

Annex B - UNEP Emissions Gap Report 2019

Table B-1. Examples of countries, subnational governments, and non-state actors that have subscribed to ambitious targets, which can serve as examples for others to sign up to (collection as of September 2019, sources added in footnotes)

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members																																																																																				
<p><i>This overview table builds on a broad range of literature to identify unambiguously ambitious climate action in the different sectors as of August 2019. Given the scope of existing policies and rapid change in policymaking, the table makes no claim to be exhaustive.</i></p>																																																																																							
Overarching																																																																																							
<p>Achieve zero emissions by year x^{xiii}</p> <p><i>Overview from the Committee on Climate Change report (May 2019)¹, the Net-Zero Tracker (2019)², and Climate Home News (June 2019)³ for countries and by CDP for cities⁴</i></p>	<table border="1"> <tr><td>Norway</td><td>LB</td><td>2030</td><td>GHGs</td></tr> <tr><td>Sweden</td><td>LB</td><td>2045</td><td>Unclear</td></tr> <tr><td>United Kingdom</td><td>LB</td><td>2050</td><td>GHGs</td></tr> <tr><td>France</td><td>LB</td><td>2050</td><td>GHGs</td></tr> <tr><td>Switzerland²⁷</td><td>LB</td><td>2050</td><td>GHGs</td></tr> <tr><td>Denmark</td><td>LB con.</td><td>2050</td><td>GHGs</td></tr> <tr><td>Germany</td><td>LB con.</td><td>2050 (TBC)</td><td>TBC</td></tr> <tr><td>EU28</td><td>LB con.</td><td>2050 (TBC)</td><td>GHGs</td></tr> <tr><td>New Zealand</td><td>LB</td><td>2050 (TBC)</td><td>CO₂</td></tr> <tr><td>Chile</td><td>LB con.</td><td>2050 (TBC)</td><td>CO₂</td></tr> <tr><td>Ireland</td><td>LB con.</td><td>2050</td><td>GHGs</td></tr> <tr><td>Netherlands²⁸</td><td>LB con.</td><td>2050</td><td>GHGs</td></tr> <tr><td>Finland</td><td>Not LB</td><td>2035</td><td>GHGs</td></tr> <tr><td>Ethiopia</td><td>Not LB</td><td>n/a</td><td>TBC</td></tr> <tr><td>Costa Rica</td><td>Not LB</td><td>2050</td><td>TBC</td></tr> <tr><td>Bhutan</td><td>Not LB</td><td>Achieved</td><td>GHGs</td></tr> <tr><td>Fiji</td><td>Not LB</td><td>2050</td><td>CO₂</td></tr> <tr><td>Iceland</td><td>Not LB</td><td>2040</td><td>TBC</td></tr> <tr><td>Marshall Islands</td><td>Not LB</td><td>2050</td><td>GHGs</td></tr> <tr><td>Uruguay</td><td>Not LB</td><td>2030</td><td>TBC</td></tr> <tr><td>Portugal</td><td>Not LB</td><td>2050</td><td>GHGs</td></tr> </table> <p>In addition to some countries already listed above, Canada, Colombia, Luxembourg, Mexico, Spain are part of the Carbon Neutrality Coalition, which requires members to develop long-term strategies towards net zero GHG emissions.²⁹</p> <p>In addition to some countries already listed above, Antigua and Barbuda, Argentina, Austria, Bahamas, Barbados, Belgium, Belize, Benin, Cabo Verde, Colombia, Comoros, Cook Islands, Dominica, Dominican Republic, Estonia, Grenada, Guyana, Italy, Jamaica, Kiribati, Lebanon, Maldives, Mauritius, Micronesia (Federated States of), Monaco, Namibia</p>	Norway	LB	2030	GHGs	Sweden	LB	2045	Unclear	United Kingdom	LB	2050	GHGs	France	LB	2050	GHGs	Switzerland ²⁷	LB	2050	GHGs	Denmark	LB con.	2050	GHGs	Germany	LB con.	2050 (TBC)	TBC	EU28	LB con.	2050 (TBC)	GHGs	New Zealand	LB	2050 (TBC)	CO ₂	Chile	LB con.	2050 (TBC)	CO ₂	Ireland	LB con.	2050	GHGs	Netherlands ²⁸	LB con.	2050	GHGs	Finland	Not LB	2035	GHGs	Ethiopia	Not LB	n/a	TBC	Costa Rica	Not LB	2050	TBC	Bhutan	Not LB	Achieved	GHGs	Fiji	Not LB	2050	CO ₂	Iceland	Not LB	2040	TBC	Marshall Islands	Not LB	2050	GHGs	Uruguay	Not LB	2030	TBC	Portugal	Not LB	2050	GHGs	<p>Regions: California (2045 – carbon-neutral), Hawaii (2045 – net zero)⁵, Australian Capital Territory (2045 – net zero)⁶ New York (2050 – carbon-neutral)⁷, Scotland (2040 – net-zero)⁸, Catalonia (2050 - net zero)⁹, Queensland (2050 – net-zero)¹⁰, South Australia (2050 – net-zero)¹¹, New South Wales (2050 – net-zero)¹², Victoria (2050 – net-zero)¹³, Tasmania (2050 – net-zero)¹⁴</p> <p>Cities (all carbon-neutral): 32 cities have pledged carbon neutrality by 2050 as part of the <i>Carbon Neutrality Coalition</i>¹⁵ and >70 cities have pledged to become carbon-neutral by 2050, including Cape Town (2050), Barcelona (2050), Paris (2050), Reykjavik (2040), London (2050), The Hague (2030), Boston (2050), Indianapolis (2050), San Francisco (2050), Seattle (2050), Washington, D.C. (2050), New York City (2050), Canberra (2045), Melbourne (2020 – net-zero), Sydney (2050 – net-zero), Los Angeles (2045)¹⁶, Copenhagen (2025)¹⁷, Oslo (2030)^{18,19}, Stockholm (2040 – net-zero)²⁰, Helsinki (2035)²¹, Yokohama²² (2050), Kyoto (2050)²³, Tokyo (2050)²⁴</p>	<p>2 G20 members (United Kingdom, France) have passed legislation</p> <p>3 G20 members (Germany, the European Union, including Italy as part of it) are currently in the process of considering passing legislation</p> <p>15 G20 members have no binding (net-)zero emission target</p>
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^{xiii} Stakeholders use varying definitions for zero emission targets. ‘Net-zero CO₂ emissions’ or ‘carbon neutrality’ refers only to CO₂. ‘Net-zero greenhouse gas emissions’ refers to all greenhouse gases. Climate neutrality can also include other climate forcers such as black carbon.

