports suggest the aid could be in the range of several billions of US\$.¹⁰⁹ Total redundancies have also not been fully disclosed by the region's airlines. Similarly, there is a lack of transparency on possible conditions attached to the airline bailouts, but it can be assumed that the support has not included environmental conditions, as governments in the region are generally keen to publicise any environmental measures they take. In a clearly 'brown' move, in Egypt, a 'Enjoy Winter in Egypt' initiative aimed at supporting domestic tourism included discounted domestic flight tickets.¹¹⁰

Figure 10. Contribution of Tourism to Selected Arab countries' GDP in 2019¹¹¹



Declining volumes of foreign air travel have severely impacted tourism in a number of Middle Eastern economies. The Egyptian government, for example, announced a EGP 50 billion (US\$3.2 billion) stimulus for the tourism sector, and Saudi Arabia continued its drive to develop its tourism sector by launching a US\$4 billion tourism development fund.¹¹² Many governments sought to boost domestic tourism, which is generally considered to be environmentally more sustainable given the shorter travel distances. The UAE, for example, launched a campaign titled 'World's Coolest Winter', which included the development and promotion of several natural and ecotourism sites across the seven emirates, along with related job training and investment promotion.¹¹³

3.6. Examples of 'Better' Practices

Despite some short-term positive impacts on environmental metrics, such as a drop in air pollution during the lockdowns and lower emissions from the transport sector, the analysis above shows that Middle East governments' rescue and recovery measures in 2020 were neither designed with environmental priorities in mind, nor are they likely to move the needle on the region's environmental performance and resilience or support just transitions. Rather, they focused on containing the spread of the virus and on ensuring the continuation of economic activities as they existed prior to the pandemic, to the extent possible.

However, some recovery-related green, resilient and just fiscal measures and policies, can be identified, which constitute good examples and could serve as best practices for various countries in the region. These are listed in Table 5.

108. Brian O'Callaghan et al., Global Recovery Observatory - Excel file.

109. Luomi, EU and GCC Aviation and Tourism.

110. Ahram Online, 'Reviving the tourism industry: Warm up in Egypt', 19 January 2021, <https://english.ahram.org.eg/NewsContent/50/0/399214/AIAhram-Weekly/0/Reviving-the-tourism-industry-Warm-up-in-Egypt.aspx>, accessed 13 March 2021.

111. Ibid.

112. IMF, Policy Tracker; Arabian Business, 'Saudi Arabia starts \$4bn Tourism Development Fund', 21 June 2020, <https://www.arabianbusiness.com/travel-hospitality/448453-saudi-arabia-starts-4bn-tourism-development-fund>, accessed 25 February 2021.

113. UAE Office of Public & Cultural Diplomacy, 'The 'World's Coolest Winter' in UAE', 14 December 2020, <https://youtu.be/CNv0Qf6I5bU>

Table 5. Selected Best Practice Examples of Better Recovery Measures in the Middle East ^{114, 115}

Economy-wide plans	<ul style="list-style-type: none"> ● Egypt: A green recovery plan was announced in October 2020, which includes mainstreaming sustainable development metrics in the national economic plan. ● UAE: The Circular Economy Policy 2021-2031 was launched in January 2021, which targets four priority areas - green infrastructure, sustainable transportation, sustainable manufacturing, and sustainable food production and consumption.
Energy supply and demand	<ul style="list-style-type: none"> ● Egypt: Green sovereign bonds, valued at US\$750 million, were introduced in September 2020 with the aim of financing renewable energy and clean transport projects. Additional government measures include supporting waste to energy projects and soft loans at zero-to-low interest rates from banks for replacing old cars with natural gas-powered vehicles. ● Egypt: Ministry of Public Business signed an agreement in January 2021 to start manufacturing EVs as part of a project meant to reduce emissions and limit the use of fossil fuels. ● UAE: In January 2021, Mubadala Investment Company, The Abu Dhabi National Oil Company (ADNOC), and ADQ (formerly Abu Dhabi Developmental Holding Company), announced the signing of a Memorandum of Understanding (MoU) to establish the Abu Dhabi Hydrogen Alliance to build a substantial green hydrogen economy in the UAE. Ministry of Energy and Infrastructure later announced joining the alliance. In March 2021, the government approved a hydrogen vehicles system and energy efficiency programmes for the transport, industry and construction sectors. ● KSA: Air Products, in conjunction with ACWA Power and NEOM, announced the signing of an agreement for a US\$5 billion world-scale green hydrogen-based ammonia production facility powered by renewable energy.
Circularity	<ul style="list-style-type: none"> ● Egypt: A new waste management law was introduced to reduce the manufacture, import or export of single-use plastics
Resilience	<ul style="list-style-type: none"> ● UAE: Dubai announced a new urban masterplan for 2040, which includes a target to preserve 60% of the emirate's land area.
International cooperation	<ul style="list-style-type: none"> ● Egypt: The European Bank for Reconstruction and Development (EBRD), the European Union (EU), and the Green Climate Fund (GCF) launched two programs to promote green finance in an attempt to support a green recovery for the Egyptian economy. The programmes supported will offer sub-loans by local banks to businesses for green investments in energy, water, and resource-efficient solutions. ● Iraq: The government signed a Memorandum of Understanding (MoU) with the UNEP Regional Office for West Asia and the UN Development Programme (UNDP) to advance progress towards the 2030 Sustainable Development Agenda in the country, and particularly its 'environmental SDGs'. The MoU aims to place environmental sustainability at the lead of Iraq's COVID-19 response.
Institutions and governance	<ul style="list-style-type: none"> ● UAE: The government launched a project titled 'Designing the Next Fifty Years Project in the UAE', which included a call for public e-participation: public and private sectors and, citizens and residents were invited to share their future aspirations and recommendations across different sectors.

It is clear that longer-term recovery policies must place people and jobs at their heart. At the same time, the climate and biodiversity crises demand that governments seek to align their investments in job sustenance and creation more closely with positive environmental outcomes, as environmental security is a basic component of human security.

114. Al Ahram, 'Between investments and the green recovery...'; WAM, 'Transition to circular economy'; Ahram Online, 'Egypt signs framework agreement'; UNEP LEAP, 'Egypt: Waste Management Law'; Mubadala, 'Mubadala, ADNOC and ADQ form alliance'; Jennifer Gnana, 'Hydrogen vehicle strategy to help UAE achieve its clean energy targets', The National, 22 March 2021; Air Products, 'Air Products, ACWA Power and NEOM Sign'; UNDP, 'Iraq's environmental sustainability prioritized'; IISD, 'Two programs support green recovery'; UAE Government, 'Designing the Next 50'...', <https://u.ae/en/about-the-uae/the-uae-government/2020-towards-the-next-50/designing-the-next-50>, updated 22 October 2020.

115. This report covers policy developments from March 2020 through mid-March 2021. After this, a number of plans and initiatives were announced that either are directly intended to support sustainable recoveries or have potential to support 'better' development trajectories over a longer time frame. These include, among others, Saudi Arabia's Green Middle East and Green Saudi Initiatives, which were announced in April 2021 and contain pledges to plant 10 billion trees and generate 50% of electricity from renewables by 2030 in Saudi Arabia. Other examples include plans by Abu Dhabi's energy company Taqa to expand the share of renewable energy generation in its portfolio from 5% today to 30% in 2030, and a UAE-wide energy and water demand management programme, which contains energy efficiency measures for the three most energy-intensive sectors. Various countries in the region also announced updates to their Paris Agreement plans, also known as nationally determined contributions, in the run up to the 2021 UN Climate Change Conference.

4. Past Experiences and Present Efforts: Lessons Learned & ‘Better’ Practices Promoted

The policy discussions around better and more sustainable recoveries are not fully new, even though they now take place in different circumstances to when they first started in the wake of the 2007-2008 Global Financial Crisis. During the COVID-19 crisis, the volume of both policy trackers and policy literature and recommendations has already grown significantly larger, reflecting a recognition of the increasing urgency of addressing climate change and the interdependencies between economic, social and environmental sustainability by governments and businesses alike.

