The Climate Transition Impact Framework (C-TIF)

Introductions

James Patterson-Watterson
Partner, McKinsey & Company

Rishika Daryanani
Manager, McKinsey & Company

Net zero requires societal support

Achieving net-zero requires a **broad and consistent societal support**

Countries are transitioning from **varied starting points**

To date, planning has **focused on cost optimization**

Tools that measure societal impacts of the transition often present a partial view

So, we need…

A unifying language

Common framework

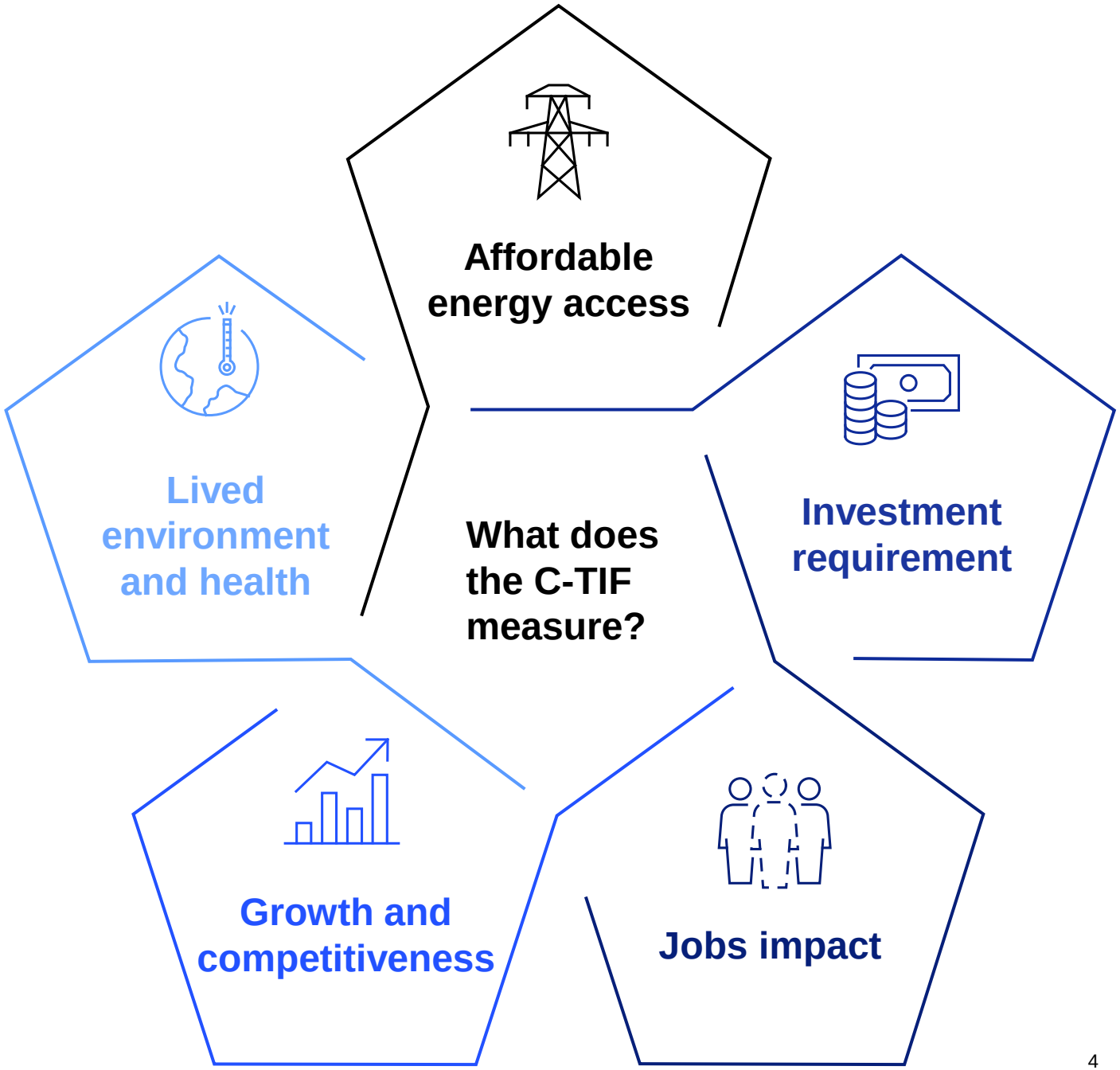
New tools

Climate Transition Impact Framework (C-TIF)

