

Entry Points and Levers of Transformation

Insights from

the 2023 Global Sustainable Development Report



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Halfway to 2030: where are we?

- Stagnation in the face of multiple crises: 15% of achievement, 5/36 on track.
 - Some positive trends
 - But slowing down, or reversal of progress since 2019
 - Still negative trends on environment-related goals
 - Temporary shocks or 'scarring' effects - including COVID19?
 - Growing gap between high- and lowincome countries
- Future crises are expected be prepared with SDGs
- Call to action: Boost data availability

SNAPSHOT OF TRENDS IN SELECT TARGETS

		DISTANCE FROM TARGET (2023) ¹		Ì
GOAL	INDICATOR NUMBER	Very far from target Far from target Moderate distance to target Close to target Target met or almost met	TREND OF SDG PROGRESS (2023)*	CHANGE IN TREND OF SDG PROGRESS BETWEEN 2020 AND 2023 ²
	1.1.1 Eradicate extreme poverty		Limited or no progress	Sackward
1.666	1.3.1 Implement social protection systems		Fair progress but acceleration needed	N/A
2 🖤	2.1.2 Achieve food security		Deterioration	None
2 🐡	2.2.1 End malnutrition (stunting)		Fair progress but acceleration needed	None
	3.1.2 Increase skilled birth attendance		Fair progress but acceleration needed	A Backward
a . A	3.2.1 End preventable deaths under 5		Fair progress but acceleration needed	Sackward
3 -₩+	3.3.3 End malaria epidemic		Limited or no progress	None
	3.b.1 Increase vaccine coverage		Deterioration	ighter Backward
4 Mi	4.1.2 Ensure primary education completion		Limited or no progress	Sackward
	5.3.1 Eliminate child marriage		Fair progress but acceleration needed	None
5 @	5.5.1 Increase women in political positions		Fair progress but acceleration needed	None
	6.1.1 Universal safe drinking water		Limited or no progress	None
6 Q	6.2.1 Universal safe sanitation and hygiene		Fair progress but acceleration needed	None
	7.1.1 Universal access to electricity		Fair progress but acceleration needed	A Backward
7 🙊	7.3.1 Improve energy efficiency		Fair progress but acceleration needed	None
	8.1.1 Sustainable economic growth		Deterioration	m Backward
8 🎢	8.5.2 Achieve full employment		Limited or no progress	None
	9.2.1 Sustainable and inclusive industrialization		Limited or no progress	None
9 🐣	9.5.1 Increase research and development spending		Fair progress but acceleration needed	A Forward
	9.c.1 Increase access to mobile networks		Substantial progress/on track	None
10 (⊕)	10.4.2 Reduce inequality within countries		Fair progress but acceleration needed	N/A
11 📠	11.1.1 Ensure safe and affordable housing		Fair progress but acceleration needed	N/A
Haus	12.2.2 Reduce domestic material consumption		Limited or no progress	N/A
12 00	12.c.1 Remove fossil fuel subsidies		Deterioration	Sackward
13 😡	13.2.2 Reduce global GHG emissions		Deterioration	None
	14.4.1 Ensure sustainable fish stocks		Deterioration	N/A
14 👼	14.5.1 Conserve marine key biodiversity areas	—	Limited or no progress	N/A
	15.1.2 Conserve terrestrial key biodiversity areas		Limited or no progress	None
15 些	15.4.1 Conserve mountain key biodiversity areas		Limited or no progress	N/A
	15.5.1 Prevent extinction of species		Deterioration	None
	16.1.1 Reduce homicide rates		Limited or no progress	Eackward
16 💆	16.3.2 Reduce unsentenced detainees		Deterioration	None
	16.a.1 Increase national human rights institutions		Deterioration	Sackward
17 🋞	17.2.1 Implement all development assistance commitments		Fair progress but acceleration needed	Forward
	17.8.1 Increase internet use		Substantial progress/on track	None
	17.18.3 Enhance statistical capacity		Limited or no progress	None

¹ Distance from target (2023) and Trend of SDG progress (2023) infort to current level and trend information for the latest available data utilizing the calculation methodology from the Sustainable Development Coale 2022 Progress Charl Technical Note. Latest available data as of Neg 2023 from the SDG global indicator distabase. Please note that information for indicators 1.1.1, 10.4.2, 13.2.2, 17.2.1 and 17.13.8 and hom the Sustainable Development Coale Progress Charl Coale 2022 Progress Charl Information for indicators 1.1.1, 10.4.2, 13.2.1, 17.2.1 and 17.13.8 and hom the Sustainable Development Coale Progress Charl Coale 2022 Progress Charl Progress C

N/A trend comparisons unaveilable between the 2020 and 2023 Progress Charts due to: i) lack of trend analysis from insufficient data; ii) indicator not included in the 2020 Progress Chart, or iii) indicator has changed between progress charts.