In the aftermath of the Global Financial Crisis, green growth and economy strategies were pitched by a number of governments, including through G8 and G20 meetings, and international agencies.¹¹⁶ Some focused on generating additional value (green growth) while others took a more holistic approach (green economy). However, only 16% of related fiscal stimulus spending was eventually targeted at green activities.¹¹⁷ As a consequence, global GHG emissions exceeded their pre-crisis levels already in 2010.¹¹⁸

Since the onset of the COVID-19 pandemic, numerous actors have put forward recommendations for governments relating to better, sustainable, green, resilient and just recoveries. Several governments worldwide have also announced recovery policies and strategies that aim at similar outcomes, either building on existing policy agendas (such as the EU and South Korea) or announcing entirely new ones (Biden Administration in the US).

The first part of this section identifies lessons learned from the green recovery efforts after 2008 and from green growth and economy agendas promoted through the 2010s both globally and in the Middle East, based on related assessments and country experiences. The second part reviews and distils current ‘better’ practices by drawing from agendas promoted by major international organisations and agencies and policy agendas launched by governments in other regions.

4.1. Past: From Green Growth and Economy to ‘Better Recovery’

The early green growth and economy discussions of the late 2000s have evolved into longer-term agendas promoted by various international organisations including the UNEP, UN Industrial Development Organization (UNIDO), World Bank and Organisation for Economic Co-operation and Development (OECD), and through various international partnerships, such as the South Korea-headquartered GGGI and the UN-affiliated Partnership for the Green Economy (PAGE).

These agendas have held appeal in various countries. South Korea was the first country to adopt an economy-wide ‘green growth’ strategy in the immediate aftermath of the 2009 crisis, allocating 80% of its stimulus spending into green activities.¹¹⁹ Many other countries have since developed green strategies and plans, either at an economy-wide or sectoral level. The EU’s ten-year strategy for ‘smart, sustainable and inclusive growth’ (2010) contained a focus on greening the economy. China’s 12th Five Year Plan (2011-2015) included a section on ‘green development’. South Africa announced a ‘green economy accord’ (2011) to create green jobs, signed by labour, business and community representatives.¹²⁰ In the Middle East, the UAE launched a green growth strategy (2012).

The 2008 Financial Crisis, however, was in many ways structurally very different from the current COVID-19 pandemic. The origins of the former crisis were within the financial system, whereas the present shock is due to a health crisis, which has effects across the economy, including on the financial system itself. At the same time, there are a number of lessons to be captured from these ‘green’ efforts over the past decade. The two subsections below distil such lessons, first from a global perspective and then in a Middle East context.

116. Mohamed Abdel Raouf and Mari Luomi, ‘Introduction’ in Mohamed Abdel Raouf and Mari Luomi (eds.), *The Green Economy in the Gulf* (Oxon: Routledge, 2016).

117. The OECD study defines these as: renewable energy, energy efficiency in buildings, car switching payment schemes, clean technology development support, mass transit, nature conservation and water resource management. Agrawala et al., *What policies for greening?*

118. According to the PIK dataset of total GHG emissions (excluding LULUCF), global emissions were 42.5 GtCO₂e in 2008, 42.0 GtCO₂e in 2009 and 43.9CO₂e in 2010. World Resources Institute et al., *Climate Watch*.

119. South Korea’s president at the time Lee Myung-bak, had already come to power in 2008 with an agenda of ‘low-carbon, green growth’.

120. UN, OECD and World Bank, *Incorporating Green Growth and Sustainable Development Policies into Structural Reform Agendas* (Mexico City: G20 Mexico, June 2012); Agrawala et al., *What policies for greening?*

Global Lessons

Despite significant green stimulus and policy efforts since 2008-2009, there have been few systematic efforts to evaluate the economic, labour and environmental impacts of these measures.¹²¹ Two OECD ex post assessments, of stimulus packages implemented after the Global Financial Crisis and from experiences with green growth policies, have drawn **economy-wide** lessons (see Box 1).

Box 1. Economy-Wide Lessons from the Global Financial Crisis

- **Systematic policy evaluation:** Monitoring and evaluation mechanisms should already be incorporated early on into rescue and recovery spending and policies.
- **‘Do no harm’ rescue policies:** Since restoring public health is the overriding priority during the COVID-19 pandemic, stimulus spending in the rescue phase should be based on a ‘do no harm’ approach, aimed at avoiding environmental rollbacks and further negative environmental impacts. At the same time, reforming prices that drive investment decisions and consumption preferences should also be considered in short-term stimulus measures. A study by the World Bank found that ‘reforms of price distortions that work against green investment and consumption patterns’ are also crucial in the context of short-term stimulus.
- **Green and just recovery policies:** Recovery spending, in turn, should emphasise green stimulus, while at the same time taking into account social considerations, including ensuring just transitions for workers. Furthermore, policies should have the following attributes:
 - **Just:** Measures should support reallocation of workers from declining sectors to growing ones, including through public financing, safety nets, education, vocational training, support to green innovation and technologies.
 - **Well designed:** Green stimulus measures that are sufficiently large, timely and integrated into domestic policy contexts maximise the chances of delivering both economic and environmental benefits. Governments should adopt high-level green recovery visions and communicate them effectively.
 - **Holistic:** Recovery policies should be designed through a whole-of-government approach. Related objectives should be integrated across government policies and budgets. Policies should also take into account trade-offs between economic, environmental and social objectives. Governments should also ensure that institutions and governance mechanisms are prepared to manage environmental transitions.
 - **Transformational:** Policies should be aimed at preventing a rebound in pollution and other negative environmental impacts and should target changes in economic incentives, including through ensuring that environmental externalities are priced. Pricing instruments should be complemented by subsidies and regulations to address market failures and increase acceptability.

Sources: Agrawala et al., What policies for greening?; OECD, What have we learned from attempts to introduce green-growth policies? OECD Green Growth Papers (Paris: OECD, March 2013); Jon Strand and Michael Toman, “Green Stimulus,” Economic Recovery, and Long-Term Sustainable Development, Policy Research Working Paper 5163 (Washington D.C.: World Bank, 2010).

The IEA notes that additional spending in clean energy and energy efficiency contributed positively to the recovery in the early 2010s. The spending was, however, insufficient to prevent a record rebound: after declining by 400Mt in 2009, CO₂ emissions increased by 1,700Mt in 2010, driven by growth in Asia. The OECD and the IEA have identified various lessons from the 2008 financial crisis aftermath for the **energy sector** (see Box 2).¹²²

121. Many such efforts have consisted of ‘ex ante evaluations’ or focused expected impacts. Agrawala et al., What policies for greening? The Oxford University Economic Recovery Project maintains a list of green spending-related literature, which includes more assessments: <https://recovery.smithschool.ox.ac.uk/existing-green-literature/>

122. Fatih Birol, ‘What the 2008 financial crisis can teach us about designing stimulus packages today’, Commentary (Paris: IEA, 19 April 2020, <https://www.iea.org/commentaries/what-the-2008-financial-crisis-can-teach-us-about-designing-stimulus-packages-today>)

Box 2. Energy Sector-Specific Lessons from the Global Financial Crisis

Invest in both mature technologies and ones nearing breakthrough: After the financial crisis, government R&D spending supported the development of key low-carbon technologies, which helped unleash the rapid growth seen in wind and solar photovoltaics (PV) installations since. Policies designed with countries' competitive advantages in mind led to higher success rates, for example solar panel industries in China. Compared to the 2009 crisis, renewable energy costs have fallen dramatically, making renewable energy financing currently an economically attractive recovery spending option. Investments are currently, however, also needed in energy technologies that are still not fully market-ready, particularly in the area of energy storage (lithium-ion batteries and hydrogen electrolyzers). These two technologies are now at a similar stage of development as wind and solar PV were a decade ago.

