

ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





MAITHREYI SEETHARAMAN

Moderator



09:35 – 09:45

HER MAJESTY QUEEN MATHILDE

ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





09:45 – 09:55

PAOLO GENTILONI

European Commissioner for Economy

ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





09:55 – 10:05

ZAKIA KHATTABI

Belgian Federal Minister of Climate, Environment,
Sustainable Development and Green Deal

ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





10:05 – 10:35

SANDRINE DIXSON-DECLÈVE

Co-President of the Club of Rome

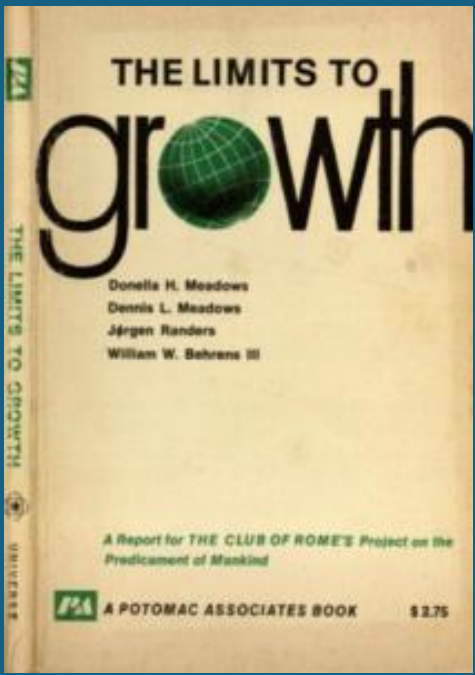
SDG's for All: Developing Strategic Systems Scenarios

Sandrine Dixon-Decleve, Co President, The Club of Rome
Co-Author, Earth for All: A Survival; Guide for Humanity
Chair, European Commission Expert Group, Economic & Societal
Impacts of Research & Innovation
Commissioner, Climate Governance Commission
Ambassador, Energy Transition Commission

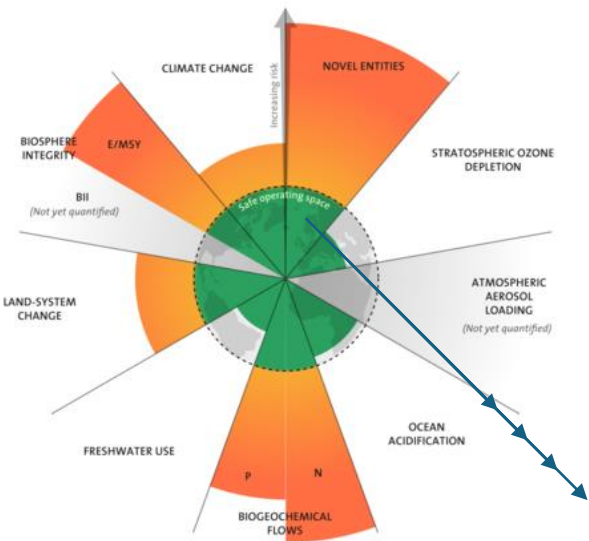




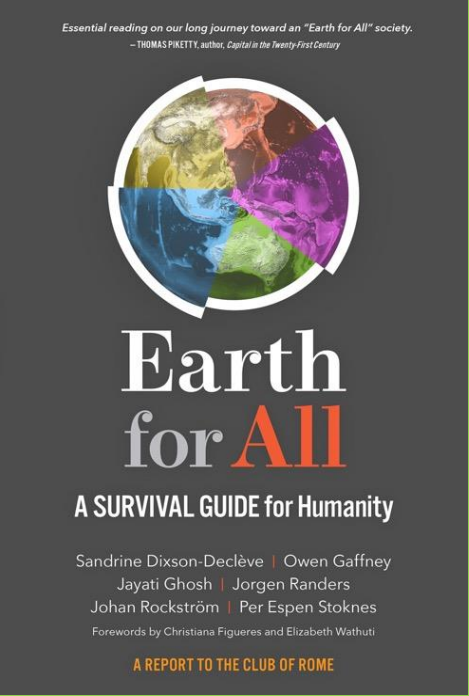
1972



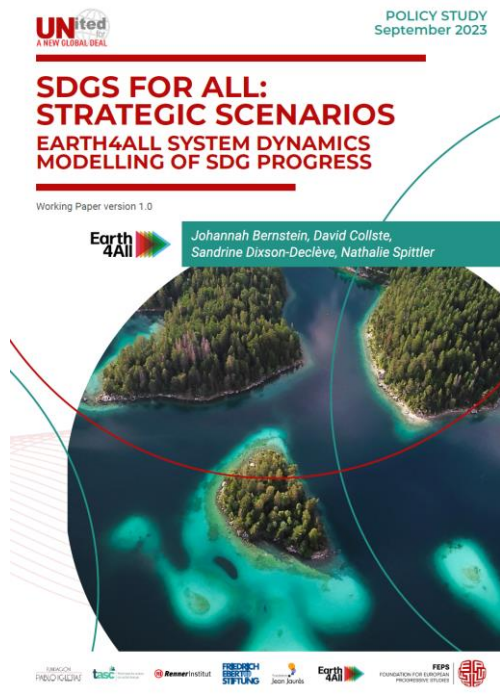
2009



2022



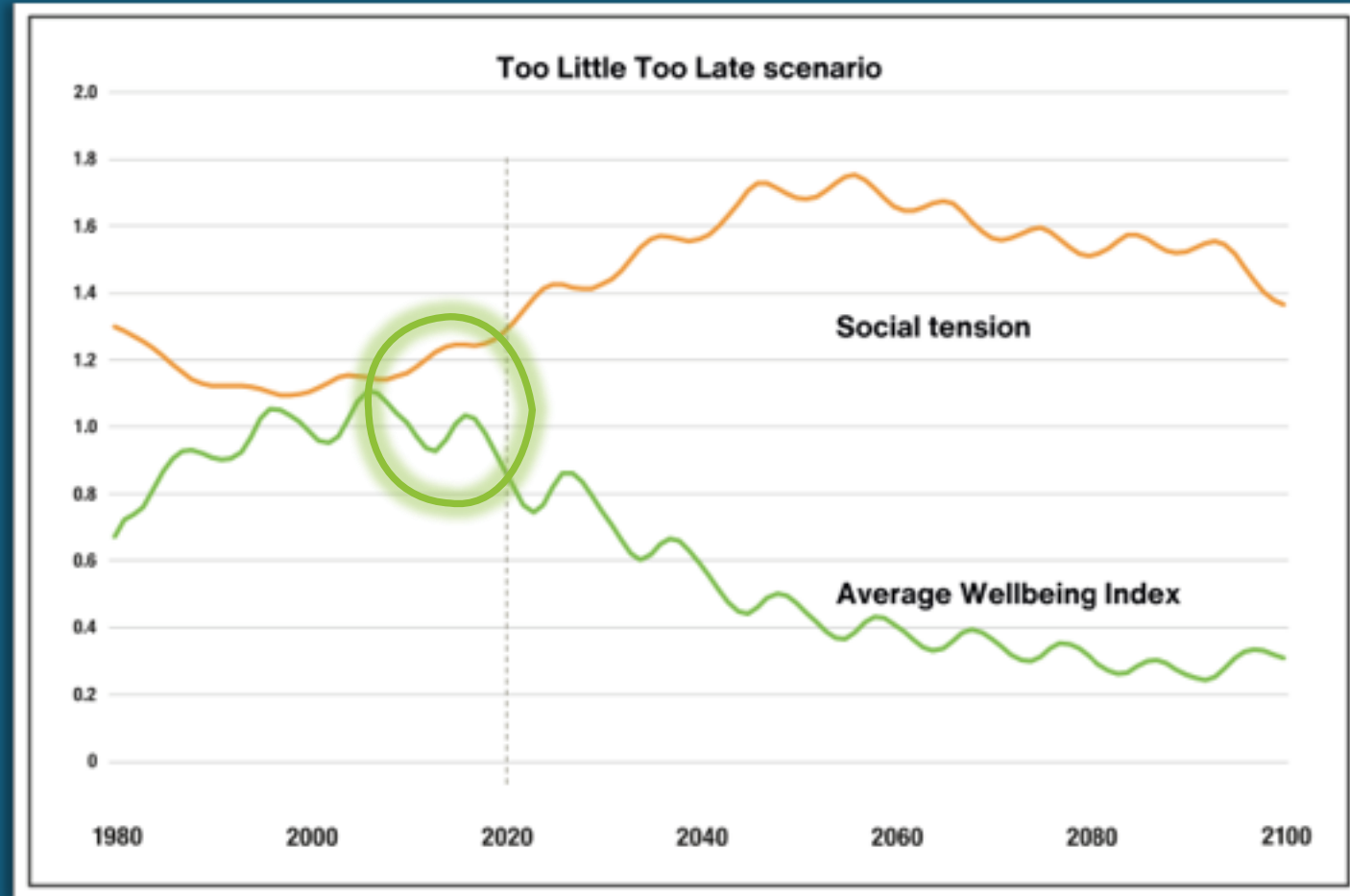
2023



Global wellbeing is declining

74% of G20 citizens want a well
being economy*

*Ipsos Mori survey 2020



Top 10 Risks

“Please estimate the likely impact (severity) of the following risks over a 2-year and 10-year period”



2 years

1	Cost of living crisis
2	Natural disasters and extreme weather events
3	Geoeconomic confrontation
4	Failure to mitigate climate change
5	Erosion of social cohesion and societal polarization
6	Large-scale environmental damage incidents
7	Failure of climate-change adaption
8	Widespread cybercrime and cyber insecurity
9	Natural resource crises
10	Large-scale involuntary migration