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
	Nauru, Nicaragua, Niue, Palau, Papua New Guinea, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Seychelles, Solomon Islands, South Sudan, Suriname, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu, Vanuatu are listed to be part of the climate ambition alliance: net zero 2050 ³⁰	Businesses: >500 airports in Europe (2050) ²⁵ , Deutsche Post DHL Group ²⁶ Investors: <i>None identified</i>	
Implement ambitious comprehensive CO₂ pricing in all sectors by year x ^{xiv}	<i>No country has implemented ambitious comprehensive CO₂ pricing in all sectors</i> <i>Examples of intermediate action: 25 countries have implemented or planned a carbon tax (plus 3 countries that are considering doing so) and seven countries plus EU28 have implemented or planned an Emissions Trading System (plus 8 countries that are considering doing so), according to the World Bank's Carbon Dashboard³¹</i>	<i>Regions: None identified</i> <i>Cities: None identified</i> <i>Businesses: None identified</i> <i>Investors: None identified</i> <i>Examples of intermediate action: 4 Canadian States implemented a carbon tax and a tax is currently being considered by Catalonia and the Northwest Territory; 21 regions in Canada, China, Japan and the United States implemented an Emissions Trading System and 8 regions in Brazil, Canada, the United States and Taiwan are considering implementing an Emissions Trading System, according to the World Bank's Carbon Dashboard³²</i>	No G20 members have ambitious comprehensive CO₂ pricing in all sectors <i>7 G20 members (Argentina, Canada, France, Japan, Mexico, South Africa, United Kingdom) have implemented some form of carbon tax</i> <i>3 G20 members (Australia, Canada, EU28) have implemented some form of Emissions Trading System, with 5 G20 members (China, Indonesia, Japan, Mexico, Turkey) considering doing so</i>
Phase out all fossil-fuel subsidies by year x	<i>No country has reform plans to fully phase out all subsidies by a specific year</i> <i>Decision by G20 in 2009 to gradually phase out fossil-fuel subsidies, including an annual peer review among G20 members³³</i> <ul style="list-style-type: none"> <i>G20 members progressing on consumption-related support measures as of 2018 are Argentina, India, Indonesia and Mexico</i> <i>G20 members progressing on production-related support measures as of 2018 are Argentina, Canada,</i> 	<i>Regions: None identified</i> <i>Cities: None identified</i> <i>Businesses: None identified</i> <i>Investors: None identified</i>	No G20 members have existing reform plans to fully phase out all fossil-fuel subsidies