Consider smaller projects with financing barriers: Energy efficiency programmes were particularly effective in providing jobs in the construction sector. Success was made in some very large-scale projects, for example rail infrastructure in China: the country invested US\$100 billion in 2010-2012 in rail infrastructure development, which led to high energy efficiency improvements. A key finding from a macroeconomic assessment by the IEA of the 2009 stimulus programmes in the energy sector is that they contributed proportionally less to employment than they did to GDP, given their generally high capital intensity and low labour intensity. Currently, implementing relatively small, labour-intensive projects in areas facing constrained financing, such as building retrofits, can improve the effectiveness of stimulus and maximise job creation.

Build on proven or existing policy schemes: Based on experiences post-2009, the existence of legal and institutional structures for implementing policies can facilitate quick scaling up, and expanding the scope of existing policies can deliver fast results.

Sources: *Birol*, 'What the 2008 financial crisis can teach us'; IEA, 'Green stimulus after the 2008 crisis', 29 June 2020, <https://www.iea.org/articles/green-stimulus-after-the-2008-crisis>, both accessed 27 February 2021; *Agrawala et al.*, 'What policies for greening?'

In the aviation and tourism sector, the 2008 crisis saw a major fall in related stocks and employment in the sector took a hit. A number of airlines in the US saw restructuring and consolidation, and traditional travel agencies, which had already been in decline, never recovered.¹²³ The industry, however, recovered fast as the shock was financial and economic alone—not involving physical limitations to travel as during the COVID-19 pandemic. The key lesson from the 2008-2009 crisis for the **aviation industry** in particular is that green conditionalities can be used also in the recovery phase. A decade ago, industries in need of bailouts provided opportunities for governments to attach environmental conditionalities beyond the short-term, such as vehicle fuel efficiency standards in the US.¹²⁴

However, as the IMF has pointed out more recently, support should only go to viable businesses: governments should avoid sustaining 'zombie sectors' and rather focus on encouraging retraining and reallocation of labour and capital away from sectors in that will be 'permanently scarred by the pandemic'. This may not be the case for aviation in the longer term, but may be so for tourism.¹²⁵

Another area where the OECD identifies further opportunities compared to a decade ago is resource efficiency and **circular economy** policies, which have high job creation potential, including investments to support recycling, reprocessing and repairing industries.¹²⁶

123. Seth Borko, '10 Years Later: How the Travel Industry Came Back From the Financial Crisis', Skift, 14 September 2018, <https://skift.com/2018/09/14/10-years-later-how-the-travel-industry-came-back-from-the-financial-crisis/>, accessed 27 February 2021.

124. IEA, 'Green stimulus after the 2008 crisis'.

125. Klakow Akepanidaworn et al., *Regional Economic Outlook: Middle East and Central Asia*, October 2020 (Washington D.C.: IMF, 2020), 32-33.

126. Agrawala et al., 'What policies for greening?'

Regional Agendas and Experiences

Since their emergence in the global sustainable development discourse, some Middle Eastern countries have expressed reservations to the green growth and economy concepts. The debate around these two concepts has mirrored that in other regions. It has reflected a fear that these concepts could be used by developed countries for political and economic purposes, to constrain developing countries' development and limit their economic activities through, for example, green conditionalities and trade barriers¹²⁷. Similar reservations have applied to the climate change agenda: many Middle Eastern countries have been reluctant to commit internationally to binding emission reduction targets not only because they expect developed countries to take action first and fund activities in developing countries, but also because this is often seen as representing a limit to development. Box 3 explains the criticism directed at the green growth/economy agendas, and how these have evolved in the past decade.

Box 3. Criticism of the Green Growth and Economy Agendas and Related Evolution

The green growth/economy agendas have also been met with criticism for their strong emphasis on 'green' at the expense of a wider set of objectives including social development, justice, equity and poverty, both from a number of developing countries and civil society groups. Around the negotiations leading to the Rio+20 Summit of 2012, the developing countries' Group of 77 (G-77) cautioned that 'market-based growth strategies are insufficient by themselves to ensure equitable economic growth' and to address social issues, such as poverty, healthcare, education, employment, equity and inclusion. Some developing countries also expressed concern that 'green' policies would be used by industrialised countries as an excuse to raise trade barriers for products from the developing world. Environmental groups have accused the agenda for 'monetising nature' (given the push to value ecosystem services) and for having a limited focus on social equity and rights. It should be noted, though, that green economy in particular (in contrast to green growth) has been defined by many actors in a more inclusive manner than is often portrayed by its critics. For example, in 2011, the UNEP defined green economy as 'one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities'.

Compared to the early 2010s, COVID-19 sustainable recovery debates have seen a more pronounced emphasis on the 'resilient' and 'just' dimensions, reflecting related priorities and concerns. First, climate change resilience adaptation has been perceived in developing countries as an issue of environmental justice, since industrialised countries still account for most GHG emissions in from a historical perspective but it is often developing countries that suffer the most from negative climate impacts due to their lower resilience to climate risks, such as storms, floods, droughts, other climate extremes and sea-level rise.

As awareness of the gravity of the negative impacts of climate change on developing countries has grown, climate adaptation has gained prominence on the global climate change agenda through both dedicated governance institutions and expanded discussions. It was given a visible standing in the Paris Agreement (Article 7), and a great deal of emphasis has been dedicated to the need to increase international climate finance flows targeting adaptation.

Second, the theme of 'just transitions' and a recognition of governments by the importance of integrating a social justice dimension to their climate change agendas grew in importance towards the late 2010s. The Polish-hosted UN Climate Change Conference in Katowice (2018) showcased the country's efforts in transitioning jobs from the coal sector, and the French Yellow Vests movement that was born the same year have been widely perceived as a reminder that, in order to succeed, climate change policies needed to take into account people's livelihoods.

Sources: Third World Network, 'North-south divide over Rio+20 outcome document', TWN Update on Sustainable Development Conference 2012 (Apr12/02), 3 April 2012; Abdel Raouf and Luomi, 'Introduction'; Barbara Unmüßig et al., *Critique of the Green Economy: Toward Social and Environmental Equity* (Berlin: Heinrich Böll Foundation, 2012); Mizan Khan et al., 'Twenty-five years of adaptation finance through a climate justice lens, *Climatic Change* Vol. 161 (2020), pp. 251-269; Adaptation Committee, *25 Years of Adaptation under the UNFCCC* (Bonn: UN Climate Change Secretariat, 2019).

127. Mari Luomi, *The International Relations of the Green Economy in the Gulf: Lessons from the UAE's State-led Energy Transition*, MEP 12 (Oxford: Oxford Institute for Energy Studies, May 2015).

Nevertheless, aware of the negative consequences of inaction, practically all governments in the region have already undertaken at least some actions such as developing national climate mitigation and adaptations plans or seeking funding from international financing mechanisms, such as the Green Climate Fund.¹²⁸

The UAE stands out as a country that has openly supported the green development agenda and was an early adopter of the concept in the region: in 2012, the UAE's Prime Minister launched the Green Economy for Sustainable Development initiative, and in 2015, the UAE Green Agenda 2015-2030 was announced as an overarching framework of actions to implement the initiative.¹²⁹ The agenda covers five main focus areas: competitive knowledge economy; social development and quality of life; sustainable environment and valued natural resources; clean energy and climate action; and green life and sustainable use of resources. The UAE is a founding member of the GGGI, it hosts the World Green Economy Organization, and it has supported the UN Partnership for Action on Green Economy. The UAE has also set various climate and environmental goals that are ambitious in a regional context.¹³⁰ The country has also invested in renewable energy, utility and fuel pricing reforms to reduce consumption and infrastructure for EVs.

Egypt has also actively engaged with the green economy agenda: in 2016, it launched a national green economy strategy, in partnership with the UNEP and the Centre for Environment and Development for the Arab Region and Europe (CEDARE). The strategy has four key areas: water, agriculture, waste, and energy. Additionally, Egypt launched a sustainable development strategy 'Egypt's Vision 2030' in 2016, which serves as a roadmap for the country to achieve its priority SDGs.¹³¹ The strategy has a significant focus on climate adaptation through its promotion of sustainable ecosystems that enhance resilience and ability to withstand natural hazards.