A structured forward-looking approach that quantifies the socioeconomic impacts of climate action

Developed together with:

UN trade & development | NGFS | McKinsey Sustainability

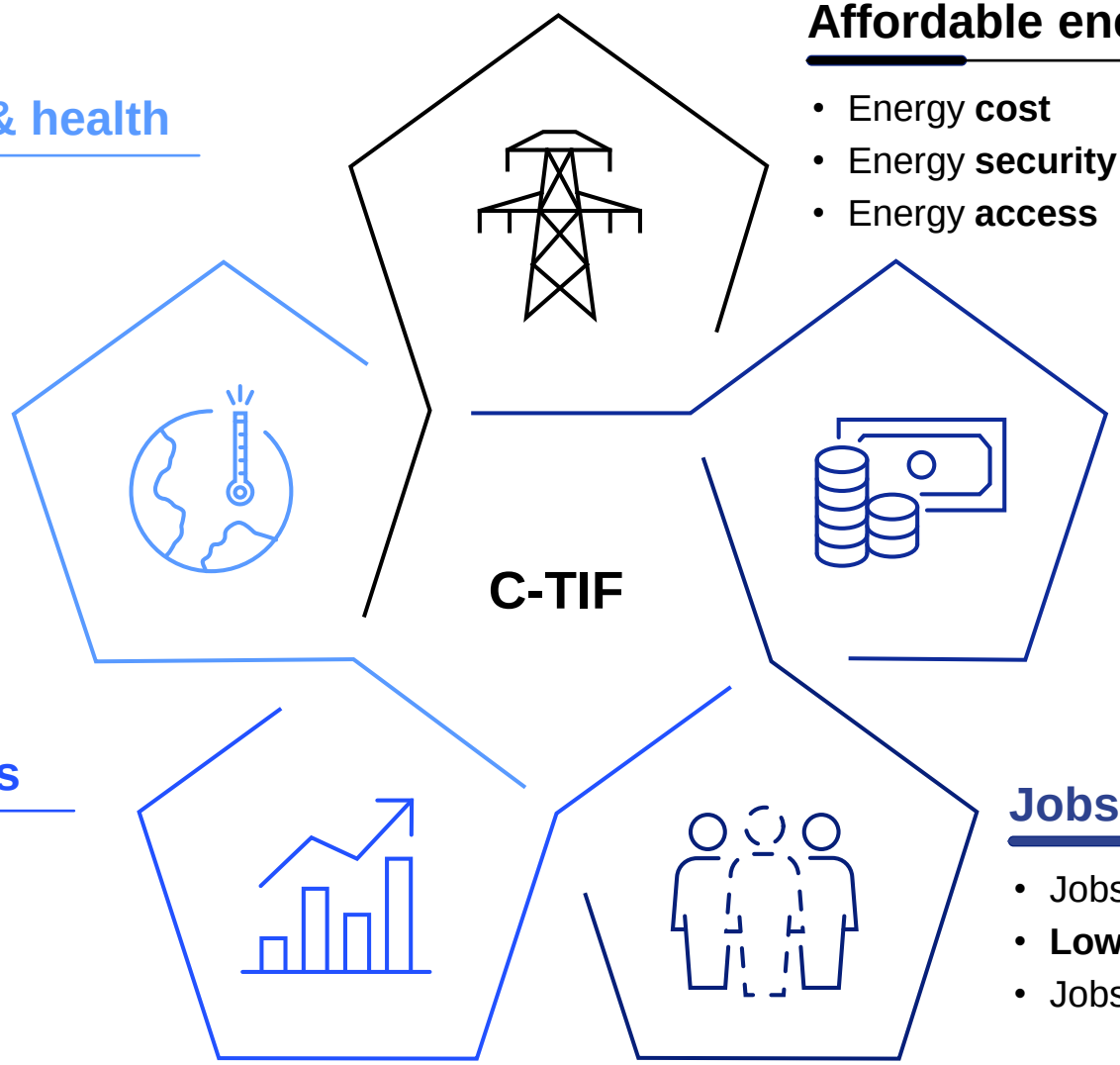


Affordable energy access

- Energy **cost**
- Energy **security**
- Energy **access**

Lived environment & health

- **Air** quality
- **Food** security
- **Biodiversity**
- Climate **hazards**
- **Mortality & morbidity**
- **Water** access
- **Adaptation**