^{xiv} The Report of the High-Level Commission on Carbon Prices of 2018 recommends an average economy-wide price of at least US\$40–80/tCO₂ by 2020 and US\$50–100/tCO₂ by 2030 to close the emissions gap in order to meet the 2°C target (High-Level Commission on Carbon Prices, 2017; UNEP, 2018). For this reason, economy-wide carbon prices would need to be higher in the respective years to close the emissions gap in order to meet the Paris Agreement's temperature goal of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels".

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
	<i>China, the European Union, and the United Kingdom</i>		
Make all finance flows consistent with the Paris Agreement goals by year x	No country has made all finance flows consistent with the Paris Agreement goals <i>Examples of intermediate action: United Kingdom (Green Finance Strategy of 2019)³⁴</i>	Regions: None identified Cities: None identified Businesses: None identified Investors: French Development Agency (AFD) (since 2017) ³⁵ , the Netherlands Development Finance Company (FMO) (2016) ^{36,37} , Multilateral Development Banks (MDBs) (approach to be developed by 12/2019) ³⁸	No G20 members have finance flows fully aligned with the Paris Agreement goals
Electricity production			
Reach 100 per cent renewable electricity or 100 per cent carbon-free electricity by year x <i>Overview by the International Renewable Energy Agency (IRENA) (2019)³⁹, REN21 (2019)⁴⁰, and Go100%Renewable (2019)⁴¹</i>	Austria (2030) ⁴² , Sweden (2040) ⁴³ , Cape Verde (2025) ⁴⁴ , Costa Rica (2030) ⁴⁵ , Denmark (2035) ⁴⁶ , Fiji (2030) ⁴⁷ , Iceland (<i>achieved</i>) ⁴⁸ , New Zealand (2035) ⁴⁹ , the Solomon Islands (2030) ⁵⁰ , Tuvalu (2020) ⁵¹ , Papua New Guinea (2030) ⁵² Samoa (2021) ⁵³ <i>Example(s) of other intermediate action: 53 countries have further pledged to achieve some sort of 100 per cent renewable energy target with differences/little clarity on the scope and legal durability⁵⁴, including the Climate Vulnerable Forum (CVF) comprising 48 developing countries⁵⁵</i> <i>Example(s) of other intermediate action: 33 states have further pledged to achieve some sort of 100 per cent renewable energy target with differences/little clarity on the scope and legal durability⁵⁶</i>	Regions: California (2045), Hawaii (2045), Rhineland-Palatinate (2030), South Australia (2025), Cook Islands (2020), El Hierro (not defined), New Mexico (2050) ⁵⁷ , Nevada (2050) ⁵⁸ , Washington State (2045) ⁵⁹ , New York (2050) ⁶⁰ , Puerto Rico (2035) ⁶¹ , Washington, D.C. (2032) ⁶² , Maine (2050) ⁶³ , Burgenland (2020) ⁶⁴ , Upper Austria (2030) ⁶⁵ , Lower Austria (<i>achieved</i>) ⁶⁶ , Schleswig-Holstein (<i>achieved</i>) ⁶⁷ , Mecklenburg-Vorpommern (<i>achieved</i>) ⁶⁸ , Hessen (2050) ⁶⁹ , Fukushima (2040) ⁷⁰ , Sumba (2025) ⁷¹ , Scotland (2020) ⁷² Cities: Sydney (2030) ⁷³ , Canberra (2020) ⁷⁴ , Vancouver (2050) ⁷⁵ , Victoria (2050) ⁷⁶ , Malmo (2020) ⁷⁷ , 122 United States cities have committed to 100 per cent renewable energy ⁷⁸ including San Francisco (2030), Portland (2035) and Los Angeles (2045) ⁷⁹ Businesses: 180 companies “to go 100 per cent renewable” as part of the RE100 initiative ⁸⁰ Investors: None identified	No G20 members have a 100 per cent renewable electricity or a 100 per cent carbon-free electricity target
Phase out coal-fired power plants by year x	Finland (2029), Austria (2020), Chile (2040), Denmark (2030), France (2021), Ireland (2025), Italy (2025),	Regions: Australian Capital Territory, Alberta, British Columbia, Balearic Islands, California, South	3 G20 members (France, Canada, Italy) have passed legislation