Qatar has had some engagements with the agenda: it is a founding member of the GGGI, it hosted the 2012 UN Climate Change Conference (COP 18) and most recently, in 2020, it signed an agreement with GGGI to open a country office. Many Middle Eastern countries have not embraced the green economy agenda fully at key international forums despite engaging in policy discussions via in other relevant forums.¹³² Bahrain and Kuwait for example, are both members of the Regional Center for Renewable Energy and Energy Efficiency (RCREEE).

Some other Middle East countries such as Saudi Arabia, Oman and Iraq have also indicated plans to investment in renewable energy and low-carbon technologies. However, moving toward the green economy requires an approach that goes beyond initiatives, but rather involves a whole strategy for an economic transformation.

4.2. Present: Aligning COVID 19- Recoveries with 'Better' Recoveries

Sustainable Recovery Agendas Promoted by International Organisations

Through 2020, various sustainable recovery agendas were put forward by major international organisations and financial institutions. Among the most active proponents have been the UN, OECD and energy agencies IRENA and IEA. Different organisations have labelled their recovery agendas with different names. For example, OECD, among many others, have referred to 'building back better'-originally used in disaster recovery contexts-to reduce the likelihood of, and increasing societies' resilience to, future shocks.¹³³ The IMF has emphasised green recoveries that support green activities, make support to brown activities conditional and price carbon.¹³⁴ The UN has called for building back better, which similarly ensure green transitions and conditionalities, end fossil fuel subsidies, incorporate climate risks into the financial system and increase social resilience.¹³⁵ The GGGI has recommended 'Green Deals' for emerging and developing economies that would focus on green physical and digital infrastructure, building energy efficiency retrofits, green jobs and online education training, natural capital investments, green technology R&D funding and rural supportschemes.¹³⁶

128. GCF, 'Areas of Work', <https://www.greenclimate.fund/countries>, accessed 10 March 2021.

129. UAE MoCCAE, The UAE Green Agenda Programs (2015-2030), n/d, <https://www.moccae.gov.ae/assets/download/dbcb99d6/The%20UAE%20Green%20Agenda%20Programs%20-%20English.pdf.aspx>, accessed 10 March 2021.

130. Examples include a target of 44% of energy supply to come from renewable resources by 2050 and aims to rank within the top 10 countries in the Environmental Performance Index.

131. The strategy was updated in 2018. Ministry of Planning and Economic Development of Egypt, 'Egypt's Vision 2030', <https://mped.gov.eg/EgyptVision?lang=en>, accessed 13 March 2021.

132. Luomi, The International Relations of the Green Economy.

133. OECD, Building back better: A sustainable, resilient recovery after COVID-19, 5 June 2020.

134. IMF, Greening the Recovery, Fiscal Affairs Special Series (Washington D.C.: IMF, 2020).

135. UN, 'Climate Change and COVID-19: UN urges nations to 'recover better'', press release, 22 April 2020.

136. GGGI, Green Deals to Accelerate Climate Action Post-COVID-19, GGGI Insight Brief No. 4 (Seoul: GGGI, 2020).

Despite the different names and nuances, these recovery agendas contain a high level of similarities. Box 4 provides summary of some of the main economy-wide policy prescriptions.¹³⁷

Box 4. Major International Organisations' Sustainable COVID-19 Recovery Agendas

ILO: The ILO has called for governments and workers' and employers' organizations to promote for sustainable recoveries that support 'decent work, resilient enterprises and workplaces, and environmental sustainability'. An ILO policy brief stresses the need for policies and investments for greener and circular economies, including fast-tracking low-carbon mobility, removing fossil fuel subsidies while incentivising renewable energy, and channelling public funds to business continuity and job creation, among others.

IMF: In April 2020, the IMF recommended that, as the 'scope and need for broad-based fiscal stimulus' increases, governments adopt green measures that stimulate aggregate demand and employment. Finance ministries should ensure that related policies and projects are 'shovel ready' so that they can be incorporated into recovery packages and equip the ministries to manage their implementation. The fund recommended as specific public investment targets climate-smart infrastructure (renewables, power grid modernisation, public transport), climate-smart technologies (batteries, hydrogen, carbon capture and storage) and adaptation (flood protection, resilient buildings), and avoid carbon-intensive investments.

OECD: The OECD has called for designing economic recovery packages to 'build back better', which it defines as not only 'getting economies and livelihoods quickly back on their feet' but also promoting investment and behavioural changes that lower the risk of future shocks and increase societies' resilience to them. The OECD stresses the need to focus on well-being and inclusiveness, which it defines as income, job quality, housing and health and protection of the most vulnerable. In addition, policies should align with long-term emission reduction goals and boost climate resilience, biodiversity protection and circularity of supply chains. The OECD has also proposed 13 green recovery indicators, consisting of a mix of outcome and policy indicators in three areas: climate change (including renewable energy shares and support to fossil fuels), biodiversity (land cover change, protected areas) and other environmental dimensions (air pollution exposure, environmental tax revenues).

Partners for Inclusive Green Economies: In June 2020, a group of UN and green economy-oriented international organisations published a list of 'ten priority options for a just, green and transformative recovery', which emphasise the importance of science and recognising the connections between human and environmental health. The options include calls for using national green economy plans, 'green deals', using fiscal stimulus to accelerate green and fair transitions, supporting sustainable infrastructure and service provision and 'greening' through SMEs, strengthening social safety nets, and using the recovery to accelerate the achievement of Paris Agreement NDCs and remove fossil fuel subsidies.

137. Notably, statements by G7 and G20 on recoveries in 2020 did not contain a major emphasis on environmental aspects. In 2021, the G7, under the presidency of the UK, which is also host the 2021 UN Climate Change Conference (COP 26), issued a leaders' statement in February 2021 that expressed resolve to 'shape a recovery that promotes the health and prosperity of our people and planet'. Italy, the presidency of G20, has the theme 'planet' and green recoveries among its priorities for 2021. G20 Italia, 'Planet', <https://www.g20.org/planet.html>, accessed 2 March 2021.

World Bank: Already in April 2020, the World Bank published its ‘Proposed Sustainability Checklist for Assessing Economic Recovery Interventions’, which contains short- and long-term considerations for planning stimulus interventions and investments. The short-term (6-18 months) criteria relate to impacts on employment and economic activity, and the long-term considerations relate to building human and social capital, technological development, natural and cultural capital (biodiversity) and physical capital (access to essential services), fixing market failures (externalities and low economic diversification), boosting resilience and adaptive capacity to climate change and natural disasters, and decarbonisation and sustainable growth (economic incentives and technology development and integration).

Sources: ILO, COVID-19 and the world of work: Jump-starting a green recovery with more and better jobs, healthy and resilient societies, Policy Brief, July 2020 (Geneva: ILO, 2020); IMF, Greening the Recovery; Partners for Inclusive Green Economies, Ten Priority Options for a Just, Green & Transformative Recovery, June 2020; OECD, Building back better; OECD, Making the Green Recovery work for jobs, income and growth, 6 October 2020 (Paris: OECD, 2020); World Bank, Proposed Sustainability Checklist for Assessing Economic Recovery Interventions, April 2020 (Washington D.C.: World Bank Group, 2020).

Sectoral Sustainable Recovery Agendas and Announcements

In the energy sector, the IEA and IRENA have been vocal proponents of sustainable recoveries. The IEA has recommended a set of policy actions and investments for 2021-2023 in six energy-related sectors. The plan has three objectives: economic growth, job creation and more resilient and cleaner energy systems.¹³⁸ The agency has put forward 30 energy policy measures that it estimates to require US\$1 trillion (0.7% of global GDP) annually while boosting global economic growth (1.1% per year), energy access and jobs (a quarter of employment in the industry) and reducing emissions (in particular from energy efficiency and low-carbon power generation).

In mid-2020, the IRENA issued eight recommendations, similarly for 2021-2023, which included raising the ambition of countries’ Paris Agreement pledges, investing in transition-related infrastructure, avoiding fossil fuel investments, safeguarding existing renewable energy projects, diversifying supply chains and maintaining energy access initiatives.¹³⁹ The agency specifically recommended investing in infrastructure and jobs in renewable energy, heating and cooling systems, green hydrogen, electric and biofuel vehicles and local industries.

