

2023 Global Sustainable Development Report

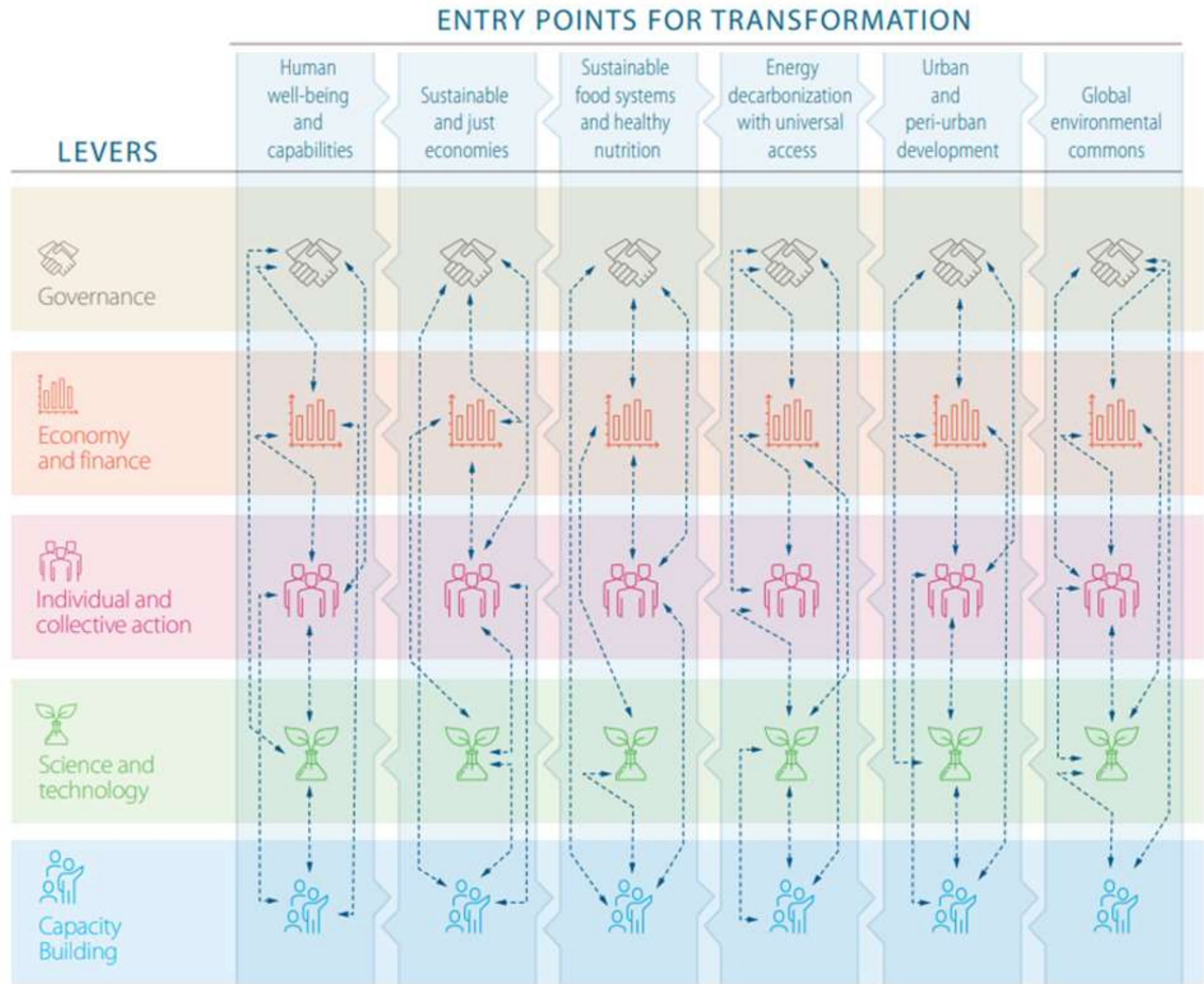


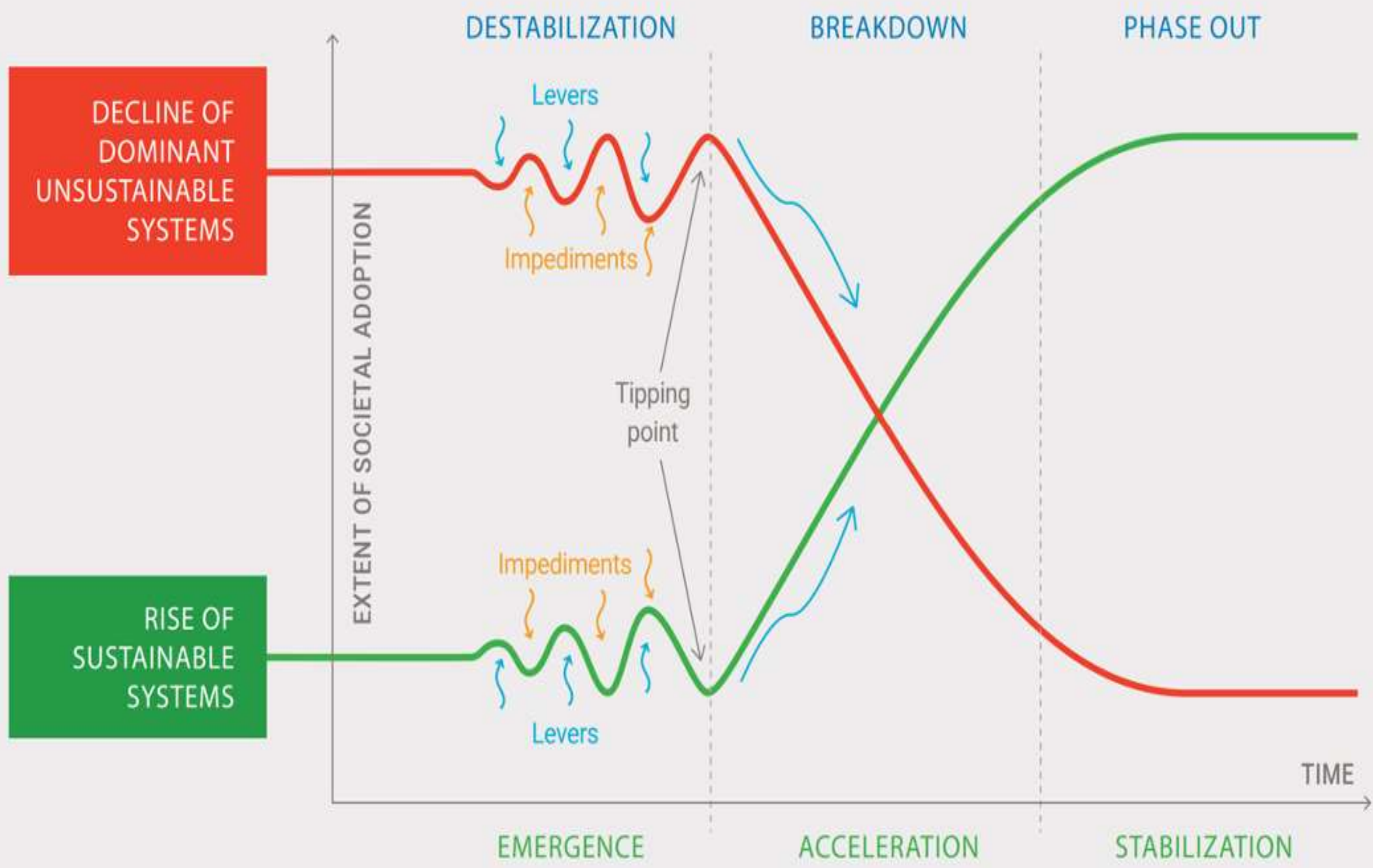
TIMES OF CRISIS,
TIMES OF CHANGE
SCIENCE FOR ACCELERATING
TRANSFORMATIONS
TO SUSTAINABLE
DEVELOPMENT