10 years

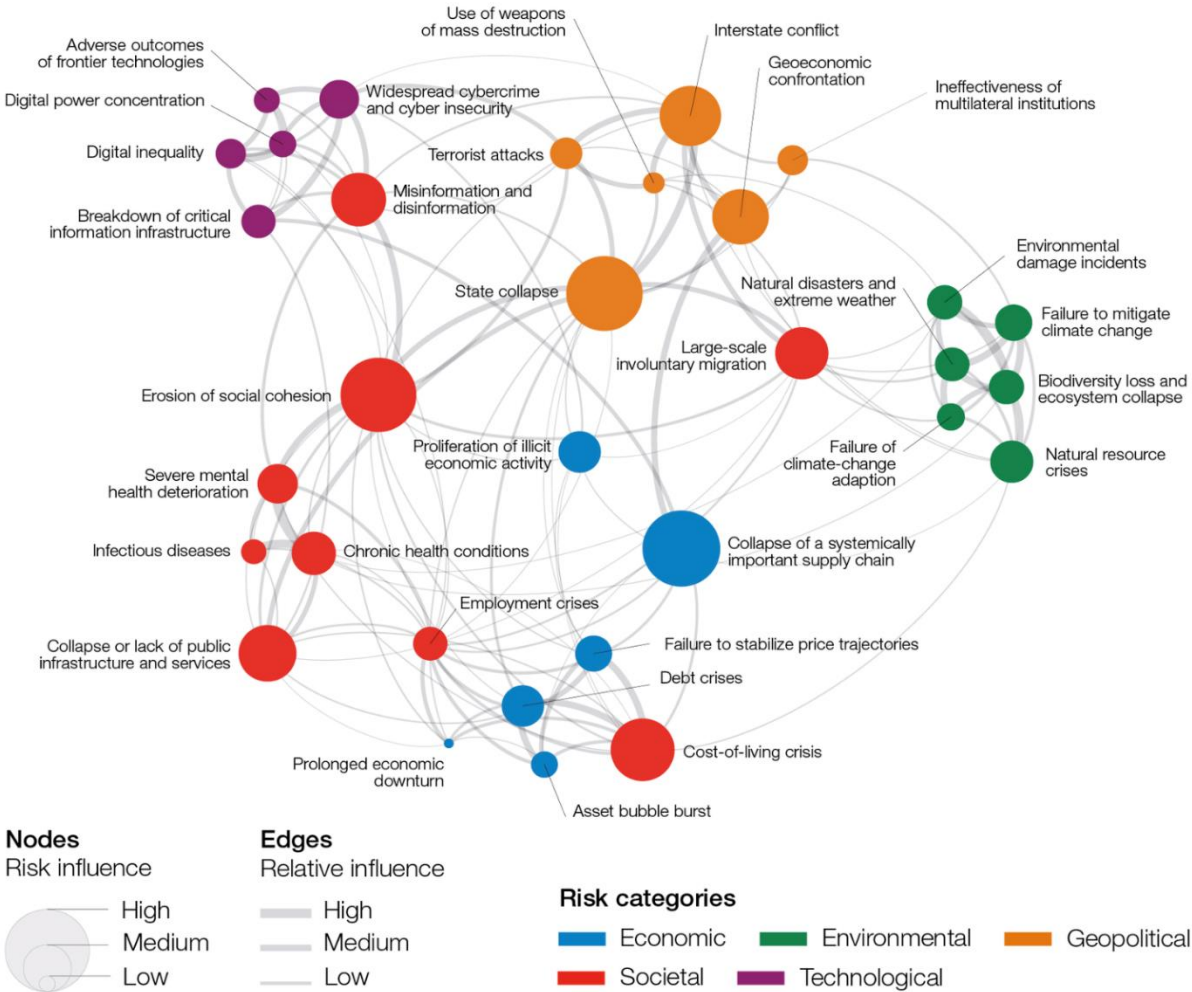
1	Failure to mitigate climate change
2	Failure of climate-change adaption
3	Natural disasters and extreme weather events
4	Biodiversity loss and ecosystem collapse
5	Large-scale involuntary migration
6	Natural resource crises
7	Erosion of social cohesion and societal polarization
8	Widespread cybercrime and cyber insecurity
9	Geoeconomic confrontation
10	Large-scale environmental damage incidents

Risk categories
Economic Environmental Geopolitical Societal Technological

Source: World Economic Forum, Global Risks Perception Survey 2022-2023



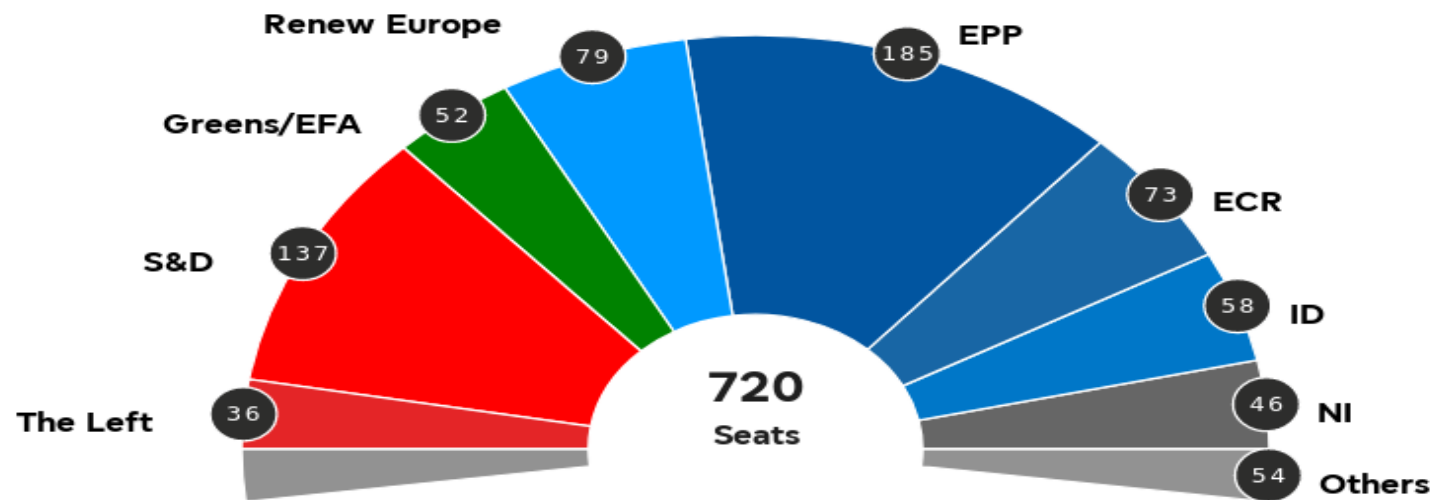
Global risks landscape: an interconnections map



Source: World Economic Forum, Global Risks Perception Survey 2022-2023

European Parliament 2024 – 2029

Provisional results



Provisional

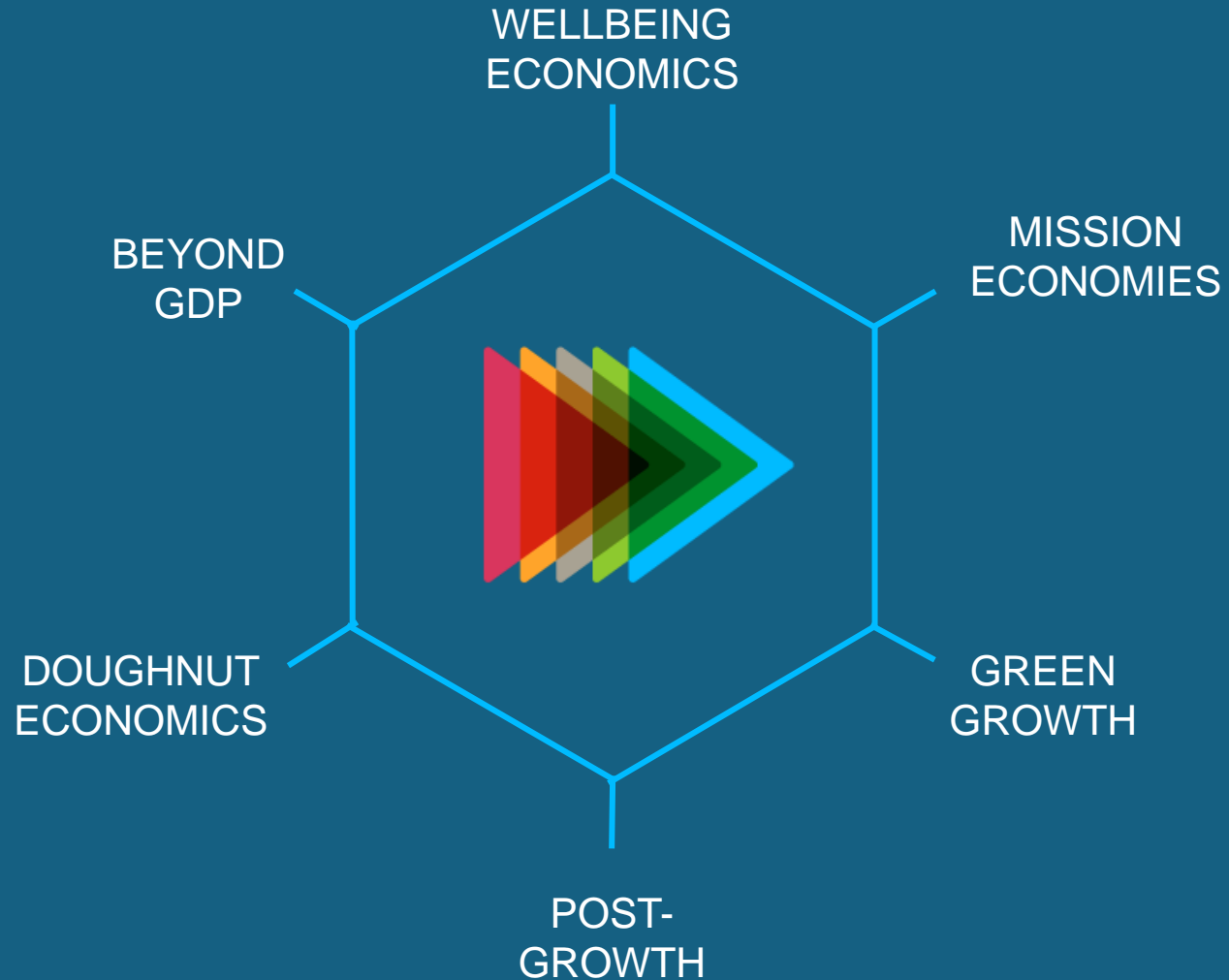
Composition of the European Parliament based on available provisional or final national results published after voting has finished in all Member States, based on the structure of the outgoing Parliament.

According to Parliament's rules of procedure, a political group shall consist of at least 23 Members elected in at least seven Member States.