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
with just a transition plan ^{xv}	the Netherlands (2030) ^{xvi81} , Portugal (2030), Sweden (2022), Canada (2030) ⁸² , United Kingdom (2025, <u>under consideration</u>) ⁸³ , Germany (2038, <u>under consideration</u>) ⁸⁴	Chungcheong Province, Connecticut, Hawaii, Minnesota, New York, Ontario, Oregon, Quebec, Scotland, Wales, State of Washington (all part of the Powering Past Coal Alliance) ⁸⁵ Cities: Honolulu, Melbourne, Los Angeles, Rotterdam, Sydney, Vancouver (all part of the Powering Past Coal Alliance ⁸⁶) Businesses: 28 businesses in the Powering Past Coal Alliance ⁸⁷ Investors: <i>None identified</i>	2 G20 members (Germany, the United Kingdom) are currently in the process of passing legislation 15 G20 members have no binding phase-out plan
Stop financing and insuring coal-fired power plants elsewhere as of year x	<i>No country has legally binding legislation to fully stop financing and insuring coal-fired power plants elsewhere</i>	Regions: <i>None identified</i> Cities: <i>None identified</i> Businesses: <i>None identified</i> Investors: DBS Group Holdings Ltd. ⁸⁸ , Oversea-Chinese Banking Corp. ⁸⁹ ; Standard Chartered ⁹⁰ ; Commonwealth Bank by 2030 ⁹¹ ; National Bank for Economic and Social Development (BNDES) ⁹² ; <u>22 banks</u> stopped directly financing new coal mine projects worldwide and <u>23 banks</u> stopped directly financing new coal plant projects worldwide ⁹³	No G20 members have legally binding legislation to fully stop financing and insuring coal-fired power plants elsewhere
Other energy industry			
Stop new fossil-fuel explorations and production as of year x	Ireland (2018 – oil and gas) ⁹⁴ , Denmark (2018 – oil and gas) ⁹⁵ , New Zealand (2018 – offshore oil and gas) ⁹⁶ , Belize (2017 – oil) ⁹⁷ , Costa Rica (2014–2021 – petroleum) ⁹⁸ , France (2040 – oil & gas) ⁹⁹ <i>Example(s) of other intermediate action: The Netherlands (2030 – Groningen gas field)¹⁰⁰, United States (TBC – Arctic oil and gas exploration), Canada (TBC – Arctic oil and gas exploration)¹⁰¹</i>	Regions: <i>None identified</i> Cities: <i>None identified</i> Businesses: <i>None identified</i> Investors: AXA and Swiss Reinsurance Company Ltd. (stop insuring/underwriting oil pipelines, shale gas, tar sands and Arctic drilling), ADB, The African Development Bank Group (AfDB), World Bank Group ¹⁰²	1 G20 member (France) has passed legislation 19 G20 members have no binding commitments to stop new fossil-fuel explorations and production
Commit to zero fugitive	<i>No country has committed to a zero fugitive emissions target</i>	Regions: <i>None identified</i> Cities: <i>None identified</i>	No G20 members have a zero