² To capture the impacts of the COVID-10 pandemic on SDC progress, a comparison of the trend assessment from the Sustainable Development Goals Progress Chart 2020 and the Trend of SDC progress (2023) was made, with some indicators showing revenual or slowed progress.

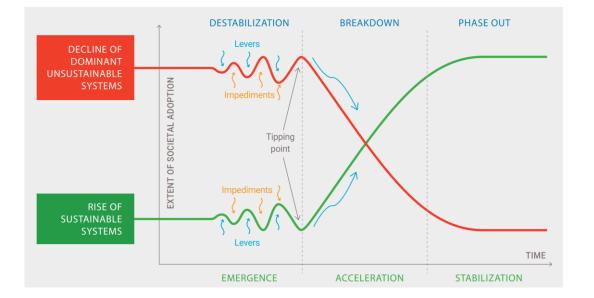
What scenarios tell us

- Under a **high-ambition scenario**, most of the Goals will have **made progress** by 2030.
- By 2050 most Goals would be achieved or nearing the target levels, but such issues as air pollution and management of food waste would still be lagging behind.
- High-ambition scenario measures include: Price on carbon, Phasing out coal and biomass, Mandating electric vehicles, Adjusting energy subsidies, More determined shift towards sustainable consumption and diets.
- The SDGs won't be achieved by 2030 with 'Business-as-usual' pathways or incremental changes, or even by 2050
- Transformations & game-changing interventions are needed

PROJECTED GLOBAL ACHIEVEMENT FOR SELECT SUSTAINABLE DEVELOPMENT GOAL INDICATORS



Soergel et al., 2021



How to transform? Dynamics of transformative change

"S-curve" model for transformation: drive transformation through its phases

- Emergence
- Acceleration
- Stabilization

Identify levers enable sustainable solutions

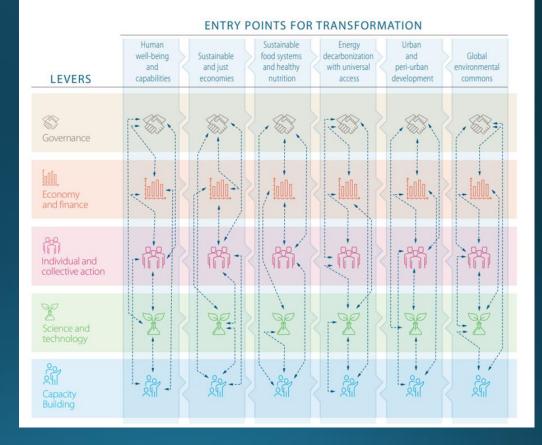
Tipping points:

ex.

- Major societal shifts <u>in perspectives</u> (singleuse plastics)
- Innovations suddenly become easier to use or more socially desirable (smart phone)

Transformative change: What needs to be done?

- Six entry points to transformation (2019 GSDR)
- WHAT? Identifying key interventions
 - Five Levers for transformation (2019 GSDR+ capacity building)
 - Review of scenario literature



TRANSFORMATIONS TO THE SDGS: ENTRY POINTS AND LEVERS



	Key Shifts
ENTRY POINT: Human wellbeing	• Scale-up investment in core primary health care interventions, ensure that every pregnant woman and neonate has access to lifesaving interventions, optimize existing health systems and expand community-based health initiatives.
and capabilities	• Accelerate secondary education enrolment and completion rates, ensure all girls are enrolled in secondary education by 2030, expand tertiary education and education on sustainability issues.

• Increased investment in water and sanitation infrastructure, particularly; transition to universal piped water access and halve untreated wastewater that by 2030 (and halve again by 2050).