Election Language:

- **Defense**
- **Security**
- **Economic stability**
- **Competitiveness**
- **Single Market**
- **Industrial Plan**
- **IRA**
- **People first**
- **Europe first**

21st Century Economics



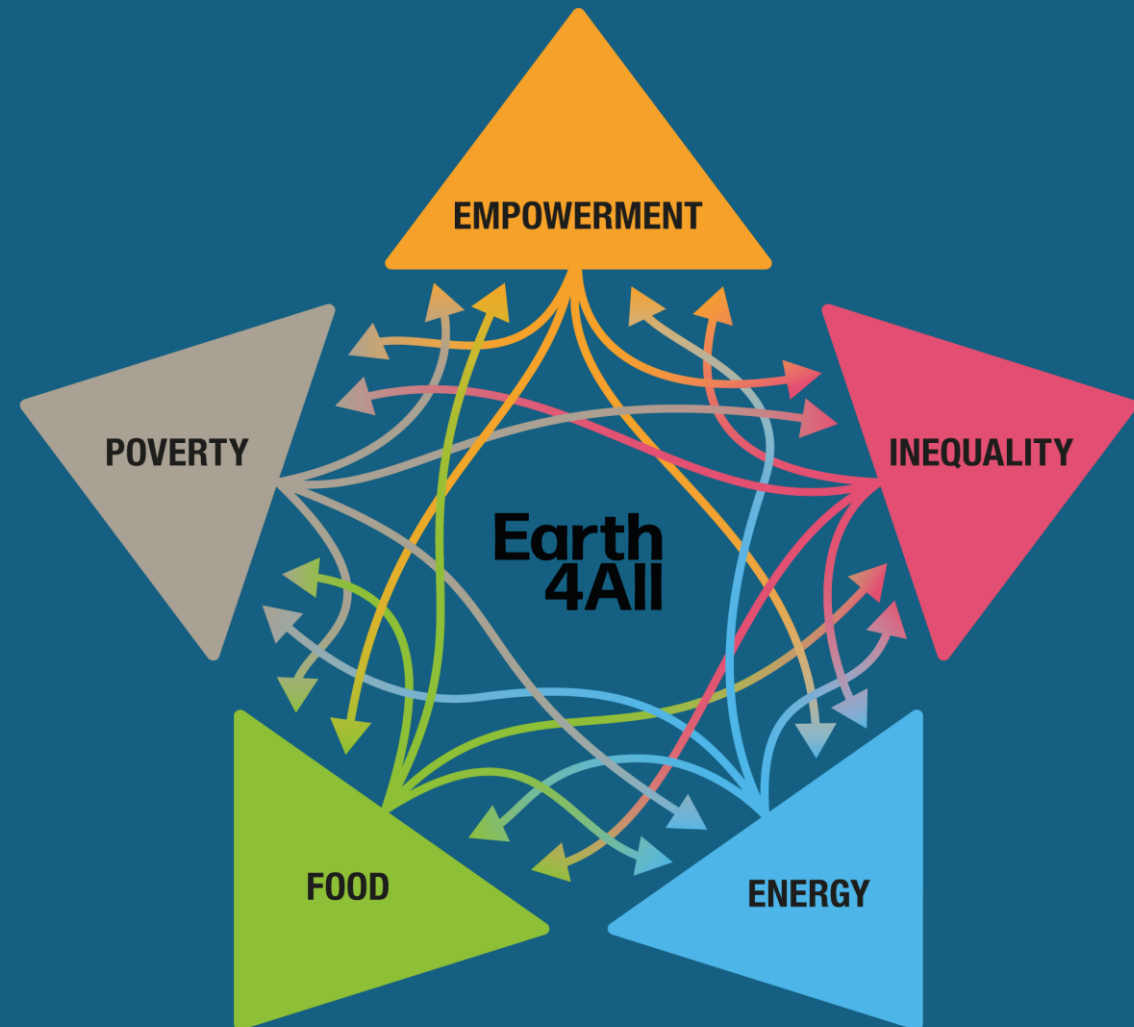
- Account for social and environmental risk in financial and economic decision-making
- Correct the inequity between high and low-income countries created by international finance and trade systems
- our perspective of public goods and socialise the rewards of environmental and social commons
- Increase the agency of women and workers to drive the direction of the economy

A systems change agenda for wellbeing within planetary boundaries

21st century
transformational
economics for well
being



Global and regional
system modelling





Just

2-4%

of global income is
needed to invest in a
better future.

Earth
4All



Our **societies** will
become more resilient
to the consequences
of climate change if we
take a **Giant Leap**



WILDFIRES



FLOODS



HURRICANES

Too Little Too Late: Earth reaches
a catastrophic 2.5 C before 2100.
Wildfires, floods and other extreme
events become a regular
occurrence by mid-century.



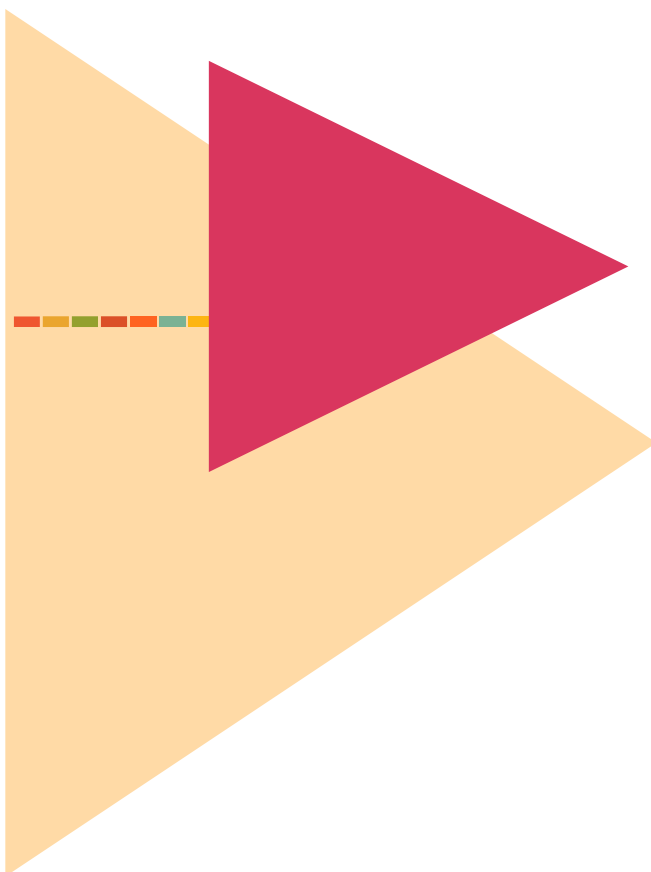
Giant Leap: Societies are more
resilient. Extreme weather events
come and go without toppling
entire nations.