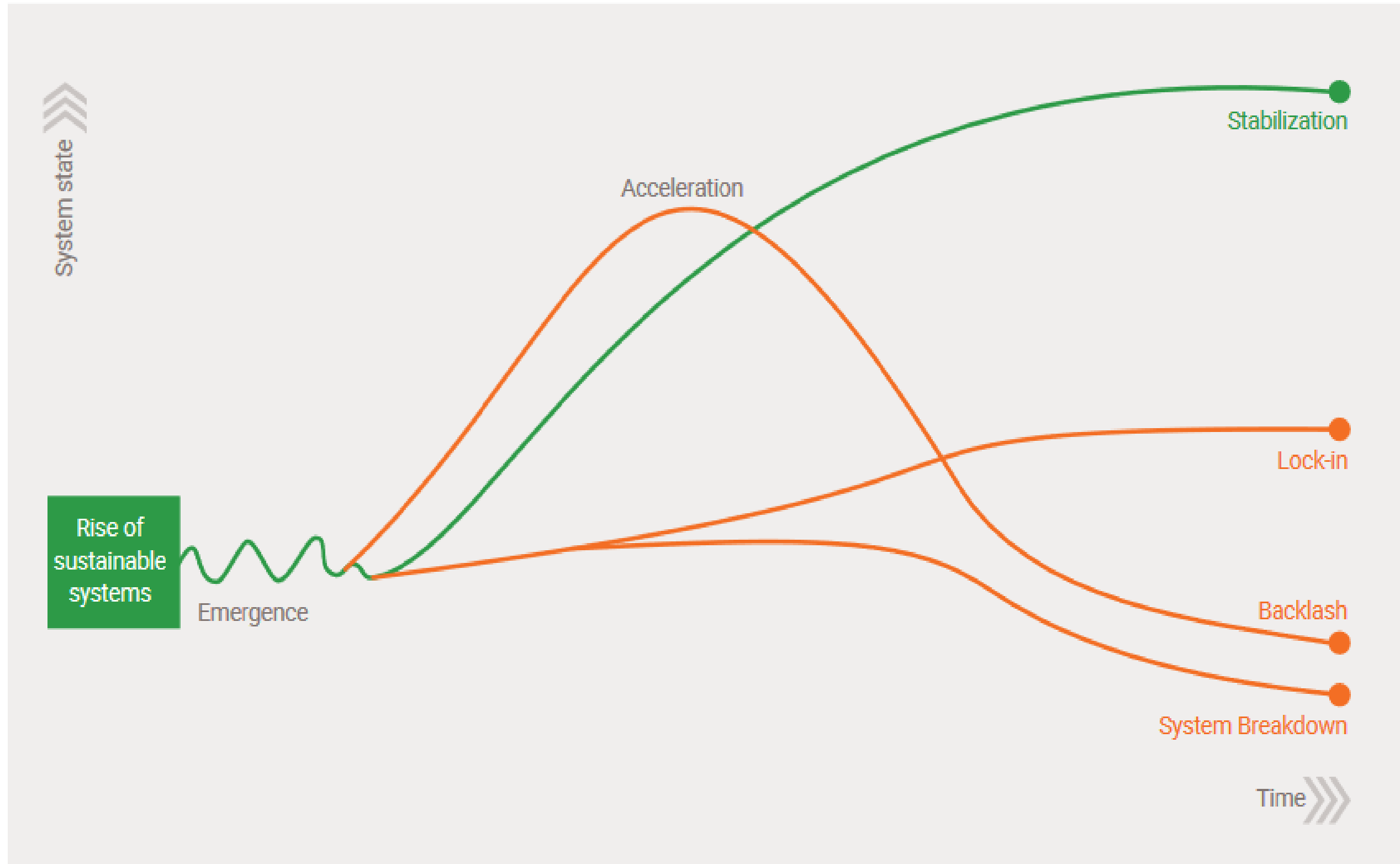
GLOBAL SUSTAINABLE
DEVELOPMENT REPORT 2023

TRANSFORMATIONS TO THE SDGS: ENTRY POINTS AND LEVERS





SUCCESSFUL AND UNSUCCESSFUL TRANSFORMATION PATHWAYS⁴⁴²



Source: Loorbach and others, 2017.

Key Shifts

ENTRY POINT: Energy Decarbonisation & Universal Access

- Large-scale deployment of **renewables** and best available technologies, appliances and equipment
- Rapidly scaling up **infrastructure** investment and support for universal electricity access and clean cooking alternatives
- 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

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 fossil fuel CO₂ 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.

CAPACITY BUILDING

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