Interventions by lever

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GOVERNANCE	Health: policy and population-wide interventions (e.g. regulatory interventions, taxes, restrictions and bans); periodic outreach and schedulable services (e.g. vaccines, family planning, nutrition, supplements); first-level and above clinical services (e.g. disease treatment, counselling, mammography, asthma, pulmona). Optimising health systems to address staff shortages, retrain workers, reinforce infrastructure and supplies, strengthen networks and expand services
	Education: eliminating school fees, improving local access to schools, increasing the number of years of compulsory schooling, and providing food, stipends, and other resources for children at school
BUSINESS &FINANCE	Health: additional USD200 billion per year from 2020 to 2030 for core PHC in LMICs
	Water & Sanitation (W&S): reallocate financing away from conventional freshwater supply systems combined with massive ramp-up in investment in efficiency and clean supply projects. Incremental investment in piped water access and water treatment reaches USD260 billion per year by 2030.
SCIENCE &TECHNOLOGY	W&S: rapid expansion of desalination and wastewater recycling in water stressed regions
INDIVIDUAL& DLLECTIVE ACTION	
	W&S: additional 10% end-use efficiency improvement beyond baseline due to behaviour change
APACITY BUILDING	Build capacities to implement each lever and to overcome impediments including building an adequate workforce that is well-resourced, available where needed, and with accessible infrastructure and functioning equipment, addressing financing gaps for investment in health, education and water and sanitation, strengthening governance and institutions, and resolving conflicts.

ENTRY POINT:
Sustainable and just
economies

Key Shifts

- Encouraging inclusive, pro-poor growth including progressive redistribution measures, doubling welfare transfers in low-income countries
- Rollout of good practice climate policies and global carbon pricing
- Encouraging lifestyles that promote sufficiency levels
- Investment in green innovation, and circular and sharing economy models.

Interventions by lever

- Just Economy: policies for redistribution, income transfers, and redirecting public investments to focus on productive capacity and raising the incomes of the poor, GOVERNANCE including universal cash transfers, universal insurance coverage, or instituting a basic income. Social transfer schemes can include equal per capita payments or progressive redistribution inversely proportional to income.
 - Sustainable Economy: good practice climate policies including economy-wide measures such as differentiated carbon pricing through taxes or cap- and-trade. Environmental policies and taxation to accelerate behaviour change, for example when applied to transport or energy. Governments can also create markets for new innovations through regulations, tax exemptions, deployment subsidies and labelling.
 - BUSINESS Just Economy: recycling revenue raised from carbon taxes in all countries to households to alleviate poverty, with shortfalls in LICS to be met by a portion of revenues & FINANCE raised in HICS and committed to a global fund. Greater concessional finance and debt relief for developing countries to ensure scope for social spending.
 - Sustainable Economy: global carbon tax revenue potential of USD436-1360 billion by 2030 under different mitigation pathways. Rollout of good practice climate policies would cost 0.02% in annual GDP growth to 2050.

SCIENCE & TECHNOLOGY

- Sustainable Economy: industry technology measures include carbon capture and storage (HICS 1.5% of total CO, emissions by 2030), improving final energy efficiency (HICS 11% and LMICS 6% by 2030); and reducing N,O emissions. Support from state investment banks, public-private financing facilities, and government science funding mechanisms for green innovations. Divestment in current business-as-usual practices and technologies and increasing investment in R&D.
- Build capacities to implement each lever and overcome impediments including building institutional capacities for navigating revenue collection and redistribution, CAPACITY overcoming political resistance, managing environmental and economic trade-offs, designing and delivering carbon taxes to address financing gaps, developing **BUII DING** markets for sustainable innovations, and shifting ingrained unsustainable behaviors and attitudes.



	Key Shifts
	Shift to regenerative ecological and multifunctional agricultural systems.
ENTRY POINT:	Improve irrigation and fertilizer efficiency.
Food systems and	Reduce food waste by 50 per cent and scale up proven nutrition interventions.
nutrition patterns	 Halve consumption of meat in high-consumption regions and adapt plant-based diets.

Interventions by lever

GOVERNANCE	 Sustainable Food Systems: policy reform and investment in enabling conditions including improved value chains, finance, extension, gender-responsive policies and investments, social protection, water management, implementation of carbon payments and smart subsidies, and agroecological and landscape approaches. Investing in education and social security can address lock-in effects of unskilled workers in agriculture. Healthy nutrition/diets: investment in public health information and educational materials and guided food choices through incentives or disincentives, including regulations.
BUSINESS & FINANCE	 Sustainable Food Systems: agricultural R&D investments of USD4 billion per year have the potential to nearly end hunger by 2030 while a further USD6.5 billion per year in technical climate-smart options can achieve GHG emissions reductions consistent with the 1.5°C pathway. Increased trade liberalisation; abolishment of import tariffs and export subsidies on agricultural products. Healthy nutrition/diets: investments to address stunting cost USD19.75 billion between 2019 and 2030. Investments to address wasting cost USD275.97 billion between 2019 and 2030. Investments to address wasting cost USD275.97 billion between 2019 and 2030.
SCIENCE & TECHNOLOGY INDIVIDUAL& COLLECTIVE ACTION	 Sustainable Food Systems: a rapid uptake of improved technologies, especially in Africa, Asia and Latin America; investments in R&D, yieldaugmenting technologies, management improvements and irrigation technologies to reduce losses in conveyance and application; adoption of new crop varieties; precision agriculture and automation, redesigning agricultural practices including intercropping and agroforestry. Healthy nutrition/diets: increasing R&D investments of USD4 billion per year above the baseline could reduce hunger incidence to 5% globally by 2030. Healthy nutrition/diets: influencing social norms around diet for younger population (ages 15-44).
CAPACITY BUILDING	 Build capacities to implement each lever and overcome impediments including building institutional capacities for navigating revenue collection and redistribution, overcoming political resistance, managing environmental and economic trade-offs, designing and delivering carbon taxes to address financing gaps, developing markets for sustainable innovations, and shifting ingrained unsustainable behaviors and attitudes.