Source: *Earth for All: A Survival Guide for Humanity* (2022)
www.earth4all.life

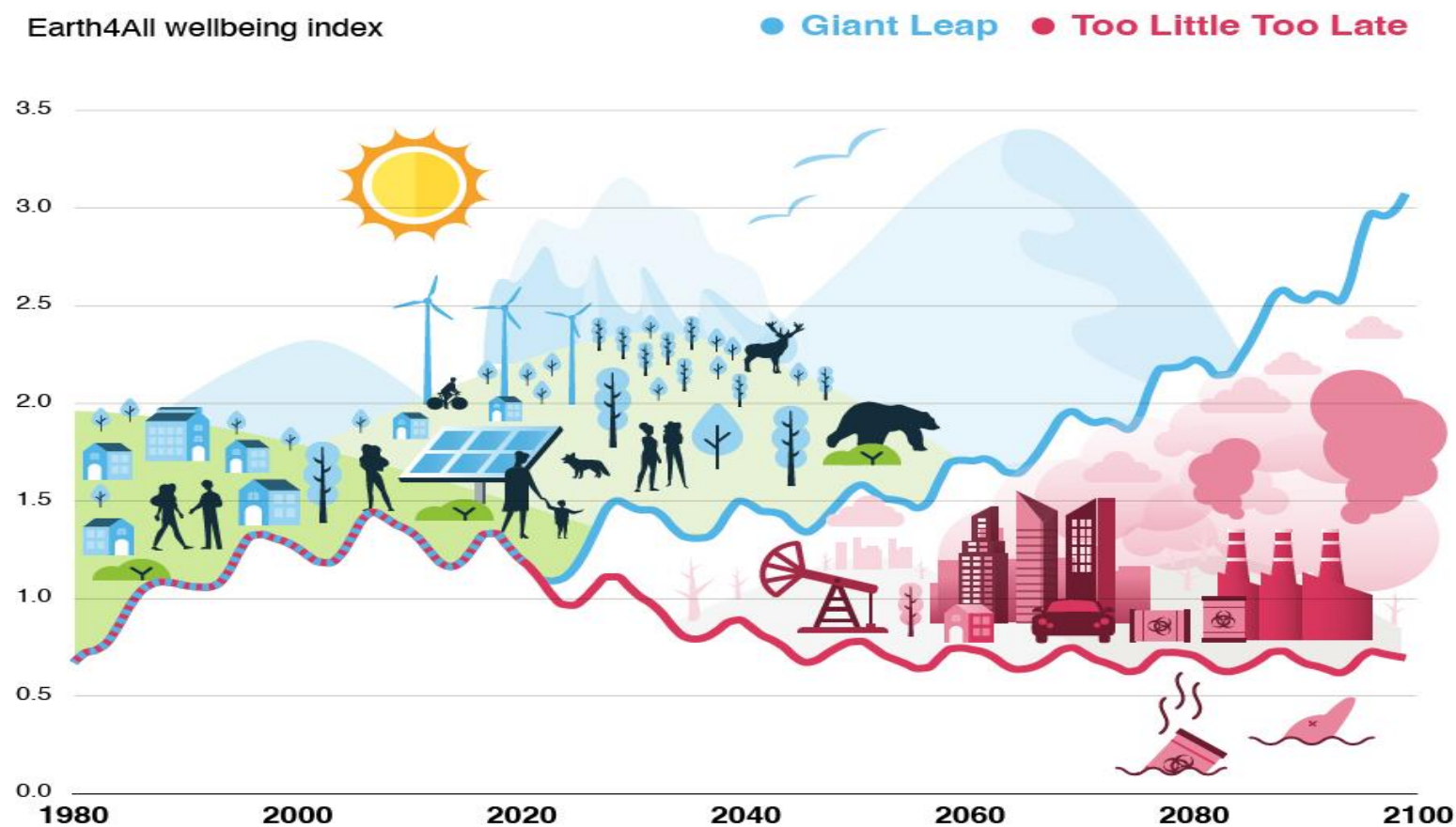
Earth
4All

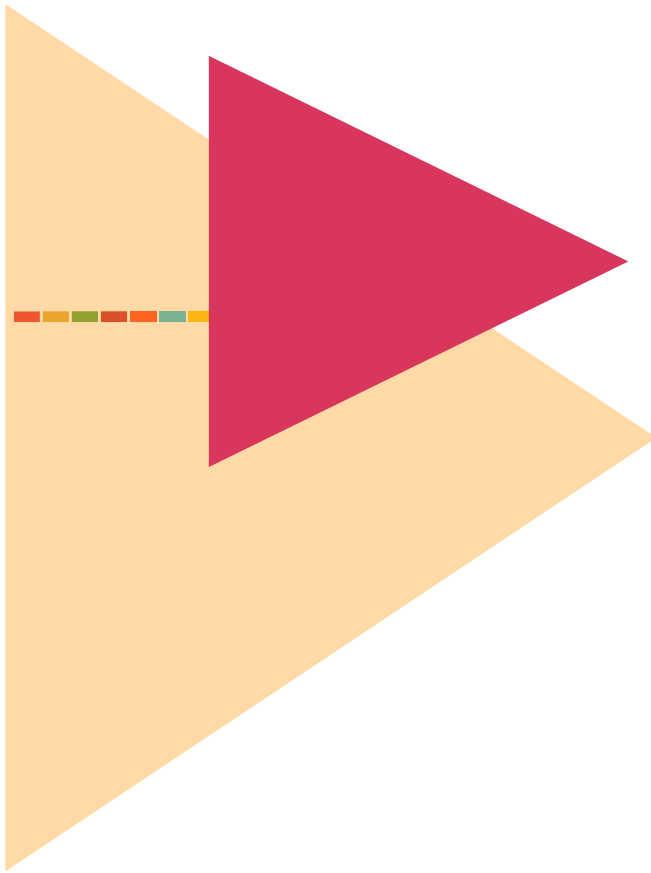




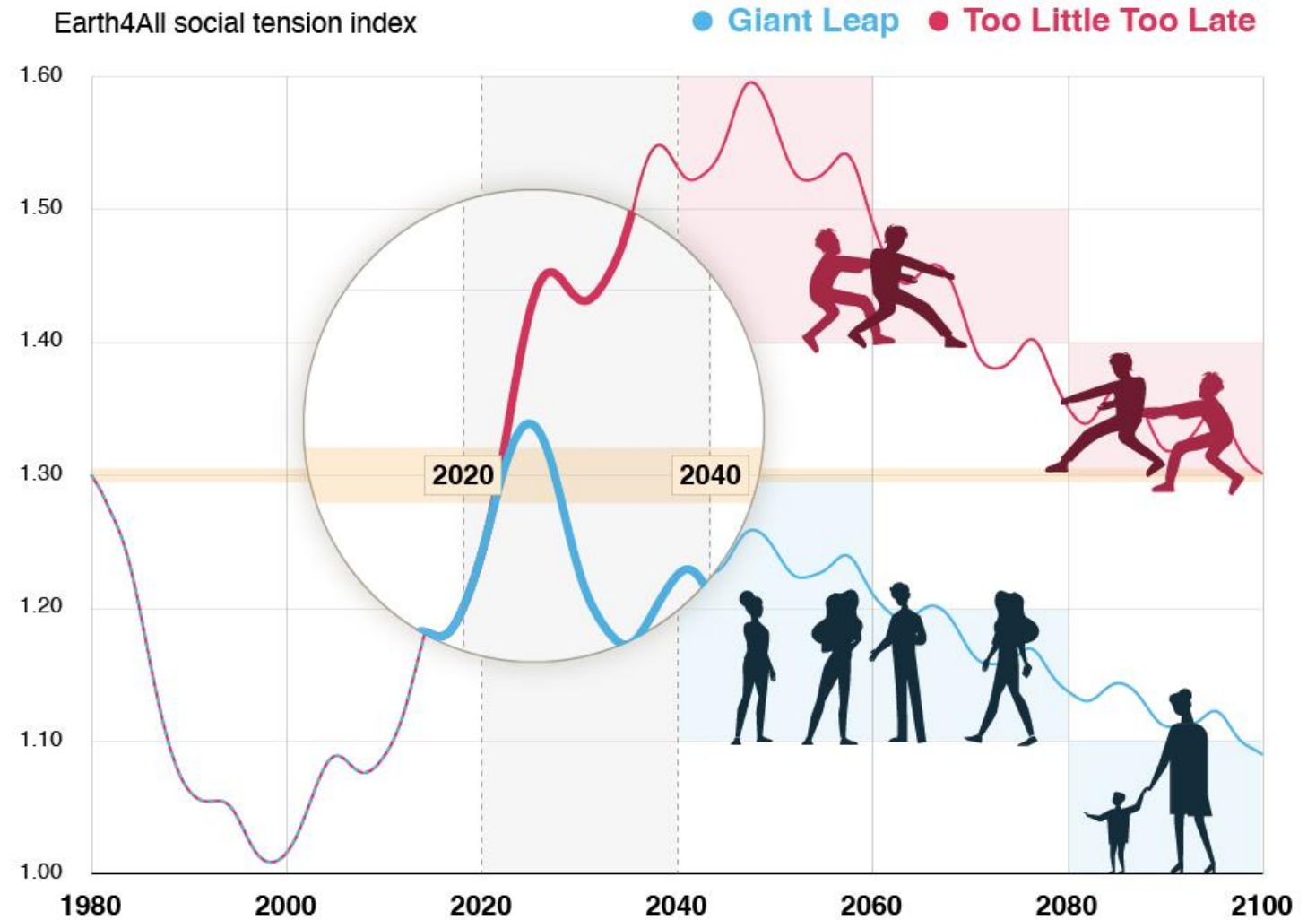
Achieving **wellbeing** for all with a **Giant Leap**

Earth4All wellbeing index





Reduced **social tension** by 2030 if we take a **Giant Leap**



Essential reading on our long journey toward an "Earth for All"
— THOMAS PIKETTY, author, *Capital in the Twenty-First Century*



Earth for All

A SURVIVAL GUIDE for Humanity

Sandrine Dixon-Declève | Owen Gaffney

Jayati Ghosh | Jorgen Randers

Johan Rockström | Per Espen Stoknes

Forewords by Christiana Figueres and Elizabeth Wathuti

A REPORT TO THE CLUB OF ROME

Deep Dive into SDGS for ALL modelling & policy recommendations

UNITED
for
A NEW GLOBAL DEAL

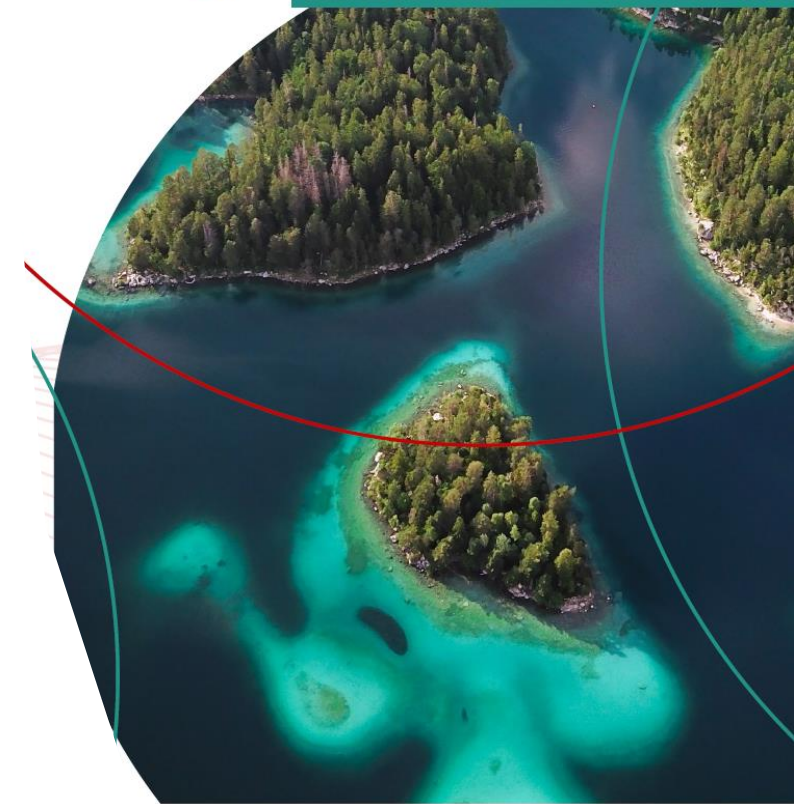
POLICY
September

SDGS FOR ALL: STRATEGIC SCENARIOS EARTH4ALL SYSTEM DYNAMICS MODELLING OF SDG PROGRESS

Working Paper version 1.0

Earth
4All

Johannah Bernstein, David Collste,
Sandrine Dixon-Declève, Nathalie Spittler



Thanks to the authors
for their contribution

Rennerinstitut

FRIEDRICH
EBERT
STIFTUNG

Fondation
Jean Jaurès

Earth
4All

FOUNDATION FOR
PROGRESS

We can achieve SDGs and create a world more resilient to future shocks and stresses if we do things differently. This means implementing a fair yet radical transformation to support wellbeing economies and a thriving biosphere. But action must start now, at a scale never seen before.