Investment requirement

- **Total** annual investment
- **Annual** investment change
- **By high- and low-emissions** technologies

Growth & competitiveness

- **Economic growth**
- Energy **intensity**
- **Agricultural** productivity
- **Labor** productivity

Jobs impact

- Jobs **supported**
- **Low-emissions** job supported
- Jobs **at risk**

C-TIF dimensions & metrics

◆ Current subdimensions ▶ Under consideration for future development

Affordable energy access

Subdimension	Metrics
Energy cost	◆ Energy cost
	◆ Final energy price
	◆ Energy spend
	▶ Fossil-fuel subsidies
	▶ Carbon pricing
	▶ Affordability
Energy security	▶ Energy imports
	▶ Hours with power
Energy access	◆ Stable access to energy
	▶ Clean fuel and tech for cooking

Growth and competitiveness

Subdimension	Metrics
Economic growth	◆ Purchasing-power parity (PPP) GDP per capita
	◆ PPP GDP per low-skilled worker
	▶ Population under empowerment line
Domestic supply chain for transition sectors	▶ Indirect and direct gross value added (GVA)
Labor productivity in transition sectors	▶ GVA per worker
Agricultural productivity	◆ Agricultural yield for cereal
Energy productivity	◆ Energy intensity of GDP

Investment requirement

Subdimension	Metrics
Total annual investment	◆ Low-emission technology
	◆ High-emission technology
Investment source	▶ Public funding source
	▶ Private funding source
Annual investment change	◆ Investment as a % of GDP
	◆ Change in annual average investment

Jobs impact

Subdimension	Metrics
Size of impact	◆ Jobs supported
	◆ Green jobs supported
	◆ Jobs at risks
Demographic impact	◆ Green jobs supported – youth
	◆ Green jobs supported – women
Inclusivity	▶ Green jobs supported – low-skilled workers
Job quality	▶ Average annual wage of green jobs
Social protection	▶ Access to social protection system
Skills readiness	▶ People requiring green-job reskilling
Regional concentration	▶ Regional concentration of green jobs
	▶ Regional concentration of jobs at risk

Lived environment and health

Subdimension	Metrics
Air quality	◆ PM2.5 emissions
Food security	◆ Food prices
	▶ Crops and livestock price
	▶ Prevalence of undernourishment
Biodiversity	◆ Forest area
	▶ Marine acidity
	▶ Wildfire
	▶ Biodiversity intactness
Climate hazard	◆ Exposure to climate hazards
	▶ GDP impact from climate damage
Mortality and morbidity	▶ Disability-adjusted life years
	▶ Infant mortality
	▶ Mortality rate from pollution
	▶ Healthcare expenditure
Water access	▶ Access to water sources
	▶ Treatment of domestic and industrial wastewater
	▶ Water stress
Adaptation	▶ Adaptation investment

The C-TIF could support assessment of the transition's impact on many of the Sustainable Development Goals

Dimensions		SDG goals supported
Affordable energy access	Energy cost, security, and access	7 10 12
Investment requirement	Financial resources required (and reallocated) to support the transition	7 9 12 17
Jobs impact	Changes in jobs and how these changes are distributed across the population	1 4 5 8 10
Growth and competitiveness	Livelihoods and economic competitiveness or productivity	2 7 8 9 12
Lived environment health	Day-to-day experience of environmental and health outcomes	1 3 6 9 11 13 14 15

Sustainable Development Goals

1 No poverty	6 Clean water and sanitation	11 Sustainable cities and communities	16 Peace, justice and strong institutions
2 Zero hunger	7 Affordable and clean energy	12 Responsible consumption and production	17 Partnerships for the goals
3 Good health and well-being	8 Decent work and economic growth	13 Climate action	
4 Quality education	9 Industry, innovation and infrastructure	14 Life below water	
5 Gender equality	10 Reduced inequalities	15 Life on land	

C-TIF outputs show both co-benefits and burdens to help inform relevant stakeholders

Co-benefit

Positive or beneficial impacts from actions or policy decision that are caused by climate action mitigation or adaption

Burden

Impact of these actions or policy decisions is **negative**

Additional action is needed compared to today

Additional action may be challenging to achieve or require action to be redirected from other areas

C-TIF results of the NGFS Net Zero 2050 and Current Policies scenarios for a country in the South Asia region