^{xv} Uncertainty remains as to whether all phase-out plans in the countries and regions mentioned are paired with a transition plan.

^{xvi} The Netherlands will ban co-firing in power plants but has left the door open for them to shift to other fuels.

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
emissions target for year x	<i>Example(s) of other intermediate action: Canada (40-50 per cent by 2025)¹⁰³, 32 governments endorse the World Bank's Zero Routine Flaring by 2030 initiative¹⁰⁴</i>	Businesses: Qatar Petroleum (<u>under consideration</u>) ¹⁰⁵ , 13 Oil and Gas Climate Initiative (OGCI) companies have a target of reducing methane intensity in up-stream gas and oil operations to below 0.25 per cent by 2025, with the ambition to reach 0.20 per cent ¹⁰⁶ Investors: <i>None identified</i>	fugitive emissions target
Industry			
Ensure all new installations are low-carbon/zero-emission and maximize material efficiency as of year x	No country has legally binding legislation to phase-in low-carbon/zero-emissions industrial technologies	Regions: <i>None identified</i> Cities: <i>None identified</i> Businesses: ThyssenKrupp (hydrogen-based steelmaking by 2050) ¹⁰⁷ , SSAB (fossil-free steelmaking by 2045) ¹⁰⁸ , Heidelberg (carbon-neutral concrete by 2050) ¹⁰⁹ Investors: <i>None identified</i>	No G20 members have a target for all new installations to be low-carbon/zero emissions
Implement ambitious carbon pricing for industry by year x^{xvii}	Sweden (€114 per tCO ₂ , <u>industry outside the EU Emissions Trading System</u>) ¹¹⁰ <i>Example(s) of other intermediate action: EU Emissions Trading System for selected industry sectors (€26–29 per tCO₂)</i>	Regions: <i>None identified</i> Cities: <i>None identified</i> Businesses: <i>None identified</i> Investors: <i>None identified</i>	No G20 members have implemented ambitious carbon pricing for the industry sector
Transport			
Shift to x per cent public transport by year x	China (30 per cent by 2020, in large- and medium-sized cities) ¹¹¹ , India (45 per cent with no target year defined, share of railways in total land transport) ¹¹² , Indonesia (32 per cent in 2019) ¹¹³ , Singapore (75 per cent in 2030) ¹¹⁴	Regions: <i>None identified</i> Cities: Copenhagen (75 per cent by 2025 by foot, bike or on public transit) ¹¹⁵ , San Francisco (58 per cent by 2019) ¹¹⁶ , New York (80 per cent by 2050, by foot, bike or on public transit) ¹¹⁷ , London (80 per cent by 2041, by foot, bike or on public transit) ¹¹⁸ , Kuala Lumpur (40 per cent by 2030) ¹¹⁹ , several European cities Businesses: <i>None identified</i>	3 G20 members (China, India, Indonesia) have varying modal shift targets <i>No conclusion possible for any other G20 member</i>

^{xvii} The Report of the High-Level Commission on Carbon Prices of 2018 recommends an average economy-wide price of at least US\$40–80/tCO₂ by 2020 and US\$50–100/tCO₂ by 2030 to close the emissions gap in order to meet the 2°C target (High-Level Commission on Carbon Prices, 2017; UNEP, 2018). For this reason, economy-wide carbon prices would need to be higher in the respective years to close the emissions gap in order to meet the Paris Agreement's temperature goal of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels".