SDGs for All (2023)

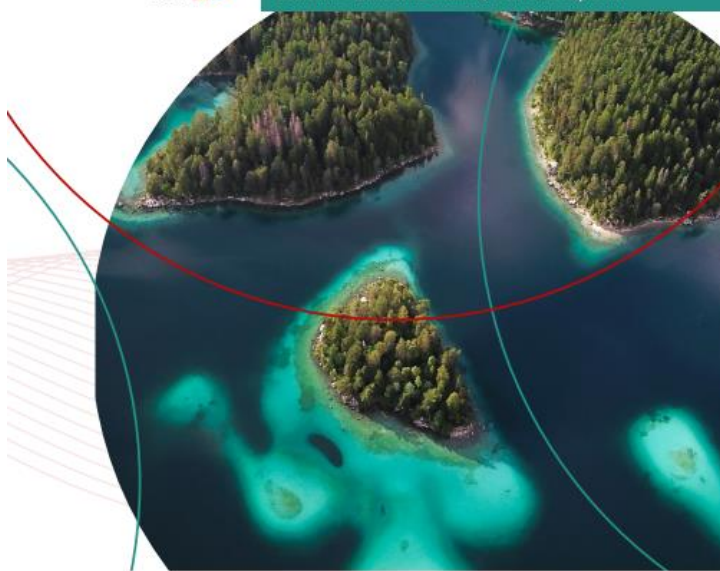
SDGS FOR ALL: STRATEGIC SCENARIOS

EARTH4ALL SYSTEM DYNAMICS MODELLING OF SDG PROGRESS

Working Paper version 1.0



Johannah Bernstein, David Collste,
Sandrine Dixson-Declève, Nathalie Spittler

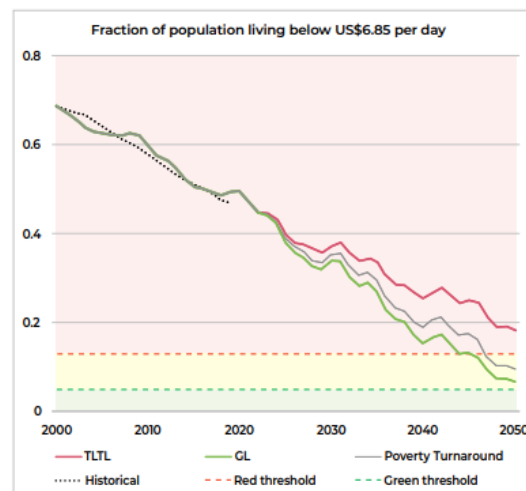


How to read the Earth4All model graphs:

Indicators: only one indicator is used per SDG, chosen out of those in our model that best reflects the SDG in question

Trend Lines: four scenarios are modelled; Historical Data (dotted), Too Little Too Late, Giant Leap, and the specific turnaround, e.g. Poverty

Thresholds: green thresholds (dashed) represent highest level of attainment in relation to the actual goal. The red thresholds (dashed) demonstrate only partial goal attainment



RED ALERT 1

The gender gap is 230 years behind schedule

The dire situation of gender inequality in both the scenarios is greatly concerning. Current numbers show that the share of

RED ALERT 2

Climate goals will not be reached under either scenario

The reality of overshooting climate goals in both the Too Little Too Late and Giant Leap scenarios gives serious cause for concern and calls into question the lack of emergency planning to address climate change including growing shocks and stresses. Even with massive emissions reductions, global warming is on track to reach 1.5°C in the early 2030s. It is time to heed the call of Secretary-General António Guterres for all countries to declare a state of climate emergency until the world has reached net-zero CO2 emissions.

Equally important, we need governments to step up their ambition levels at UNFCCC COP28 and agree to:

- ▶ fast track our global transition to clean energy and decarbonisation by accelerating fossil energy phase out and fossil energy subsidy repurposing
- ▶ support vulnerable communities to adapt
- ▶ transform climate finance to support vulnerable communities to rebuild after climate-related disasters.¹⁵

me increases before levelling improvement at scenario. o, there is only 42% by 2050, se by 2100. At approximately ll gender gap, years behind need to be a ents to start nder equality ne Giant Leap, y turnaround d prosperous

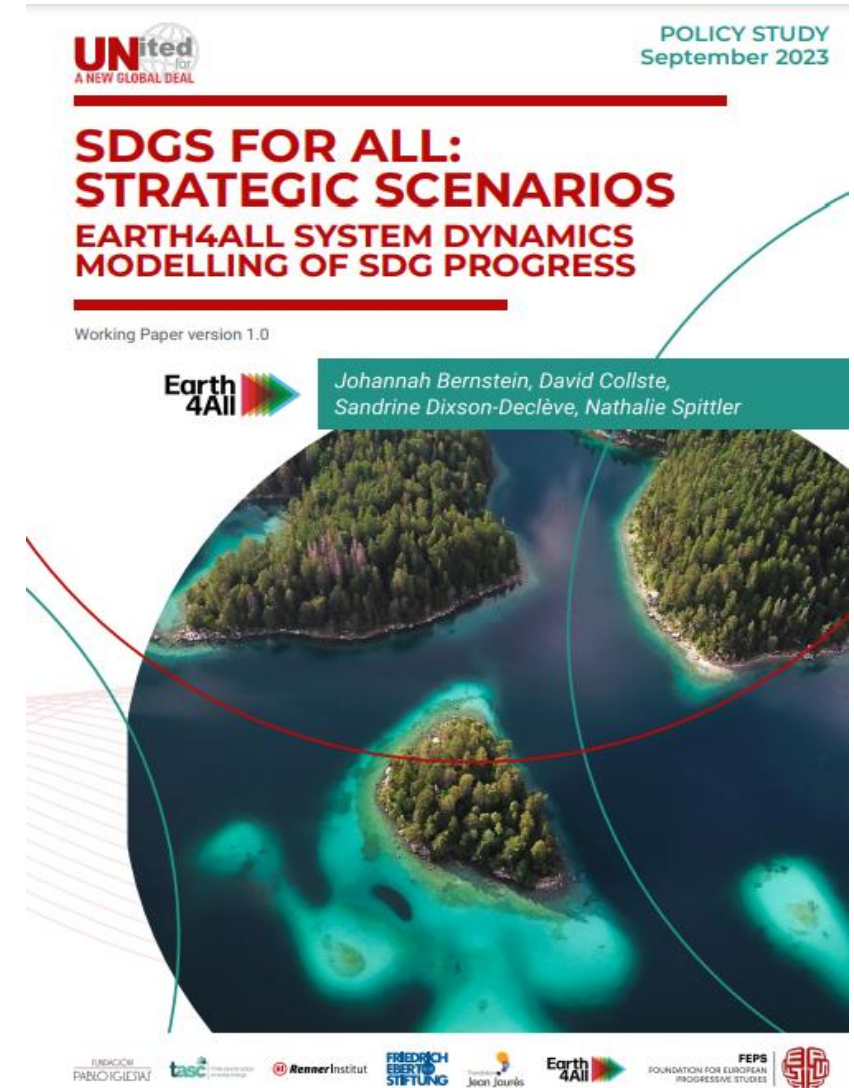


The Five Turnarounds, their SDG Clusters & Policy Interventions

	Poverty Turnaround	Inequality Turnaround	Empowerment Turnaround	Food Turnaround	Energy Turnaround
SDGs	SDG 1 Poverty SDG 2 Zero Hunger SDG 6 Clean Water Sanitation	SDG 3 Health and Wellbeing SDG 4 Quality Education SDG 5 Gender Equality SDG 8 Decent Work and Economic Growth	SDG 10 Reduced Inequalities SDG 16 Peace, Justice and Strong Institutions SDG 17 Partnership for the Goals	SDG 12 Sustainable Consumption and Production SDG 14 Life Below Water SDG 15 Life on Land	SDG 7 Clean Energy SDG 9 Industry, Innovation and Infrastructure SDG 11 Sustainable Cities and Communities SDG 13 Climate Action
POLICY LEVERS	<ul style="list-style-type: none">• Expand the fiscal space• Global financial architecture• Address trade deficits• Clean technology and leapfrogging• New economic indicators	<ul style="list-style-type: none">• Stronger progressive taxation• Strengthened labour rights and trade unions' negotiating power• Safety nets and innovation nets	<ul style="list-style-type: none">• Gender equality• Investment in education• Gender equality in leadership positions• Universal social protection	<ul style="list-style-type: none">• Repurpose agricultural subsidies.• Shift food production• Localised consumption, food sovereignty, and farmworker rights• Supply chain efficiency	<ul style="list-style-type: none">• Triple Investment in renewables and efficiency• Concessional climate financing• Redirect fossil fuel subsidies• Global price on carbon• Access to safe, affordable energy

The Giant Leap delivers concrete wins for many of the SDGs

- ✓ We turn poverty around.
- ✓ Wellbeing for all is achieved.
- ✓ Income inequality is massively reduced.
- ✓ CO2 intensity is lowered to negative levels.
- ✓ Emissions per person are also declining rapidly in the Giant Leap scenario.
- ✓ Public spending per person increases dramatically.



The Earth4All turnarounds and key policy interventions

- ✓ Need all 5 Turnarounds to realize the giant leap
- ✓ Significant new investments are essential
- ✓ Need fundamental reform of the IMF process for allocating Special Drawing Rights (SDRs)
- ✓ Governments must reverse steady erosion of workers' rights and implement new safety nets
- ✓ Need more public and private capital flows to women and girls
- ✓ Global food systems must be radically transformed
- ✓ Global energy systems must shift from inefficient fossil energy systems

POVERTY

Goal: GDP growth rate of at least 5% for lower-income countries until GDP per person is greater than \$15,000/year.