Affordable energy access

Net Zero 2050 (NZ) could lead to a more pronounced increase in final energy price than current Policies (CP) as subsidies are lifted and carbon prices are levied

Sub-dimension	Metrics cover	Current policies	Net Zero 2050
Energy cost	Δ final electricity price	+2.9	+1.5
	Final electricity price	9.4	8.7
	Δ final energy price	+2.7	+6.3
	Final energy price	6.8	10.7
	Percentage-point Δ final energy spend	+2.6	+2.8
	Final energy spend	4.9%	5.6%
Energy access	Time required to achieve 100% electrification	25	10

Lived environmental and health

A major co-benefit of the transition may be that fewer people are exposed to climate hazards in NZ than CP

Sub-dimension	Metrics cover	Current policies	Net Zero 2050
Air quality	Δ PM2.5 emissions per square meter	-293k	-299k
Food security	% Δ food price index	-10	+57
Biodiversity	Δ managed and unmanaged forest	-0.2	-0.0
Climate hazard[8]	Percentage point Δ annual share of effective outdoor working hours affected by extreme heat and humidity in climate-exposed regions	>10	0.5-5
	Percentage point Δ share of time spent in drought over a decade	<0	<0

Jobs impact

The difference in job shifts between NZ and CP are minimal, with both scenarios facing the same jobs at risk and slightly more jobs supported in NZ

Sub-dimension	Metrics cover	Current policies	Net Zero 2050
Size of impact[3]	Number of jobs supported	1.0%	1.0%
	Number of green jobs supported	0.5%	1.0%
	Number of jobs at risks	2.5%	2.5%
Demographic impact[4]	% of green jobs supported filled by youth	13.5%	12.0%
	% of green jobs supported filled by women	15.0%	15.5%

Growth and competitiveness

NZ drives greater economic growth and productivity than CP, because of climate hazard avoidance and more efficient energy use

Sub-dimension	Metrics cover	Current policies	Net Zero 2050
Economic growth	% Δ purchasing-power-parity (PPP) GDP per person	+80%	+90%
	Δ PPP GDP per person	+3k	+4k
Agricultural productivity	% Δ agricultural yield for cereal	+14%	+64%
Energy productivity	Δ energy intensity of GDP	+5.3	-1.0

The sample country-level results demonstrate the potential co-benefits and burdens to help decision makers compare climate action pathways and amplify—or mitigate—potential impacts.

Impact: Burden — Co-benefit

Δ = change from 2020 to 2050; "final" is a 2050 data point

Investment requirement

Country B may face a significantly higher low-emissions investment need under an NZ scenario

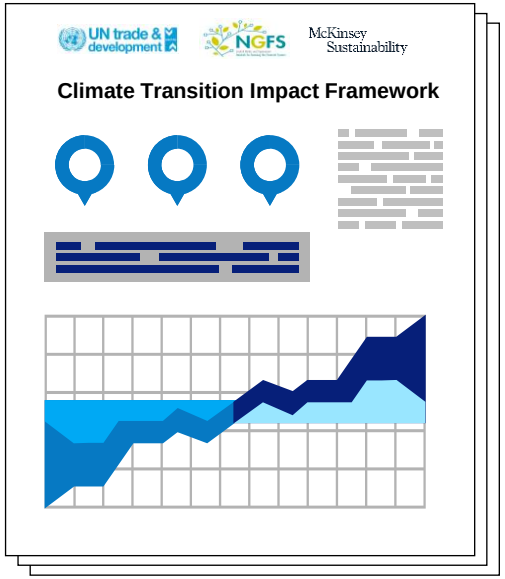
Sub-dimension		Metrics cover	Current policies	Net Zero 2050
Total annual investment	Low emission technology	Avg. investment as a % of GDP	4.0%	8.0%
		Avg. investment as $ bn	20	40
	High emission technology	Avg. investment as a % of GDP	6.0%	4.0%
		Avg. investment as $ bn	30	20
Annual investment change	Low emission technology	Δ Avg. investment as a % of GDP	+8.5%	+20.0%
		Δ Avg. investment vs 2020	3.5x	7.0x
	High emission technology	Δ Avg. investment as a % of GDP	+7.0%	-1.0%
		Δ Avg. investment vs 2020	2.0x	1.0x

The C-TIF 2024 work will culminate in a pilot inaugural C-TIF report, an in-country pilot and radiation at key climate events