	 Large-scale deployment of renewables and best available technologies, appliances and equipment
ENTRY POINT: Energy	 Rapidly scaling up infrastructure investment and support for universal electricity access and clean cooking alternatives
Decarbonisation & Universal Access	 Phasing down of fossil fuels by 2030 in a domestically and globally just manner
	 Major changes in global consumer behaviour to reduce energy consumption and end-use electrification.
Interventions by le	ver

Key Shifts

GOVERNANCE

- Access: subsidies to stimulate the adoption of cleaner cooking fuels/technologies or regulations to near-complete phase out biomass cookstoves by 2030.
- Decarbonisation: carbon pricing of emissions and subsidies for renewables. Energy system policies for faster phase out of coal and near-complete phase out of traditional biomass by 2040, restrictions on nuclear capacity additions and bioenergy potential, and faster phase out of fossil energy subsidies by 2030. Mandatory targets to increase share of renewables in electricity generation and ban new installations of coal power plants by 2025 (HICS) or 2030 (LMICs).
- Demand: introduction of a progressive carbon tax affecting energy demand, regulations to improve energy efficiency, incentives to improve dwelling energy performance and change behaviour to reduce energy consumption; designing and enforcing national standards and labelling for household appliances and efficient equipment; subsidies, appliance rebates and access to credit for lower income households to benefit from modern energy technologies.

BUSINESS & FINANCE

- Access: increase public and private investment in electricity infrastructure in Africa from 1% to 3% GDP per annum to 2030.
 - Decarbonisation: divestment from fossil fuel activities reaching more than 170 Billion USD per year by 2030 and used to partially fund USD910 billion per year on efficiency and low-carbon resources. Recycling of carbon revenues whereby developed countries devote part of their revenues to an international fund that supports clean energy and R&D in developing countries (USD50 billion per annum).

SCIENCE & TECHNOLOGY

- Decarbonisation: public and private investment in innovation in renewable energy technologies; spatially optimised bioenergy with carbon capture/storage.
- Demand: promote digital technologies for energy use, transmission and monitoring and innovation in high quality housing with highly efficient facilities for cooking. storing food and washing, low-energy lighting.

INDIVIDUAL & COLLECTIVE ACTION

- Demand: incentivize behaviour change to reduce energy consumption.
- Build capacities to implement each lever and overcome impediments including for designing and implementing market conditions, incentives and regulatory settings for CAPACITY investment in sustainable energy infrastructure and improving revenue collection, navigating political resistance from sunk investments in capital stocks, managing trade-BUILDING offs and competition between socioeconomic and environmental goals, building coalitions and public support in favour of decarbonisation, and shifting towards sustainable consumption behaviours.



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ENTRY POINT: Sustainable urban and peri-urban development

Key Shifts

Shift towards sustainable urban development by doubling of the recycled and composted share
of municipal waste by 2030 and increased circularity in the waste cycle; implementing
mandates for electric vehicle market penetration; increasing demand and provision of public
transport; rollout of good practice climate policies for transport, buildings and waste; investing
in innovation to reduce plastic and solid waste; transition to smart cities using modern digital
technologies. water access and halve untreated wastewater that by 2030 (and halve again by
2050).