POLICY INTERVENTIONS



SDGs ADDRESSED

Fraction of population living below \$6.85 per day



Prevalence of undernourishment

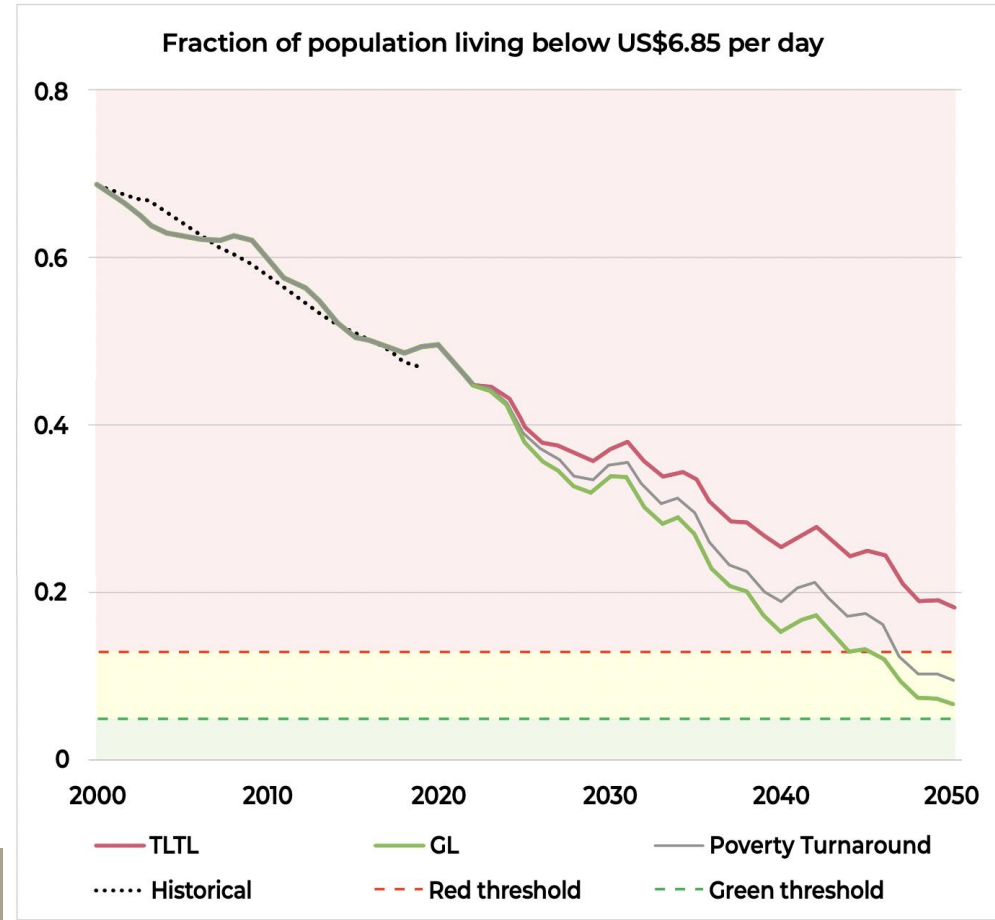


*Safe water access
Safe sanitation access*

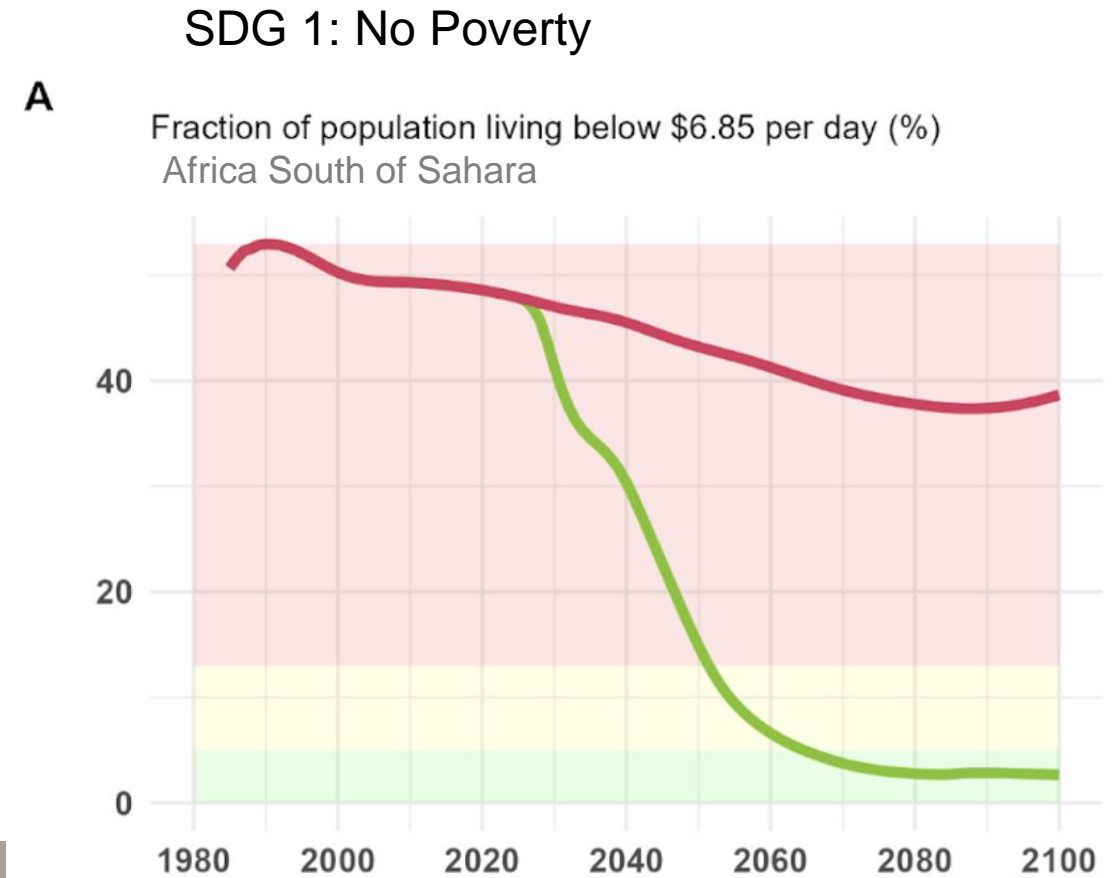




Poverty turnaround: 1 billion less people in poverty by 2050



GLOBAL RESULTS



REGIONAL RESULTS

INEQUALITY & EMPOWERMENT

INEQUALITY TURNAROUND

Goal: By 2030, the wealthiest 10% take less than 40% of national income

POLICY INTERVENTIONS

1

Stronger progressive taxation on both income and wealth for individuals and corporations

2

Strengthened labour rights and trade union negotiating power

3

Safety nets and innovation nets to share prosperity and provide security, such as the universal basic dividend

EMPOWERMENT TURNAROUND

Goal: Full gender equity in terms of agency, rights, resources and power in both law and employment

POLICY INTERVENTIONS

1

Recognise that gender equality is essential for economic prosperity and social cohesion

2

Massively scale up investment to meet 2030 education targets and guarantee the right to education for women and girls

3

Ensure gender equality in leadership positions in public and private bodies

4

Guarantee universal social protection and adequate universal pension systems

INEQUALITY & EMPOWERMENT

SDGs ADDRESSED

Average wellbeing index



School life expectancy (years)



Female pre-tax labour income share



Worker disposable income



Ratio of owner incomes to worker incomes



Public services per person total



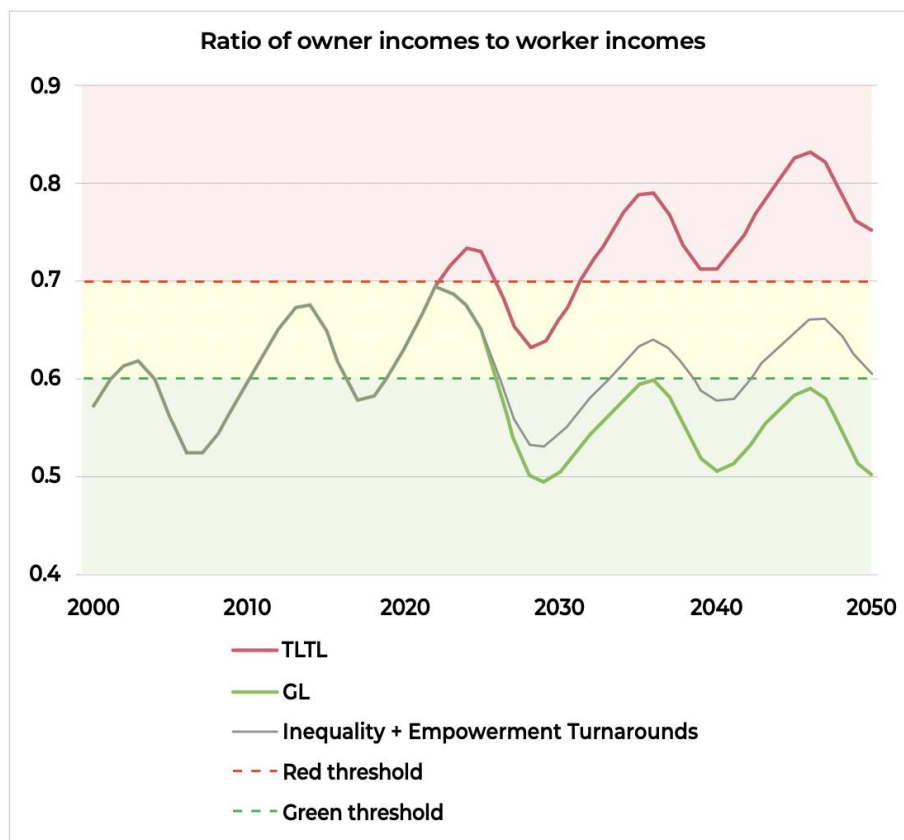
Social tension





Income inequality massively reduced: parity between owner and worker income

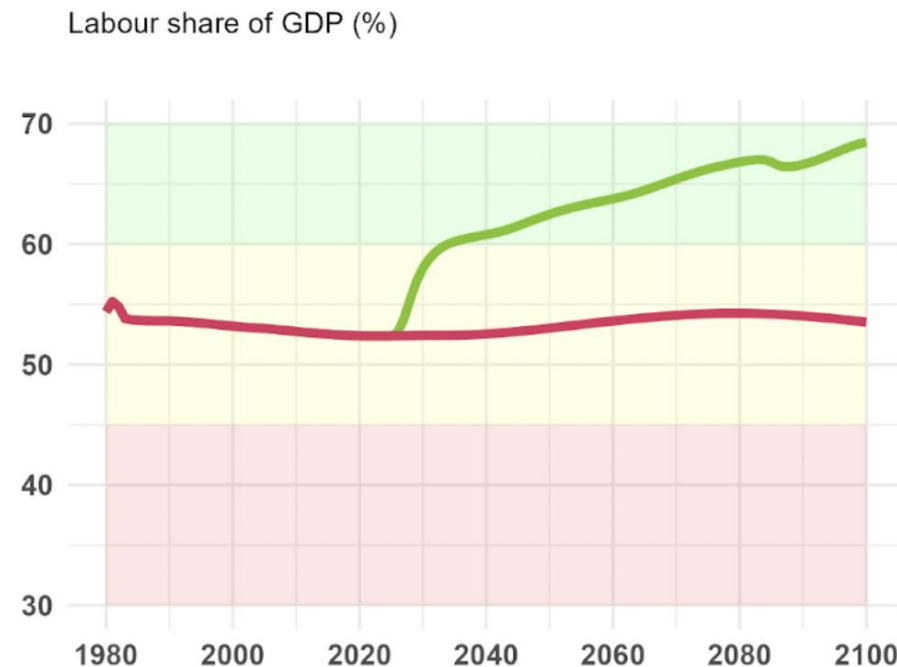
Earth4All indicator for Reduced Inequalities (SDG 10)