Illustrative

Inaugural C-TIF report

The pilot inaugural C-TIF report will translate and extend socioeconomic impacts for countries using the Current Policy & Net Zero scenarios from the Network for Greening the Financial System (NGFS)



In-country pilots

The C-TIF will be piloted in one country this year and others across the globe in 2025 to represent countries and economies of varying scale and composition

Wave 1
2024

Indonesia

Wave 2
2025

Ireland

Morocco

+

Radiating at events

The C-TIF will be radiated at global climate events throughout the year namely NY Climate Week and COP29

COP 29 Baku Azerbaijan 2024

CLIMATE WEEK NYC
CLIMATE GROUP

#COP16
Colombia offers to host the next United Nations Biodiversity Conference

Summit of the Future
Our Common Agenda

INDONESIA INTERNATIONAL SUSTAINABILITY FORUM

To learn more about the **Climate Transition Impact Framework (C-TIF),** a publicly available resource, please read our concept note!

james_patterson-waterston@mckinsey.com
rishika_daryanani@mckinsey.com

Appendix: C-TIF metrics

More than 50+ metrics underpin the Climate Transition Impact Framework

Affordable Energy Access

Demographic granularity for future releases | Sectoral granularity for future releases | Metric under revision | Under consideration for future development | May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020) **Target year** = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Energy cost	Δ final electricity price (cents per kWh, target year minus base year)	Average cost of final electricity (cost to deliver electricity to end user, incl transformation cost, transmission and distribution, taxes, and subsidies) in target year vs base year	+/– cents per kWh
	Final electricity price (cents per kWh, target year)	Final electricity price (cost to deliver electricity to end user, incl transformation cost, transmission and distribution, taxes, and subsidies) in target year	Cents per kWh
	Δ final energy price (cents per kWh, target year minus base year)	Weighted average cost of final energy across all available sources of energy (eg, coal, solar, wind, etc) in target vs base year	+/– cents per kWh
	Final energy price (cents per kWh, target year)	Weighted average cost of final energy across all available sources of energy (eg, coal, solar, wind, etc) in target year	$ per gigajoule
	Percentage-point Δ final energy spend (% of GDP, target year minus base year)	Total change in spend on energy as a % of GDP in target year compared with base year	+/- percentage point
	Final energy spend (% of GDP, target year)	Final energy spend in target year as a % of GDP	%
	Δ energy price without fossil fuel subsidies (cents/kWh, target yr / base year): • Oil • Gas • Coal	Change in cost of energy excluding fossil fuel subsidies across all sources of energy in target vs base year	+/– cents per kWh
	Δ carbon pricing ($/tCO2e, target year minus base year)	Change in carbon pricing per ton of CO_2e in base year vs target year	+/- $/tCO2e
	Δ energy spend (as a % of household income) for bottom quartile of household (target year vs base year)	Energy spend as a percentage of household income for households at the bottom 25% based on household income distribution (target year vs base year)	%pt.
Energy security	% share of net imports to final energy consumption (target year)	Energy imported in target year to meet domestic energy demand in target year as a % of final domestic consumption	%
	Average number of hours without power (hours per year per household, target year)	Average number of hours each month a household is without power	Hours per year per household
Energy access	International Energy Agency (IEA) time required to achieve 100% electrification[1] from base year (years)	Time in years for 100% of the population to have stable access to a minimum electricity level[1] (as defined by the IEA)	Years
	Δ population with primary reliance on clean[2] fuel and technology for cooking (% of population, target year / base year)	Proportion of people using clean fuel and technology for cooking, heating, and lighting compared with total population in target vs base year	+/-%

Note: US $ are 2010 dollars.

1. Defined as enough electricity to power four lightbulbs operating at five hours per day, one refrigerator, a fan operating 6 hours per day, a mobile phone charger and a television operating 4 hours per day, which equates to an annual electricity consumption of 1 250 kWh per household with standard appliances, and 420 kWh with efficient appliances | 2. "Clean" is defined by the emission rate targets and specific fuel recommendations (i.e. against unprocessed coal and kerosene) included in the normative guidance WHO guidelines for indoor air quality: household fuel combustion

More than 50+ metrics underpin the Climate Transition Impact Framework

Investment Required

Demographic granularity for future releases | Sectoral granularity for future releases | Metric under revision | Under consideration for future development | May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020)