Interventions by lever

GOVERNANCE	Expanding municipal waste collection systems, incentives and educational initiatives for composting and recycling; investment in public transport networks, multi-modal transport and incentives or mandates for electric vehicle uptake (e.g. 50% new sales by 2030), regulations or standards to improve fuel efficiency of passenger cars and aviation, building standards to improve final energy intensity of new residential and commercial buildings and no new installations of boiler capacity;12 retrofitting of existing building stock to improve energy efficiency (6-11% by 2030); reducing waste emissions by 28-55% by 2030.
SCIENCE& TECHNOLOGY	Investing in innovation to reduce plastic and solid waste and modern digital technologies to transition to smart cities.
INDIVIDUAL COLLECTIVE ACTION	Incentives and educational initiatives for behaviour change around composting and recycling and public transport.



ENTRY POINT: Global Environmental Commons

Key Shifts

 Protect and restore life on land by expanding protected areas to all priority conservation areas and biodiversity hotspots reaching 40-50% of terrestrial areas by 2050; preserving 85% of tropical/ boreal forest and 50% of temperate forest on each continent; abandoning agricultural land in protected areas or areas with >5% threatened species; ambitious reforestation of all degraded forest areas; and implementing a 1.5°C land-sector roadmap for 2050 combining avoided deforestation and land conversion, restoring forests and wetlands, improving forest management, lifestyle changes (diets, waste) and reduced reliance on BECCS. Protect other global environmental commons including ensuring environmental flow requirements; greater conservation of water by households, farms and industry, and improved air quality control.

Interventions

- Conservation policies, establishment of protected areas, land use regulation and law enforcement, integrated land use planning, sustainable forest management (optimising rotation and stocks, low-impact logging, certification, fire management), improved land tenure, sustainable commodity production, improved supply chain transparency, procurement policies, commodity certification, cleaner cookstoves, investments in ecosystem restoration and nature-based solutions, integration of agroforestry into agricultural and grazing lands, limit water extraction to local environmental flow requirements in low, intermediate and high flow periods.
 - Payment for Ecosystem Services schemes, including Reducing Emissions from Deforestation and Forest Degradation (REDD+).

BUSINESS & FINANCE

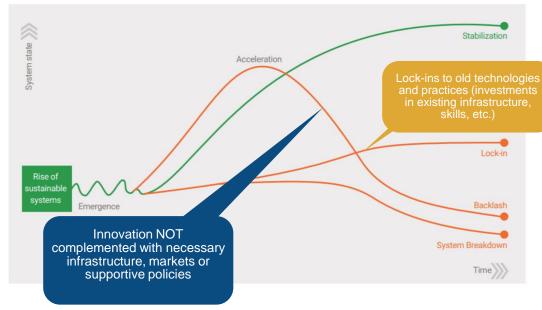
GOVERNANCE

INDIVIDUAL & COLLECTIVE ACTION

> CAPACITY-BUILDING

- Shift societal preferences from production to conservation land use and enable lifestyle changes around diets and waste.
- Build capacities to implement each lever and overcome impediments including for managing trade-offs between food production and biodiversity protection, designing and implementing effective financial conservation schemes, establishing sustainable land management regulations, institutions and governance systems.

Overcoming impediments for dynamic transformations

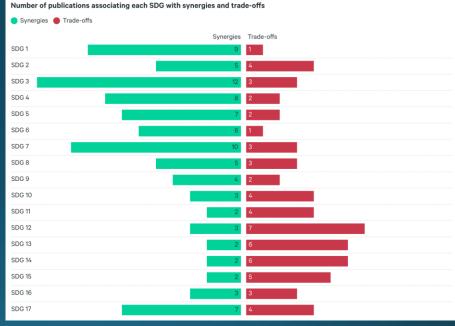


SUCCESSFUL AND UNSUCCESSFUL TRANSFORMATION PATHWAYS

- Acceleration is Key
- Nurture innovation
- Give strategic direction
- Goals Matter
- · Foresight capacity
 - Use scenarios and models
- Standardization and quality assurance
- Innovation (COVID-19 and virtual meetings)
- Powerful actors support new ways of thinking, doing and acting (electric car)

Consider SDG interlinkages

- Review of scientific literature shows mainly synergies
- Synergies: SDGs 1, 3, 4, 5, 6, 7 and 17
- Drivers of trade-offs: SDGs 2 (hunger and food) and 8 (decent work and economic growth)
- SDGs 14 and 15 are most negatively affected by progress in other areas
- SDG interlinkages are context-specific: geography, time, income groups, policy design



Source: Bennich et al., forthcoming.

SDG synergies and trade-offs

ADDITIONAL RESOURCES

Visit UN DESA online at: https://sdgs.un.org/gsdr to find:

• Global Sustainable Development Report;

https://sdgs.un.org/goals to find:

• Information on Sustainable Goals, Targets and Indicators





Thank you.

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