In the **aviation sector**, the UN International Civil Aviation Organization (ICAO) announced in June 2020 a relaxation to the baseline calculations of its international emissions offsetting mechanism ‘CORSIA’. The mechanism was intended to ensure carbon-neutral growth in international aviation from 2020. The decision was widely deemed as a disincentive to a lower-carbon recovery in the sector as emissions from aviation are not expected to return to 2019 levels until 2024 under a business-as-usual scenario.¹⁴⁰

In relation to **tourism**, the UN World Tourism Organization (UNWTO) issued a ministerial declaration in September 2020 affirming a commitment to support sustainable recoveries in the tourism sector for the ‘people, planet and prosperity’. Environmental measures listed included resource and carbon efficiency, emissions monitoring, leveraging digital technologies, supporting biodiversity conservation and promoting national and regional tourism.¹⁴¹

138. IEA, Sustainable Recovery.

139. IRENA, Post-COVID recovery: An agenda.

140. Mari Luomi, EU and GCC Aviation and Tourism.

141. UNWTO, ‘Tbilisi Declaration’, 17 September 2020, <https://www.unwto.org/actions-for-a-sustainable-recovery-of-tourism>, accessed 2 March 2021.

High-impact Measures for ‘Green, Resilient and Just’

There have been several attempts at quantifying the economic and job creation effects of green policies in the COVID-19 recovery context. Among the earliest was an Oxford University survey of more than 200 G20 finance sector stakeholders, which identified as fiscal recovery policy areas with the highest economic multipliers and emission reduction potential (of relevance for the Middle East):

- Renewable energy installations, energy storage (including hydrogen), grid modernisation and carbon capture and storage (CCS) technologies;
- Clean R&D spending;
- Building renovations and retrofits, including insulation and energy storage systems;
- Climate-friendly agriculture, ecosystem regeneration; and
- Education and training to assist with both immediate and energy transition-related job losses.¹⁴²

McKinsey estimates that government spending in renewable energy and energy efficiency creates approximately three times the jobs than spending in fossil fuels: 75 and 77 jobs, compared to 27 jobs, per US\$10 million, respectively.¹⁴³ The IRENA’s estimate is even more optimistic: 25 jobs for each US\$1 million invested in renewable energy or energy flexibility (storage) and 10 jobs in energy efficiency.¹⁴⁴

Agendas and Recommendations for the Middle East Region

In the Middle East, as discussed in section 3, green aspects have been largely absent from the COVID-19 responses to date. In August 2020, UNEP Executive Director Inger Andersen reminded the region that, while the focus on ‘economic and protection support’ in the region’s pandemic response was ‘understandable to a degree’, this was also a ‘wasted opportunity’ to invest in green recovery, which ‘is the only thing that makes economic sense’. The UNEP’s task list for the region’s governments included: promoting ‘green and decent’ jobs and income, including ending fossil fuel subsidies; investing in natural resources; circularity in production and consumption; responsible finance; and social inclusion.¹⁴⁵

Overall, many international and regional organisations have not been as vocal in advocating for sustainable recoveries in the Middle East.¹⁴⁶ They have rather focused on estimating and quantifying the impacts of the pandemic and making recommendations on short-term priorities for the region and governments.¹⁴⁷ Financial institutions and funding agencies have also focused their funding on emergency support rather than longer-term recoveries.¹⁴⁸ Some have suggested this stems from a hesitance to put pressure on governments during a period that is seen as already difficult.¹⁴⁹ The UN and IMF have put forward recommendations,¹⁵⁰ which include (see also Box 5):

142. Cameron Hepburn et al., Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?, Working Paper No. 20-0, 4 May 2020 (Oxford: Oxford Smith School of Enterprise and the Environment, 2020), 13.

143. McKinsey, ‘How a post-pandemic stimulus can both create jobs and help the climate’, 27 May 2020, <https://www.mckinsey.com/business-functions/sustainability/our-insights/how-a-post-pandemic-stimulus-can-both-create-jobs-and-help-the-climate>, accessed 24 February 2021.

144. IRENA, Post-COVID recovery.

145. UNEP, ‘Environmental stewardship and green recovery: The road ahead for West Asia’, speech by Inger Andersen, 18 August 2020, <https://www.unep.org/news-and-stories/speech/environmental-stewardship-and-green-recovery-road-ahead-west-asia>, accessed 2 March 2021.

146. For this section, the authors conducted a survey of key global and regional organisations’ regional and global websites for region-specific publications and events since April 2020. The following organisations were included in the search: UN Regional Commissions and UNESCWA, UNDP and UNDP-RBAS, UNEP and UNEP ROWA, UNIDO, League of Arab States, GCC, ILO, IRENA, GGGI, WGEO.

147. For example, in March 2020, ESCWA called for governments to support vulnerable groups, social protection systems and small enterprises. ESCWA also called for a ‘humanitarian truce’, a ‘regional social solidarity fund’ to support vulnerable countries and Least Developed Countries (LDCs) in the region, for existing funds to be channelled to the health sector and to supporting SMEs, and for regional and multilateral development finance institutions to consider debt deferral and reduction. UN Regional Commissions New York Office, ‘Executive Secretary of ESCWA calls on Arab Governments to establish a regional social solidarity fund’, 6 April 2020, <https://www.regionalcommissions.org/executive-secretary-of-escwa-calls-on-arab-governments-to-establish-a-regional-social-solidarity-fund/>, accessed 22 February 2021.

148. The World Bank for example had provided US\$1 billion in emergency support to MENA countries by November 2020. World Bank, ‘Middle East and North Africa. COVID-19 (Coronavirus) Response’, updated 10 November 2020, <https://www.worldbank.org/en/region/mena/coronavirus>, accessed 24 February 2021.

149. Stakeholder interview, February 2021.

150. The list is based on: Jihad Azour and Joyce Wong, ‘Building an Inclusive Recovery in the Middle East and Central Asia’, IMF Blog, 19 October 2020, <https://blogs.imf.org/2020/10/19/building-a-resilient-recovery-in-the-middle-east-and-central-asia/>, accessed 3 March 2021; UN, The Impact of COVID-19.

- Oil exporters, which generally can afford broader stimulus packages than non-oil exporting countries, should **balance** the speed of necessary **budget consolidations** against their negative **impacts on economic activity**.
- Governments in the region should promote **greening of the economies, green jobs and economic diversification** simultaneously, and align their monetary, trade, industrial, environment and climate policies.
- Specifically, in terms of recovery measures, Middle Eastern governments should:
 - Invest in **green infrastructure** and innovation, and in **higher-end services and industries** that integrate with green global value chains;
 - In the energy sector, invest in renewable energy and energy efficiency, including **solar technologies, retrofits of buildings** and other labour-intensive low-carbon sectors; and
 - End fossil fuel **subsidies**, implement **progressive carbon prices**, as well as **progressive taxation**;
 - Expand support for **SMEs and start-ups** to support inclusivity, invest in well-educated youth and create enabling **environments for private sector** growth to support economic diversification;
 - Address **climate risks** and support sustainability and productivity or **rural development**; and
 - Reorient spending away from public employment and energy subsidies to social spending, including strengthening and expanding social **safety nets**.^{151, 152}

Box 5. UNDP Recommendations for 'Growing Back Greener' for Iraq

Iraq is a particular case of an oil-producing country as, while it is the second largest oil producer in the Middle East, its GDP per capita (PPP) is significantly lower compared to the GCC countries and on par with Egypt. Iraq's exports are highly concentrated in the oil sector (Table 3) where revenues have been falling in recent years, and the country's energy mix remains dominated by fossil fuels. Pre-COVID-19, a third of the population was estimated to suffer from multidimensional poverty, and more than 40% are expected to be vulnerable at the moment. Pre-pandemic double-digit unemployment rates (Table 3) are also expected to have worsened by the pandemic.