Target year = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Total annual Investment	Average investment (% of GDP, 2020–50) in the following: • low-emission technology[1] • high-emission technology[1]	Average investment required from base to target year to build capacity, switching from existing assets or spend (incl continued investment), split by low- and high-emission technology	%
	Average investment ($ billion, 2020–50) in the following: • low-emission technology[1] • high-emission technology[1]	Average investment required from base to target year to build capacity, switching from existing assets or spend (incl continued investment), split by low- and high-emission technology	$ billion
Investment source	% average investment from public funding sources: • low-emission technology[1] • high-emission technology[1]	Percent of average total investment required from public funding sources from base to target year to build capacity, switching from existing assets or spend (incl continued investment), split by low- and high-emission technology	%
	% average investment from private funding sources: • low-emission technology[1] • high-emission technology[1]	Percent of average total investment required from private funding sources from base to target year to build capacity, switching from existing assets or spend (incl continued investment), split by low- and high-emission technology	%
Annual investment intensity	Δ average investment (% of GDP, average [base year to target year] minus base year) in the following: • low-emission technology[1] • high-emission technology[1]	Annual average total investment in the period from base to target year vs base year (incl new, switch, and continued investment) as a proportion of base year's GDP, split by low- and high-emission technology	+/– %
	Δ average investment (average [base year to target year] divided by base year) in the following: • low-emission technology[1] • high-emission technology[1]	Annual average total investment (incl new, switch, and continued investment) in period from base to target year vs base year	Multiple of base year spend

Note: US $ are 2010 dollars.

1. As defined by McKinsey Global Institute, "technology" includes: blue-hydrogen production, basic oxygen furnaces, and fossil-fuel kilns, all with carbon capture and storage (CCS); green-hydrogen production using electricity or biomass; biofuel production; generation, transmission, distribution, and storage of wind, solar, hydro, biomass, and gas with CCS and nuclear power; heat production biomass; steel furnaces using electric arc furnaces (EAFs) and direct reduced iron (DRI) with hydrogen; cement kilns with biomass; low-emission vehicles and supporting infrastructure; building heating equipment run on electricity or biomass, such as heat pumps; district heating connections; clean cooking technology; building insulation; greenhouse gas–efficient farming practices; food crops, poultry, and egg production; and land restoration

More than 50+ metrics underpin the Climate Transition Impact Framework

Jobs Impact

Demographic granularity for future releases | Sectoral granularity for future releases | Metric under revision | Under consideration for future development | May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020) **Target year** = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Size of Impact	Number of jobs supported (% of population, target year minus base year)	Difference between jobs supported in target year and base year from the net-zero transition (based on total investment) as a % of population	%
	Number of green jobs supported (% of population, target year minus base year)	Difference between jobs supported in target year and base year from the net-zero transition (based on the investment in green technologies) as a % of population	%
	Number of jobs at risk (% of population, target year minus base year)	Difference in jobs lost in target year and base year from the net-zero transition (eg, in heavy-emitting industries) as a % of population	%
Demographic impact	% of green jobs supported filled by youth[1] in target year	Green jobs supported in target year by the transition, filled by workers aged 15–29 years, compared to population in target year	%
	% of green jobs supported filled by women in target year	Green jobs supported in target year by the transition, filled by women, compared to population in target year	%
Inclusivity	% of green jobs supported filled by low-skilled workers[2] in target year	Green jobs supported in target year by transition filled by low-skilled workers[2] compared to population in target year	%
Job quality	Average annual wage of green jobs supported as a % of GDP	Median wage of green jobs supported as a proportion of GDP	%
Social protection	Proportion of population that have social-protection floors or systems available	Share of population with access to a social protection system (eg, child and maternity benefits, support for persons without jobs, etc)	%
Skills readiness	Average number of people requiring green-job reskilling (base year minus target year) divided base year	Annual average number of people requiring training or education to fill supported green jobs from the base year to the target year vs base year	Multiple of base year figure
Regional concentration	Share of regions with a concentration of green net jobs[1] supported above a threshold (10%) in target year	Proportion of regions where green jobs supported significantly outweigh jobs at risk (eg, net jobs supported > 10%)	%
	Share of regions with a concentration of net jobs at risk above a threshold (10%) in target year	Proportion of regions where jobs at risk significantly outweigh green jobs supported (eg, net jobs risk > 10%)	%

Note: US $ are 2010 dollars.