GLOBAL RESULTS

SDG-10.3: Reduced inequalities - Africa South of Sahara Africa South of Sahara

A

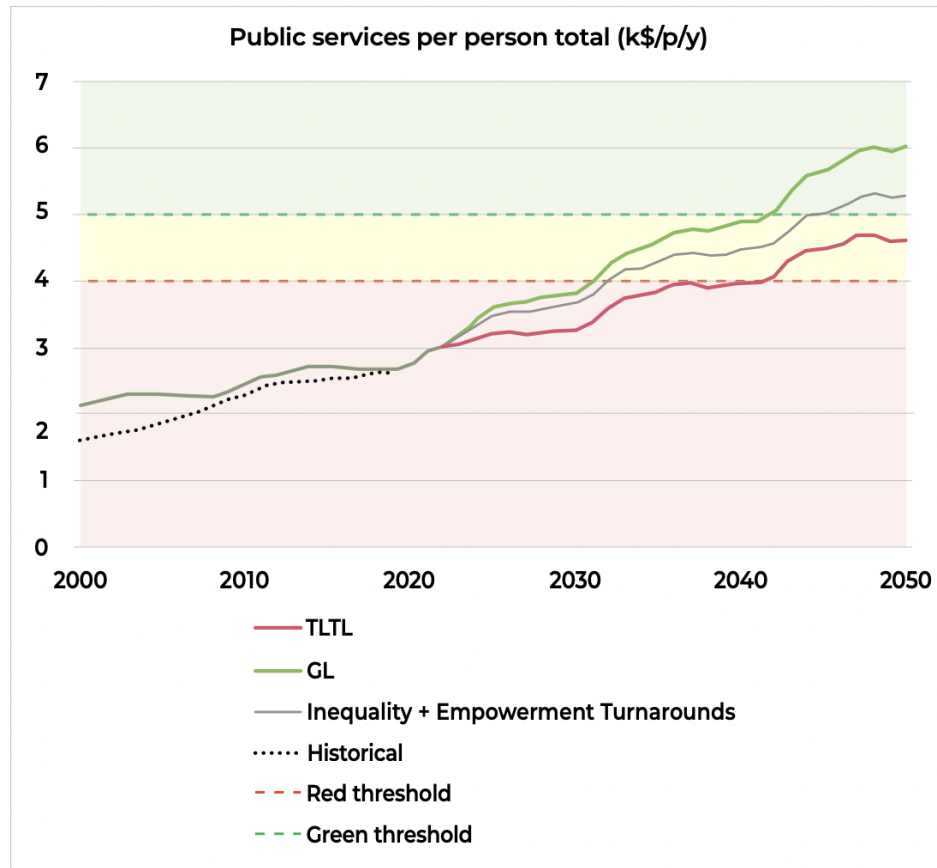


REGIONAL RESULTS

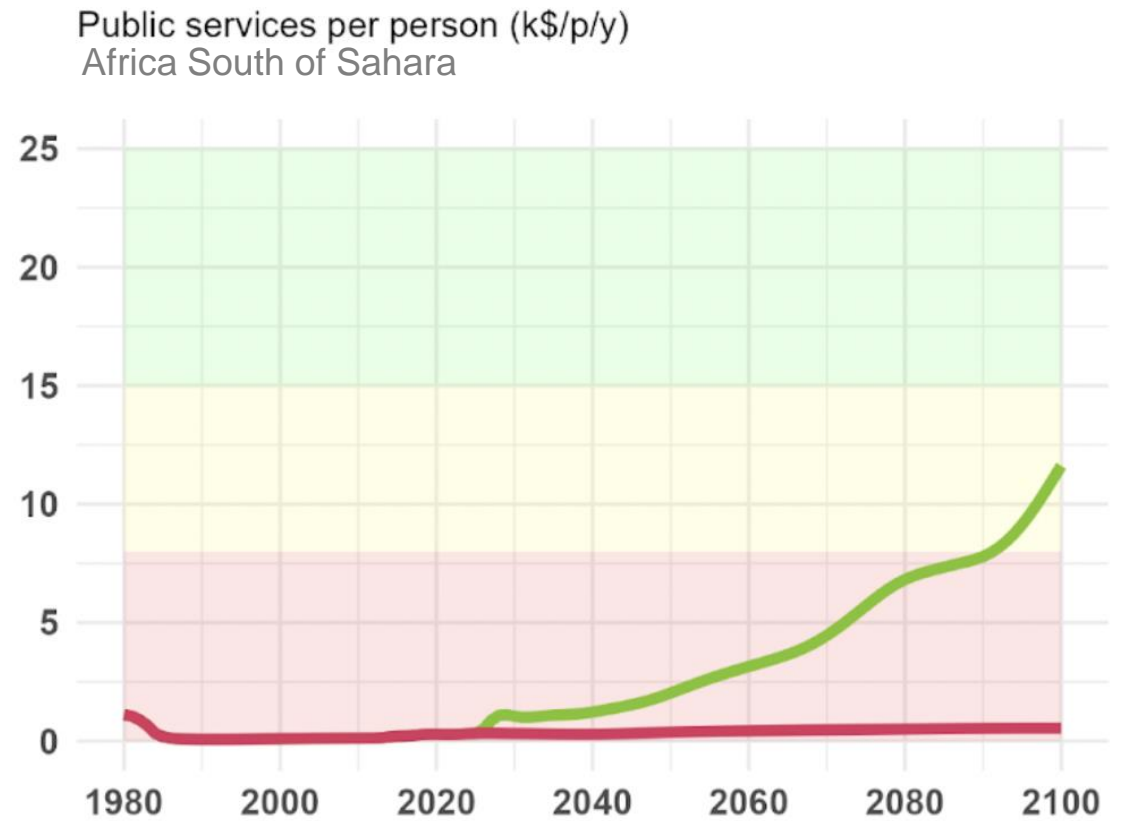


Public spending per person increases dramatically

Earth4All indicator for Peace, Justice and Strong Institutions (SDG 16)



GLOBAL RESULTS

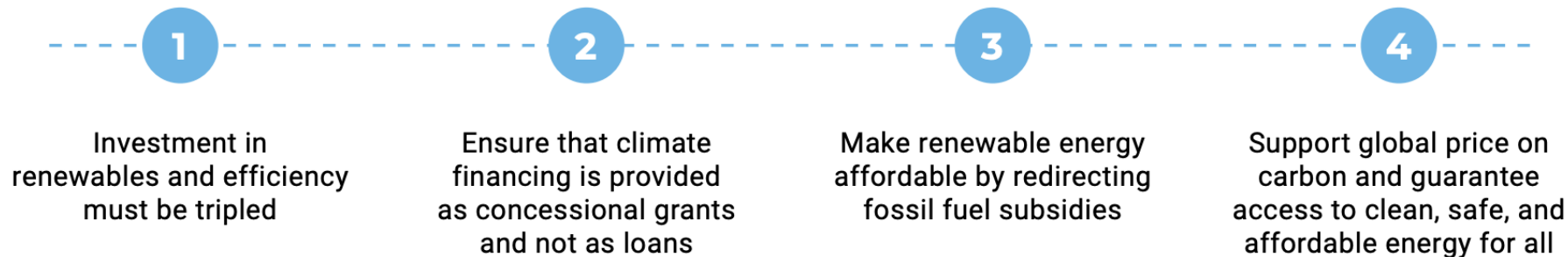


REGIONAL RESULTS

ENERGY

Goal: Improved energy access for lower income country citizens. Zero emissions by 2040 through low carbon energy sources and efficiencies