Due to its legacy of conflicts, Iraq suffers from multiple sources of fragility, and has been facing shortages relating to investments in basic infrastructure and services. Various international and regional donors and partners act as sources of financial and technical assistance and investments.

In 2020, the UNDP conducted a study on the impacts of COVID-19 on the Iraqi economy and made the following main recommendations for the national government and for international donors:

- **In the short term:** Seek financing for the deficit between public revenue and expenditures in the short term (to avoid unplanned monetary adjustment) and improve the quality and targeting of expenditure; and
- **In the long term:** Strengthen fiscal rules and governance to resist procyclicality; invest in developing the non-oil private sector to generate jobs and diversify the economy, in particular clean power generation and digital technologies; reform public sector salaries, incentivise formal employment and redesign social assistance schemes to protect the most vulnerable.
- **Green recovery:** Ensure that policies support the transition to low-carbon economies and build their climate resilience, including through: (1) focusing fiscal stimulus spending on green investments; (2) aligning taxes and subsidies with environmentally sustainable outcomes; (3) supporting efficient water resource management in agriculture; and (4) developing a diversified and dynamic non-oil private sector around 'future proof' green technologies and climate-friendly ways of doing business'.

Sources: World Bank, *World Development Indicators*; UNDP Iraq, *Impact of COVID-19 on the Iraqi Economy, October 2020*, quote from p. 31.

151. Beyond recovery, social protection policies should reach all groups, be an integral part of social policies, and integrate social justice principles (rights, equity, equality and participation in policy design). ESCWA, 'Webinar on Social Justice and Social Protection in the Arab Region', 20 January 2021, <https://www.unescwa.org/events/webinar-social-justice-and-social-protection-arab-region>, accessed 22 February 2021.

152. A World Bank blog post has also proposed several individual actions for various MENA countries: Lia Sieghart and Martin Heger, 'A blueprint for a <green> recovery from COVID-19 for MENA countries', Arab Voices - World Bank Blogs, 27 July 2020, <https://blogs.worldbank.org/arabvoices/blueprint-green-recovery-covid-19-mena-countries>, accessed 3 March 2021.

Some non-state actors and actor coalitions based in the region have promoted sustainable or green recoveries or ‘building back better’. For example, Unilever Middle East sought to engage youth in a ‘movement of sustainable growth’.¹⁵³ Abu Dhabi’s Masdar hosted its annual Abu Dhabi Sustainability Week in January 2021 under the banner of green recovery.¹⁵⁴ Levantine environmental NGO EcoPeace issued a call for a ‘Green Blue Deal’ for the region that would harness ‘the sun and the sea to create region-wide desalinated water and energy security for all’.¹⁵⁵ Several companies and business groups from the region participated in two calls under the IRENA-coordinated Coalition for Action to ensure renewable plays a key role in economic recoveries.^{156, 157}

Strategies and Policies Adopted in Other Regions

The Korean New Deal, announced in July 2020, aspires to transform South Korea into a ‘smart, green and safe’ country, and achieving a balance among people, nature and growth, through a transition to net-zero emissions.¹⁵⁸ The plan foresees increased investments in green infrastructure, industry and renewable energy, and focuses on three main aspects to enable a green transition: first, a green infrastructure transition will consist of creating a ‘green-friendly environment’ in which humans and nature coexist and entail a total investment of ₩30.1 trillion (US\$26.5 billion) through 2050. Related measures include zero-energy conversions in public buildings, restoring terrestrial, marine and urban ecosystems, and building a management system for clean and safe water. The second area targets a low-carbon, decentralised energy system through investments in sustainable and renewable energy R&D, building a smart grid, promoting renewable energy consumption, expanding the supply of electric and hydrogen vehicles and supporting fair transitions for regions that foresee difficulties relating to reduced use of fossil fuels. In the third area, the plan aims to support innovation in green industries to identify approaches that strategically address climate change and environmental risks. The third area includes actions to promote business leadership in the sector, establish low-carbon and green industrial complexes, and provide financing (including to commercialisation of large-scale CCS and carbon utilisation projects by 2023).¹⁵⁹

As a response to the COVID-19 pandemic, the EU coupled its Green New Deal with the €750 billion (US\$897 billion) ‘NextGenerationEU’ (NGEU) temporary recovery instrument. Together with the EU’s long-term budget for 2021-2027, the NGEU represents the largest stimulus package financed through the EU budget, totalling €1.8 trillion (US\$ 2.2 trillion). The European Green Deal, which was put forward pre-COVID-19, in December 2019, seeks to make the region climate-neutral and protect natural habitats for the benefit of people, the planet and economies while leaving no one behind. The plan impacts many economic sectors and industries, such as agriculture, energy, and infrastructure.¹⁶⁰

The NGEU, which was agreed on by EU leaders in July 2020, seeks to both help repair the immediate economic and social damage brought about by the coronavirus pandemic and to rebuild a greener, more digital and more resilient post-COVID-19 Europe. An integral part of the instrument is the Recovery and Resilience Facility, which will make available €672.5 billion (US\$804 billion) in loans and grants to support reforms and investments undertaken by EU countries.¹⁶¹ The facility seeks to ‘mitigate the economic and social impacts of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions’.¹⁶²

The EU’s recovery approach also aims to ensure just transitions: The Just Transition Fund is one of the three pillars of the Just Transition Mechanism, which in turn is a part of the European Green Deal. The fund has overall budget of €17.5 billion (US\$21.0 billion), of which €7.5 billion are coming from the EU’s long-term budget and €10 billion from the NGEU. Its main aim is to ‘alleviate the social and economic costs resulting from the climate-neutral transition towards a climate-neutral economy, through a wide range of activities directed mainly at diversifying the economic activity and helping people adapt in a changing labour market’.¹⁶³

153. Unilever, ‘MENA Green Recovery: Building-Back-Better’, <https://www.unileverme.com/sustainable-living/green-recovery/>, accessed 24 February 2021.

154. Masdar, ‘ADSW Summit’, <https://abudhabisustainabilityweek.com/>, accessed 24 February 2021.

155. EcoPeace Middle East, A Green Blue Deal for the Middle East (Tel Aviv, Ramallah, Amman, December 2020).

156. IRENA Coalition for Action, Call to Action in Response to COVID-19, 28 April 2020; Renewed Call to Action, 6 December 2020.

157. In addition, a roundtable organised jointly by UNDP and a Bahraini research institute, issued recommendations for the private sector, including: plan strategically for the post-pandemic era by recognising climate risks and developing green growth strategies; and explore the sharing economy as a business model and way to reduce costs and improve efficiency. UNEP and Derasat, The Impact of the Covid-19 Pandemic on the Bahrain Private Sector: Proceedings from a Roundtable Discussion, November 2020.

158. The government of the Republic of Korea later (October 2020) announced a goal to reach carbon neutrality by 2050.

159. Government of the Republic of Korea, The Korean New Deal National Strategy for a Great Transformation, July 2020.

160. European Commission, What is the European Green Deal?, leaflet, December 2019.

161. European Commission, ‘Recovery Plan for Europe’, https://ec.europa.eu/info/strategy/recovery-plan-europe_en, accessed 14 March 2020.

162. European Commission, ‘Recovery and Resilience Facility’, https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en, accessed 14 March 2020.

163. European Commission, ‘Commission welcomes the political agreement on the Just Transition Fund’, press release, 11 December 2020.

5. Conclusions and Recommendations: Policies for Recovering Better in the Middle East

There is still time for Middle Eastern governments to capitalise on COVID-19 pandemic economic recoveries to realign development to greener and more environmentally resilient and just pathways. ‘Better recoveries’ that align with global goals and planetary boundaries are not only a moral imperative, but they can deliver multiple economic and social benefits in the longer run. For the region’s oil producers, recovery policies should aim to tick more than the boxes of delivering environmentally and socially sustainable outcomes: they should also take into account these countries’ longer-term goal of diversifying economies away from hydrocarbon dependence.