1. Green jobs refers to direct and indirect jobs supported from investment in low emissions technologies | 2. Youth is defined as ages 15-29 as defined by the ILO | 3. Low skilled workers are those whose work mainly involves “simple and routine tasks which require the use of hand-held tools and often some physical effort” and/or those who have Level 2 Lower secondary level or Level 1 Primary level of education, ILO 2023

More than 50+ metrics underpin the Climate Transition Impact Framework

Growth & Competitiveness

Demographic granularity for future releases

Sectoral granularity for future releases

Metric under revision

Under consideration for future development

May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020)

Target year = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Economic growth	% Δ purchasing-power parity (PPP) GDP per person ($, target year divided by base year)	% change in economic production (PPP GDP) per person in target year vs base year	+/– %
	Δ PPP GDP per person ($, target year minus base year)	$ value difference in economic production (PPP GDP) per person in target year vs base year	+/– $ GDP per person
	Δ PPP GDP per low-skilled worker[1] ($, target year minus base year)	$ value difference in economic production (PPP GDP) per low-skilled worker[1] in target year vs base year	+/– $ GDP per person
	% Δ of population living under the empowerment line (target year minus base year)	% change in population with PPP under the empowerment line who cannot meet their essential needs and realize more of their potential (target vs base year)	+/– %
Domestic supply chain for transition sectors	Ratio of indirect and direct gross value added (GVA) supported (target year)	Ratio of supply chain to direct GVA in the region in target year vs base year as a measure to capture the economic benefits within the region	+/– $
Labor productivity in transition sectors	GVA per worker ($, target year)	Productivity per worker measured by average GVA contribution over total jobs in target year	$ per worker
	% change in GVA per worker ($, target year divided by base year)	Difference in productivity per worker as measured by average GVA contribution over total jobs in target year vs base year	+/– %
	Δ Working hours lost to heat (hours, target year divided by base year)2	Annual productivity loss (hours of lost labor) per year due to exposure to high-humid heat in target year vs base year	+/– hours
Agricultural productivity	% Δ agricultural yield for cereal (metric tons of dry matter per hectare [tDM per ha], target year divided by base year)	% change in total cereal yield in tDM per ha per year between target year and base year	+/– %
Energy productivity	Δ energy intensity of GDP (megajoules [MJ] per $MER, target year minus base year)	Change in energy consumption required to produce $1 GDP in target year vs base year	+/– MJ per $

Note: US $ are 2010 dollars.

1. According to the International Labour Organisation, Excessive heat during work creates occupational health risks; it restricts a worker's physical functions and capabilities, work capacity and productivity. Temperatures above 24–26°C are associated with reduced labour productivity. At 33–34°C, a worker operating at moderate work intensity loses 50 per cent of his or her work capacity. Exposure to excessive heat levels can lead to heatstroke, sometimes even with a fatal outcome.

More than 50+ metrics underpin the Climate Transition Impact Framework

Lived Environment & Health

⊕ Demographic granularity for future releases ⊕ Sectoral granularity for future releases — Metric under revision — Under consideration for future development — May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020) **Target year** = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Air quality	Δ PM2.5[1] emissions per capita (milligrams of black carbon emissions per annum [mgBCpa] per million people, target year minus base year)	Difference in mgBCpa per capita between target year vs base year	+/– mgBCpa per million people
	Δ PM2.5[1] emissions in urban centers (metric tons per annum [tpa] per million people, target year minus base year)	Difference in PM2.5[1] emissions (all contributing gasses and particulate matter) in cities or urban centers between target year vs base year	+/– tpa of PM2.5[1] per million people
	Δ PM2.5[1] emissions in rural areas (tpa per million people, target year minus base year)	Difference in PM2.5[1] emissions (all contributing gasses and particulate matter) in rural areas between target year vs base year	+/– tpa of PM2.5[1] per million people
Food security	% Δ food price index (target year divided by base year)	Difference in food price index of all nonenergy crops and livestock between target year vs base year	+/– %
	% Δ nonenergy crops and livestock price ($ per metric ton of dry matter, target year divided by base year)	Change in weighted average cost of food across all crops and livestock (eg, corn, soybean, wheat, etc) in target year vs base year	+/– %
⊕	Prevalence of undernourishment (% of population, target year minus base year)	Proportion of population experiencing undernourishment based on food availability, food consumption, and energy needs	+/– %
Biodiversity	Δ managed and unmanaged forest (million hectares [ha], target year minus base year)	Change in million ha of natural forest, managed forest, and afforestation and reforestation area in target year vs base year	Million ha
	% Δ average marine acidity (pH, target year divided by base year)	Change in ocean acidity levels based on change in pH between target year vs base year	+/– %
	% Δ average area of wildfires (ha, target year divided by base year)	Change in the average area burned by wildfires between target year vs. base year	+/– %
	Δ Biodiversity Intactness Index[2] (%, target year minus base year)	Change in the Biodiversity Intactness Index between target year vs base year	+/– %
Climate hazard ⊕	% of the population exposed to ≥ 2 new climate hazards[3] relative to current levels (target year)	% of the population exposed to ≥ 2 new climate hazards (eg, drought, flooding) compared with current levels (eg, 1.1°C of warming)	%
	Δ GDP due to climate damage ($, target year minus base year)	GDP impact from chronic climate damage (eg, excludes acute hazards) in target vs base year	+/– $