Possible targets	National governments		Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
			Investors: None identified	
Shift to 100 per cent share of new zero-emission motorbikes, cars and/or buses as of year x <i>Extensive overview for countries, regions, cities and companies carried out by the Partnership on Sustainable, Low Carbon Transport (May 2019)</i> ¹²⁰	2025	India (two-wheelers by 2023, TBC), Norway (cars)	Regions: California (cars by 2040, buses by 2029) ¹²¹ , Hainan (cars by 2030), British Colombia (cars and trucks by 2040), Hawaii (cars and bus fleets by 2045), Australian Capital Territory (public fleet by 2021) Cities: Seoul (car fleet by 2027, but including compressed natural gas vehicles [CNG]), Bangalore (bus fleet by 2023), Rotterdam (bus fleet by 2029), Medellin (buses, TBC), Paris (cars and buses by 2025), Rome (cars by 2024), London (buses by 2025), Los Angeles (car fleet by 2050); 30 Chinese cities, including Guangzhou, Zhuhai, Dongguan, Foshan, Zhongshan, Nanjing, Hangzhou, Shaanxi and Shandong (bus and taxi fleet by 2022) ¹²² , Rio de Janeiro (public bus fleet by 2025) ¹²³ , 13 European cities will ban all internal combustion cars by 2030 ¹²⁴ ; Shenzhen (bus and taxis, <i>achieved</i>) ¹²⁵ Businesses: 49 companies as part of the EV100 initiative ¹²⁶ ; Volvo (50 per cent electric cars by 2025 and 100 per cent of all models <u>available</u> to be electric by 2019) ¹²⁷ , Volkswagen (15 million cars by 2025) ¹²⁸ , Jaguar (all models available by 2020) ¹²⁹ Investors: None identified	5 G20 members (Canada, France, Japan, Mexico, United Kingdom) announced targets 2 G20 members (India, Indonesia) have announced a phase-in but it is pending confirmation 13 G20 members have not announced a phase-in of new zero-emission motorbikes, cars and/or buses
	2030	Denmark (cars), Iceland (cars), India (cars, TBC), Ireland (cars), Israel (cars), Nepal (cars, TBC), Netherlands (cars), Scotland (cars by <u>2032</u>), Slovenia (cars, TBC), Sweden (cars)		
	2040	Canada (cars), France (cars), Indonesia (cars, TBC), Portugal (cars, TBC), Spain (cars, TBC), United Kingdom (cars) ¹³⁰		
	2050	Costa Rica (cars and buses), Japan (cars)		
Shift to 100 per cent carbon-free heavy goods transport and ships as of year x	No country has a legally binding target for 100 per cent carbon-free heavy goods transport and ships		Regions: None identified Cities: None identified Businesses: A.P. Moller-Maersk (net-zero carbon emissions by 2030 and carbon-neutral vessels by 2030) ¹³¹ , Nippon Yusen (NYK) and Elomatic (concept for carbon-free ships by 2050) ¹³² , e5 Lab Inc. (first zero-emission tanker by 2021) ¹³³ , 7 port authorities announced World Ports Climate Action Program to keep global warming well below 2°C ¹³⁴ Investors: None identified	No G20 members have a legally binding target for 100 per cent carbon-free heavy goods transport and ships