Returning to business-as-usual and maintaining pre-COVID-19 progress on the SDGs and GHG emission reductions pre-COVID-19 is not enough: as was shown in section 2 (Figures 1-4), the region needs significantly accelerated efforts to reach the SDGs by 2030. Its oil producing countries continue to use natural resources at unsustainable rates and face various diversification challenges – be it export or government revenues or employment. These structural challenges have not been changed by the pandemic, but recovery policies can, and should, begin to address them.

Through 2020, low oil prices impacted the ability and willingness of the region’s Arab oil producers to spend in stimulus measures. As shown in section 3 (Figure 6), additional fiscal spending in these countries was generally below emerging economies’ average. Change aversion in times of low revenue and a health crisis is understandable. However, with oil prices increasing and vaccination campaigns progressing in 2021, the time has come to focus on laying the foundation for the longer term.

At the time of writing this analysis (March 2021), there had been only a few examples of green recovery plans and policies in the region’s oil producing countries: Egypt had launched an economy-wide green economy plan and a new waste management law, and announced green bonds, an agreement on EV manufacturing and green finance for the private sector. The UAE approved a ten-year circular economy policy, and Iraq is working with UN agencies to support greener recoveries. Albeit not directly related to COVID-19 recoveries, Saudi Arabia and the UAE have also been investing in blue and green hydrogen, which could become an important energy diversification tool for the region’s oil exporters. (See Table 3.) A number of new GHG-related targets, including mid-century net-zero pledges by Bahrain, Saudi Arabia and the UAE, have been announced since, but detailed delivery roadmaps, with concrete and measurable milestones, still remain to be developed and published.

International agencies have drawn lessons from past green recovery and policy efforts, which include the need to take into account the interactions between environmental and social objectives, the need for proper design and evaluation, and the importance of targeting changes in economic incentives (see section 4.1). In the Middle East region, a number of countries have engaged in green economy planning: of the countries included in the scope of this study, the UAE and Egypt have been the most active. Even so, most plans remain forward-looking, progress is not tracked consistently and ex-post evaluations have not yet been conducted.

Since the start of the pandemic, numerous international and regional actors have put forward sustainable recovery agendas, plans and recommendations. Most are not targeted at any specific region and remain generic (Box 4). However, many of these recommendations, alongside studies that have identified green policies with the highest economic multiplier effects, carry relevance across country contexts. For Middle Eastern countries specifically, international organisations have made some targeted recommendations, which largely align with inputs received from regional stakeholders consulted for this study. Countries in other regions have embarked on ambitious economy-wide green deals, which have elements that could also serve as lessons for Arab oil producers. (See section 4.2.)

The final phase of this study consisted of consultations with stakeholders working with green recovery-related issues in Arab oil producing countries, in the spring of 2021. A total of twelve regional experts were consulted from sectors including government, private sector, international organisations, research and NGOs. The consultations focused on soliciting advice on various aspects of ‘better’ recoveries, based on the study’s previous findings, for the eight oil producing countries: Bahrain, Egypt, Iraq, Kuwait, Oman, Qatar, Saudi Arabia and the UAE. The recommendations presented below build on both the study’s findings, as presented in sections 2 through 4, and the stakeholder consultations.

Policies for Better Recoveries

This study defined as ‘better recoveries’ ones that are **green** (align GHG trajectories with climate-safe trajectories and promote circular economies), **resilient** (enhance resilience to climate and environmental risks and to clean energy and production transitions) and **just** (promoting equity and decent jobs for everyone). The recovery process should also promote information sharing and holistic and participatory approaches to policymaking.

In early 2021, the IMF projected economies in the Middle East to grow on average by 2.6% compared to 2020.¹⁶⁴ By December 2021, it had revised this up to 2.7%.¹⁶⁵ Each country finds itself in a different situation, whether in terms of macroeconomic conditions, fiscal space, stimulus spending already implemented, capacity to implement major economic reforms and overall policy priorities. Even among Arab oil producers, there is significant variation on these parameters. However, there are a number of broad principles and a large number of policy options that can be applied by all.

Based on the study’s findings, COVID-19 recoveries present Arab oil producing countries’ governments with policy tasks and opportunities in five related areas (also illustrated in Figure 11):

1. Adopt best practices in developing and *implementing* recovery policies. These include:

- **Adopting high-level sustainable recovery visions or plans and leading implementation from the top** – as a first step in promoting green and resilient economic development while sustaining and creating decent and productive jobs, governments should adopt high-level visions or plans, and communicate them effectively across government, industries, businesses and the public. Implementation should not be left to environmental authorities alone;
- **Assessing, and making available data on, the budgetary implications (costs and benefits) of recovery policies** – quantifying the environmental and economic multiplier impacts in local contexts is particularly important to highlight and ensure related synergies. Another important aspect to take into account are potential trade-offs between economic, environmental and social objectives. Related assessments should be data- and science-based;
- **Engaging and empowering the entire government to implement green, resilient and just recoveries and transitions** – this includes both policy planning, targets for all sectors and budgetary tools (e.g. earmarks). Necessary governance mechanisms should be put in place, and institutional capacity to oversee and implement the recovery policies and related environmental transitions should be ensured;
- **Engaging the private sector and other policy stakeholders through dialogues in the various stages of the policy-making process** – e.g. Dubai adopted free parking for EVs based on private sector recommendations. These could be expanded to ‘social dialogues’ that include representatives of the public or specific interest groups;
- **Implementing systematic data collection, monitoring and evaluation systems for policies;**
- **Ensuring transparency and availability of policy documents and data for measuring progress;**
- **Developing detailed implementation plans and milestones to back up long-term policies;** and
- **Considering other metrics than the GDP in measuring socioeconomic progress** – examples include wealth accounting and SDG-related metrics.

164. IMF, Datamapper, Real GDP growth (Annual percent change), accessed 14 March 2021.

165. Ibid, accessed 18 December 2021.

2. Remove obstacles and disincentives to better recoveries. Governments should consider various domestic policies and measures, in particular ones targeting incentives, including:

- **Energy and water subsidy/pricing reform** – these should support low-income households and could be targeted at incentivising renewable energy production and consumption, including in the business and industrial sectors, as well as incentives for innovation in green sectors and technologies;
- **Strengthening public awareness on unsustainable consumption patterns** – price incentives and awareness go hand in hand;
- **Removing barriers to private sector participation in green financing and project implementation**, including by:
 - Supporting green SMEs by reducing transaction costs (e.g. company license fees, additional trade licenses and registration fees, chamber of commerce memberships or bid bonds); and
 - Seeking to level the playing field for private sector companies in renewable energy projects in particular; and
- **Conducting systematic and broader cost-benefit analyses around climate change mitigation and recognising related co-benefits**, – some GCC countries focus on climate change mitigation only in relation to how it can benefit of economic diversification, even though mitigation can have various other co-benefits, including relating to environmental health and economic competitiveness.

3. At the same time, they should **enable and incentivise better recoveries** through:

- **Carbon pricing** - options include taxes and mandatory or voluntary markets. Governments could start with voluntary markets as an awareness-raising measure;
- **Green public procurement** – this can include developing related rules and standards for eco-friendly and circular products in public procurement decisions;
- **Leveraging green/sustainable projects to attract foreign direct investment** – low-carbon technologies are increasingly seen as an attractive investment by sovereign wealth funds, central banks and other investors worldwide;
- **Aligning higher education and vocational training, R&D funding, job creation policies and labour market incentives (e.g. salaries) in support of green sectors (e.g. energy efficiency, renewables and digitisation)** – this should be based on thorough studies of market structures and needs. Particular attention should be placed on developing related skills and R&D locally as many green jobs and sectors are new, which means related knowledge and skills cannot always be imported or transferred;
- **Providing incentives and facilitating business conditions for environmental/green SMEs;**
- **Exploring nature-based solutions and climate change adaptation measures** (e.g. blue carbon) - including as part of carbon markets;
- **Encouraging and incentivising sustainable tourism** – including through requirements to monitor food waste, energy/ water consumption and/or GHG emissions, support in leveraging digital solutions, and incentives to ecotourism and local tourism; and
- **Incentivising climate-smart and organic agriculture, particularly in Egypt and Iraq**, which have large agricultural sectors and populations dependent on the sector for their income.