Note: US $ are 2010 dollars.

1. Particulate matter | 2. Biodiversity Intactness Index developed by National History Museum, defined as an estimated percentage of the original number of species and their abundance that remains in any given area, despite human impacts" | 3. Exposure to climate hazards is defined as exposure to two or more climate hazards, including heat stress, agricultural drought, urban water stress, riverine flooding, coastal flooding

More than 50+ metrics underpin the Climate Transition Impact Framework

Lived Environment & Health

Demographic granularity for future releases | Sectoral granularity for future releases | Metric under revision | Under consideration for future development | May be replaced by demographic granularity in future releases

Base year = baseline or reference year at beginning of period interested in (e.g., 2020)

Target year = end year of impact period interested in (e.g., Net-Zero 2050, target year = 2050)

Sub-dimension	Metric	Description	Unit
Mortality and morbidity	Δ disability-adjusted life years (DALYs[1]) (target year minus base year)	Difference in DALYs[1] in target year vs base year	+/– DALYs
	% Δ infant mortality (target year divided by base year)	Difference in infant mortality defined as the number of deaths of children under 1 year of age, expressed as 1,000 live births in target year vs base year	+/– years per 1,000 live births
	% Δ mortality from household pollution (target year divided by base year)	Difference in the mortality rate attributed to household and ambient air pollution (per 100,000 population) in target year divided by base year	+/– years per 100,000 people
	Healthcare expenditure per capita ($, target year divided by base year)	Average amount of healthcare spend (both privately and publicly funded healthcare) in target year divided by base year	+/– $
Water access	% Δ households with year-round access[2] to improved water source[3] (target year divided by base year)	Difference in households with year round access to improved water sources in target year divided by base year	+/– %
	Proportion of domestic and industrial wastewater flows safely treated in target year divided by base year	Proportion of domestic (including sewage and sanitiation) and industrial wastewater flows treated safely in target year divided by base year	+/– %
	% Δ level of water stress[4] (%, target year divided by base year)	% Δ level of water stress (amount of freshwater withdrawal as a proportion of available freshwater resources) between target year vs base year	+/– %
Adaption	Average adaptation investment as share of GDP (% of GDP)	Proportion of adaptation investment as a share of GDP over time period	% GDP

Note: US $ are 2010 dollars.

1. Sum of all years of life lost because of premature mortality and the years lived with disability because of prevalent cases of a health condition in a population | 2 . Access defined as either direct connection to the home or a public facility within 200 meters of the home | 3. Improved water source defined as: a source that is by nature or by its construction, likely to be protected from external contamination (i.e., piped water into dwelling, yard or plot ; public tap or standpipe; tubewell or borehole; protected dug well; protected spring and rainwater collection) | 4. Level of water stress is a SDG Indicator that tracks how much freshwater is being withdrawn by all economic activities, compared to the total renewable freshwater resources available. When a territory withdraws 25 per cent or more of its renewable freshwater resources it is said to be 'water-stressed'

Demographic and sectoral granularity categories

Demographic granularity categories

Categories	Types
Gender	• Men (male) • Women (female)
Population	• Urban • Rural
Age	• Youth (aged 15–29) • Prime-age workers (aged 30–54) • Older workers (aged 55+)
Income	• Low • Lower-middle • Upper-middle • High
Property type	• Residential • Commercial • Industry

Sectoral granularity categories

Categories	Types
Sector	• Agriculture • Buildings • Forest and other land use • Hydrogen sector • Industry • Mobility • Power sector