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
Shift to 100 per cent carbon-free aviation as of year x	No country has a legally binding target for 100 per cent carbon-free aviation <i>Example(s) of other intermediate action: Norway (2040, short-haul flights)¹³⁵</i>	Regions: None identified Cities: None identified Businesses: None identified Investors: None identified <i>Example(s) of other intermediate action: Scotland (net-zero domestic aviation region by 2040 with trials of low/zero-emission flights beginning in 2021)¹³⁶</i>	No G20 member has a legally binding target for 100 per cent carbon-free aviation
Buildings			
Shift to 100 per cent (near-) zero energy buildings for new buildings as of year x <i>Extensive overview for countries, regions, and cities by the International Partnership for Energy Efficiency Cooperation (IPEEC) (2018)¹³⁷</i>	EU28 (public by 2019, all by 2021), Japan (public by 2020, all by 2030), United States (public by 2030)	Regions: California (residential by 2020, commercial by 2030) ¹³⁸ , 6 regions have signed the <i>Net Zero Carbon Buildings Commitment</i> (by 2050) ¹³⁹ Cities: 23 cities have signed the <i>Net Zero Carbon Buildings Commitment</i> (by 2050) ¹⁴⁰ Businesses: 23 businesses have signed the <i>Net Zero Carbon Buildings Commitment</i> (by 2050) ¹⁴¹ Investors: None identified	6 G20 members (The European Union, including France, Germany, Italy and the United Kingdom as part of it, and Japan) have passed legislation 14 G20 members have not passed legislation
Fully decarbonize the building sector by year x	EU28 (2050)	Regions: 6 regions have signed the <i>Net Zero Carbon Buildings Commitment</i> (by 2050) ¹⁴² Cities: Coalition of European cities, including Madrid, Wroclaw, Leeds, Dublin, Velika Gorica, Budaors, Padua, and Eskisehir (2050) ¹⁴³ ¹⁴⁴ ; 23 cities signed the <i>Net Zero Carbon Buildings Commitment</i> (by 2050) ¹⁴⁵ Businesses: 23 businesses have signed the <i>Net Zero Carbon Buildings Commitment</i> by 2050 ¹⁴⁶ Investors: None identified	5 G20 members (the European Union, including France, Germany, Italy and the United Kingdom as part of it) have passed legislation 15 G20 members have not passed legislation
Phase out fossil fuels (for example, gas) for residential heating by year x	Netherlands (2050) ¹⁴⁷ <i>Example(s) of other intermediate action: United Kingdom (no connection to the gas grid by 2025, TBC)¹⁴⁸</i>	Regions: None identified Cities: Amsterdam (2050) ¹⁴⁹ , Vancouver (2050) ¹⁵⁰ , Berkeley (n/a) ¹⁵¹ Businesses: None identified Investors: None identified	No G20 members have a legally binding target to phase out gas for residential heating
Increase the rate of zero-energy renovations to x	No country has a legally binding target for the rate of zero-energy renovation across all buildings	Regions: None identified Cities: None identified Businesses: None identified Investors: None identified	No G20 members have a legally binding target for the rate of zero-

Possible targets	National governments	Cities, regions, businesses, investors (examples, not comprehensive)	Status of G20 members
per cent per year	<i>Example(s) of other intermediate action: EU28 (3 per cent, <u>public buildings</u>)¹⁵²</i>		energy renovation
Agriculture and forestry			
Zero net deforestation by year x	<p>50 countries endorsed the New York Declaration on Forests (2030)¹⁵³</p> <p>67 countries pledged support for The World Wide Fund for Nature (WWF)'s call for zero net deforestation by 2020¹⁵⁴</p>	<p>Regions: 21 regions endorsed the New York Declaration on Forests (2030)¹⁵⁵</p> <p>Cities: <i>None identified</i></p> <p>Businesses: >50 businesses endorsed the New York Declaration on Forests (2030)¹⁵⁶; Consumer Goods Forum (some 400 c stakeholders) pledged to achieve zero net deforestation by 2020¹⁵⁷</p> <p>Investors: >12 banks have signed the 'Soft Commodities' Compact as part of the Banking Environment Initiative to achieve zero net deforestation across the four commodities of soy, palm oil, beef, paper, pulp and timber (PP&T)¹⁵⁸</p>	<p>12 G20 members (Canada, Germany, the European Union, France, Italy, Indonesia, Japan, Mexico, South Korea, Turkey, the United States, the United Kingdom) have signed the New York Declaration on Forests</p> <p>12 G20 members (Australia, Brazil, the European Union, France, Germany, India, Indonesia, Italy, Japan, Mexico, South Africa, the United Kingdom) pledged their support for WWF's call for zero net deforestation by 2020</p> <p>5 G20 members have no such commitments</p>

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