In the energy sector and relating to energy use specifically, governments should consider:

- **Investments in clean infrastructure and energy** – including storage solutions, such as hydrogen, cooling systems, CCS capacity, and clean transport infrastructure (buses, metros, trams, trains);
- **Investments and incentives to clean and circular industries** – including to commercialisation of CCS and utilisation (CCUS) applications, EV production (as in Egypt);

- **Investments and incentives for energy efficiency retrofits and renovations in buildings (as well as other sectors) to bring down costs.** In parallel, governments and municipalities should collect and make available data on energy efficiency in buildings, as this helps both build awareness and develop related financial incentive mechanisms;
- **Investments in R&D into low-carbon technologies, including lithium-ion batteries, hydrogen electrolyzers, CCUS, cooling efficiency, water technologies and management** - these can also be developed into new export industries by supporting the development of related business models;
- **Support to low-carbon technologies in agricultural irrigation** - this can reduce costs and improve efficiencies;
- **Liberalising the power sector away from a single-buyer model** - in Jordan, for example SMEs can bid to supply projects to industries and households; and
- **Implementing more stringent efficiency requirements for buildings and vehicles.**

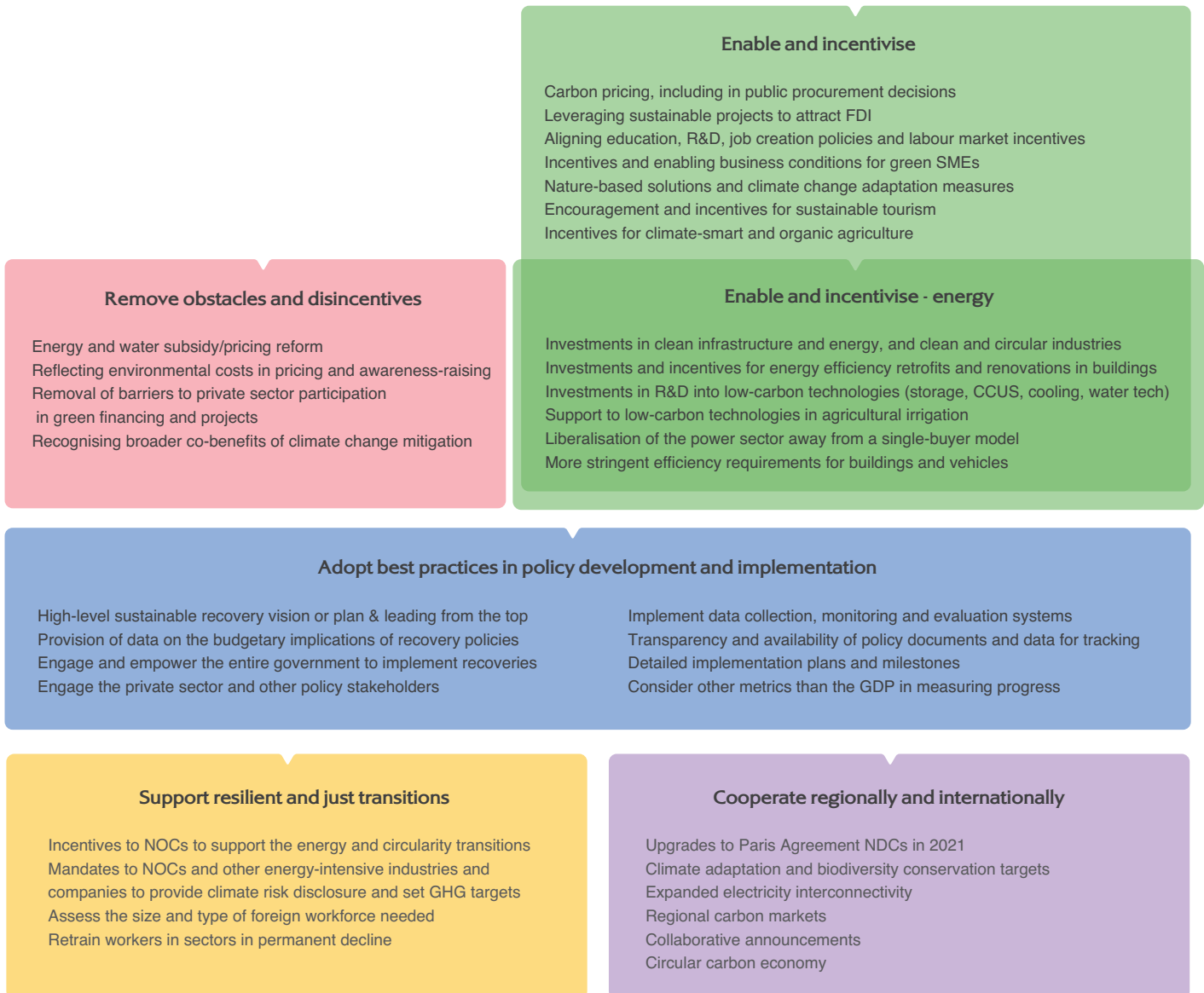
4. At the same time, it is critically important to **support resilient and just transitions in hydrocarbon-intensive sectors** by:

- **Encouraging national oil companies (NOCs) to support the low-carbon and circularity transitions** – these sectors need to be on board to contribute constructively. NOCs could explore diversifying their portfolios into cleaner energy sources and circular products (e.g. through carbon utilisation technologies, blue hydrogen and circular plastics);
- **Mandating NOCs and other energy-intensive industries (e.g. metals and aviation) and other major companies to provide climate risk disclosure and set short-term GHG emission reduction targets and mid-century decarbonisation or net-zero GHG emission targets;**
- **Assessing the size and type of foreign workforce needed for sustainable economies (in countries with large expatriate populations)** - this should involve considerations of local natural carrying capacities, ability to provide decent and productive jobs for all, and the vulnerability of sectors and jobs to external shocks (such as aviation and tourism); and
- **Providing retraining for workers in sectors in permanent decline.**

5. **Explore regional and international cooperation.** Regional cooperation too presents various opportunities to raise ambition and accelerate climate action and circular economies. Examples include:

- **Upgrading Paris Agreement NDCs** in 2022 to include economy-wide GHG targets, complete with information about projected baseline emissions for targets that are based on reductions from baseline trajectories, and detailed long-term low-GHG emission development strategies;
- Developing climate change **adaptation-related goals** and submitting adaptation communications to the UNFCCC in 2022;
- Developing **biodiversity conservation plans** and raising existing **targets**;
- Continuing to **deepen electricity interconnectivity** within the region and with neighbouring regions;
- Exploring **regional carbon markets**, including pilots under Article 6 of the Paris Agreement;
- Making **collaborative announcements**, for example relating to hydrocarbon/energy industries (e.g. an intensity target or CCUS or clean hydrogen production plans); and
- Utilising the **circular (carbon) economy** as a frame for developing detailed research, technology and investment agendas, metrics, policy planning and collaboration.

Figure 11: Policies for Better Recoveries



Appendix 1. Methodological Note

The study, which was conducted in the spring of 2021, is based on a systematic review of studies, assessments and other technical and policy-oriented literature by international and regional organisations, as well as academic and research institutions, focused on analysing government responses to the COVID-19 pandemic worldwide and in the Middle East, and providing related policy recommendations. These included reports from OECD, IMF, World Bank, and multiple UN entities. The study focuses on policy responses from eight Arab oil producers and exporters: Bahrain, Egypt, Iraq, Kuwait, Oman, Qatar Saudi Arabia & United Arab Emirates. As part of the study, the authors also reviewed ex-post assessments and policy documents relating to government responses to the 2007-2008 global financial crisis and related green economy and green growth policies and spending. The study relied on primary research as the policy recommendations draw from inputs received from regional experts and sustainable recovery stakeholders from government, research institutions, the private sector and regional and global organisations, including during a workshop organised by the MBRSO for this purpose and via semi-structured interviews. All interviews and consultations were held under the Chatham House rule.

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