POLICY INTERVENTIONS



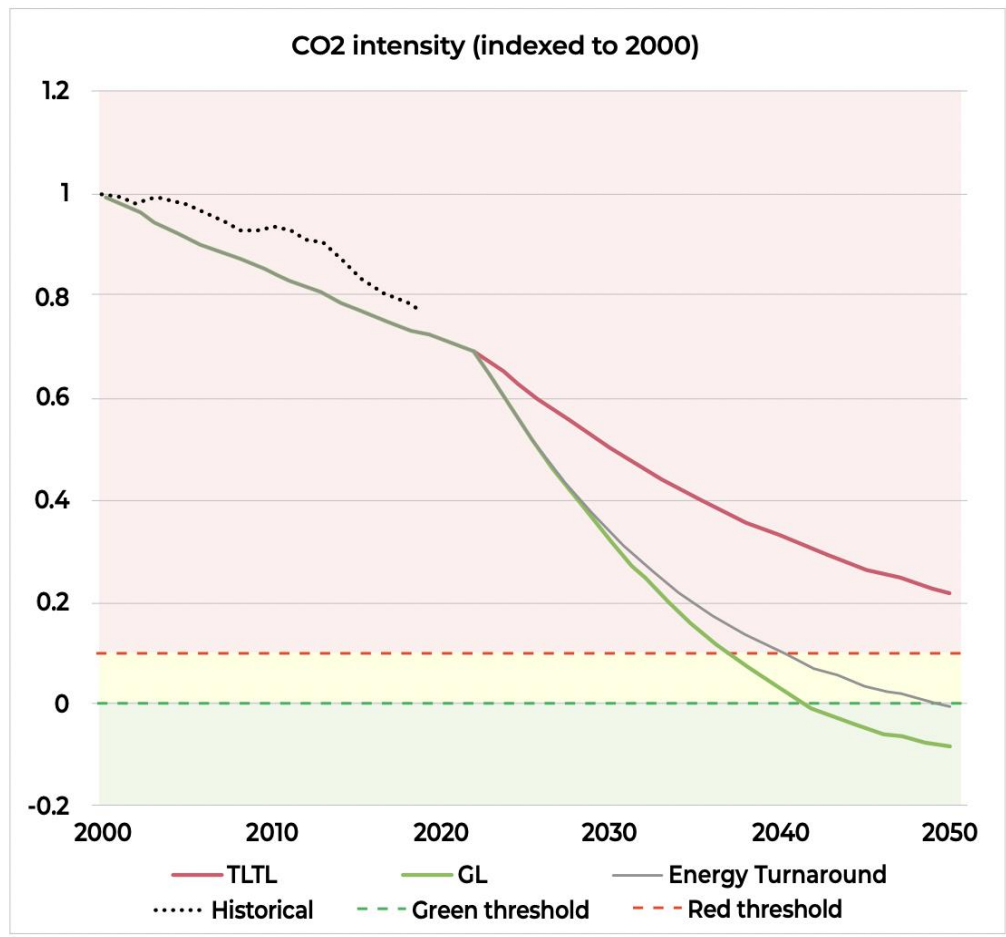
SDGs ADDRESSED



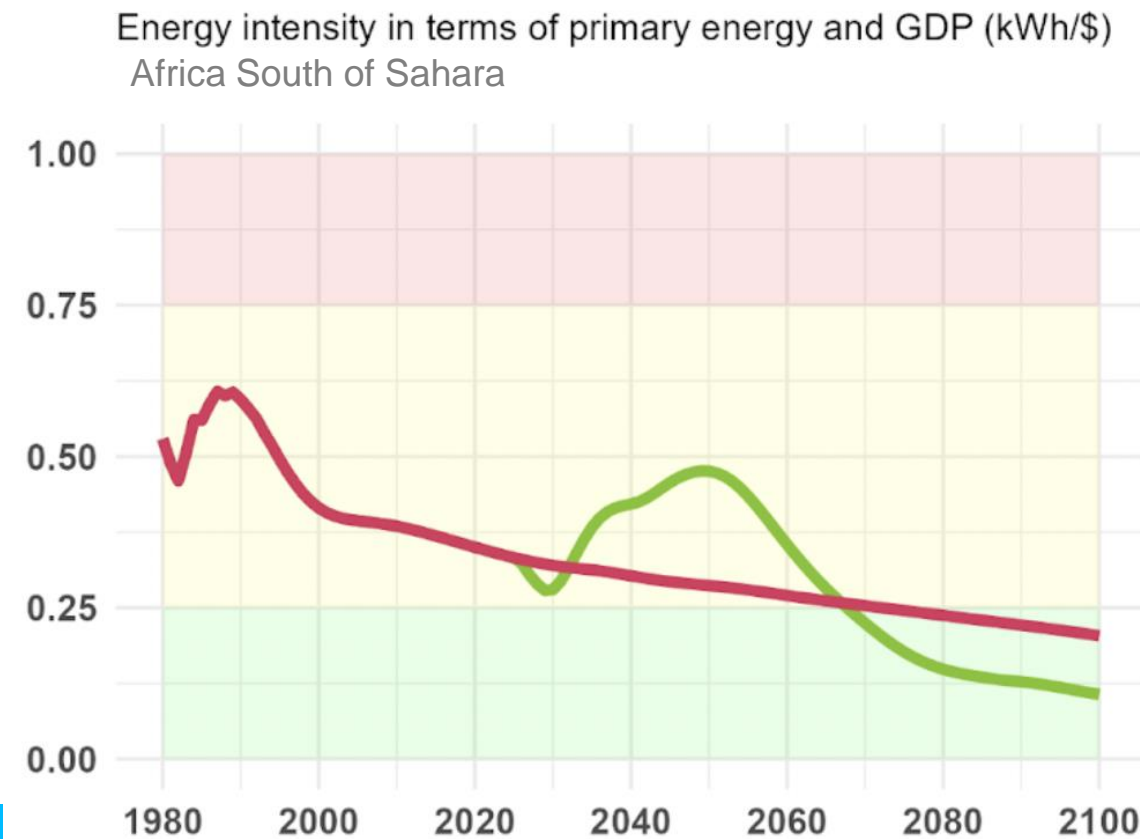


CO2 intensity lowered to negative levels

Earth4All indicator for Industry, Innovation and Infrastructure (SDG 9)



GLOBAL RESULTS



REGIONAL RESULTS

Earth4All
is possible
and
essential



Thank you!



ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024



Coffee break





10:50 – 11:00

ENRICO GIOVANNINI

Economist and former Italian Minister for infrastructure and sustainable mobility

ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





Moderator

**Maithreyi
Seetharaman**



**Vasco
Cordeiro**

Committee
of the Regions



**Petros
Kokkalis**

Member of European
Parliament



**Mariana
Kotzeva**

Director-General
of Eurostat



**Maria Rodriguez
Alcazar**

European Youth Forum
President

Networking lunch





13:30 – 14:40

JOHAN SWINNEN

Director General of International Food Policy Research Institute and Systems
Transformation Managing Director of CGIAR



INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE



Realising SDGs globally amid setbacks

Hunger and Food Security

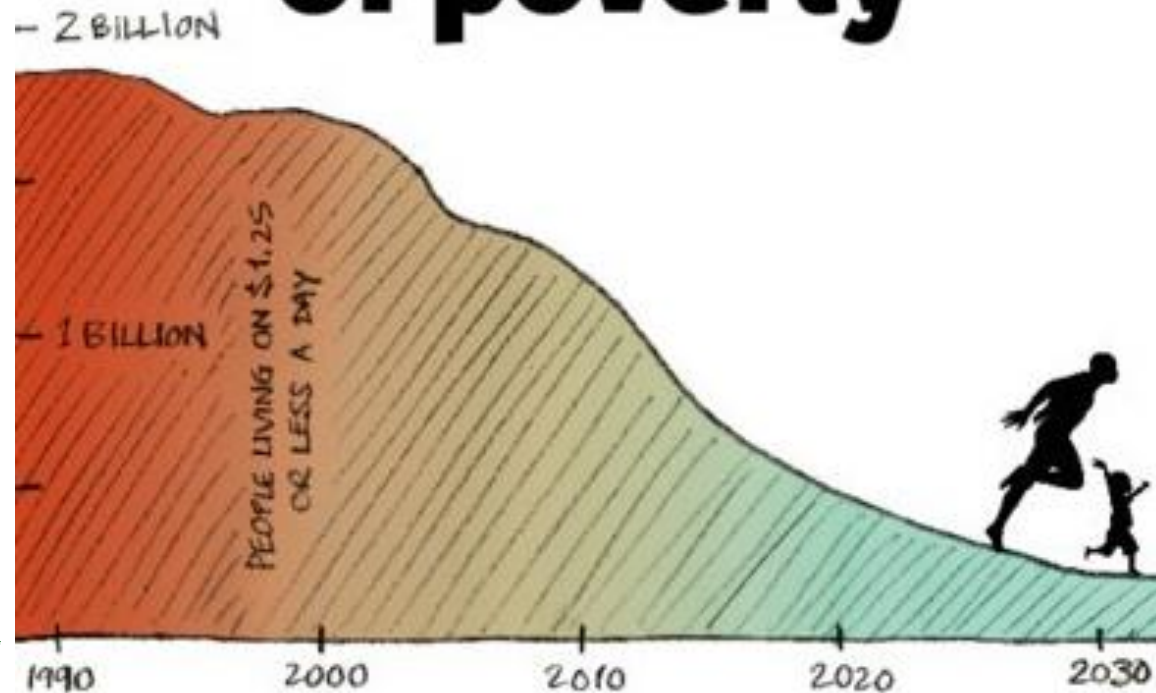
Johan Swinnen

Brussels, 18 June 2024

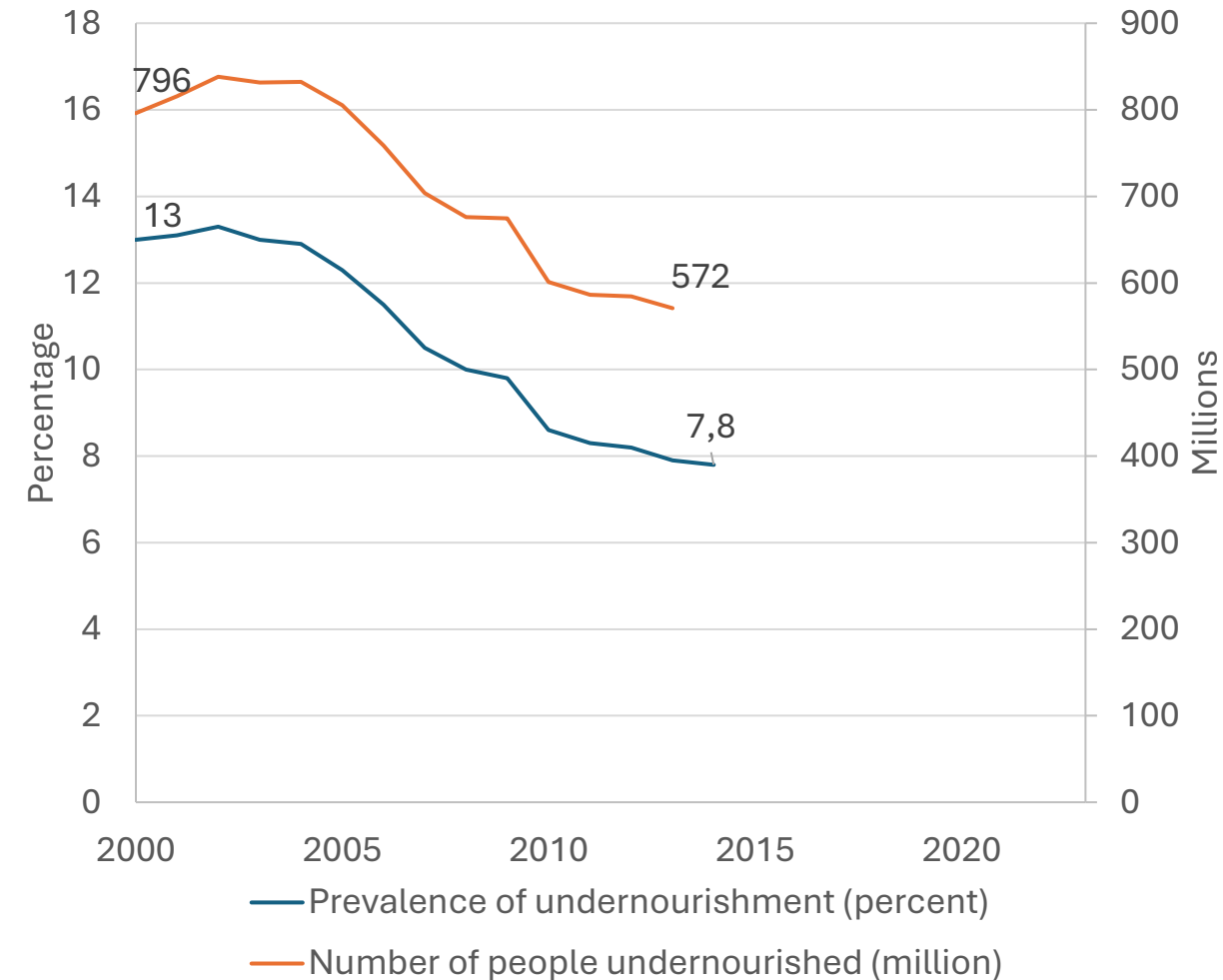
From June 2013 ...



Towards the end of poverty



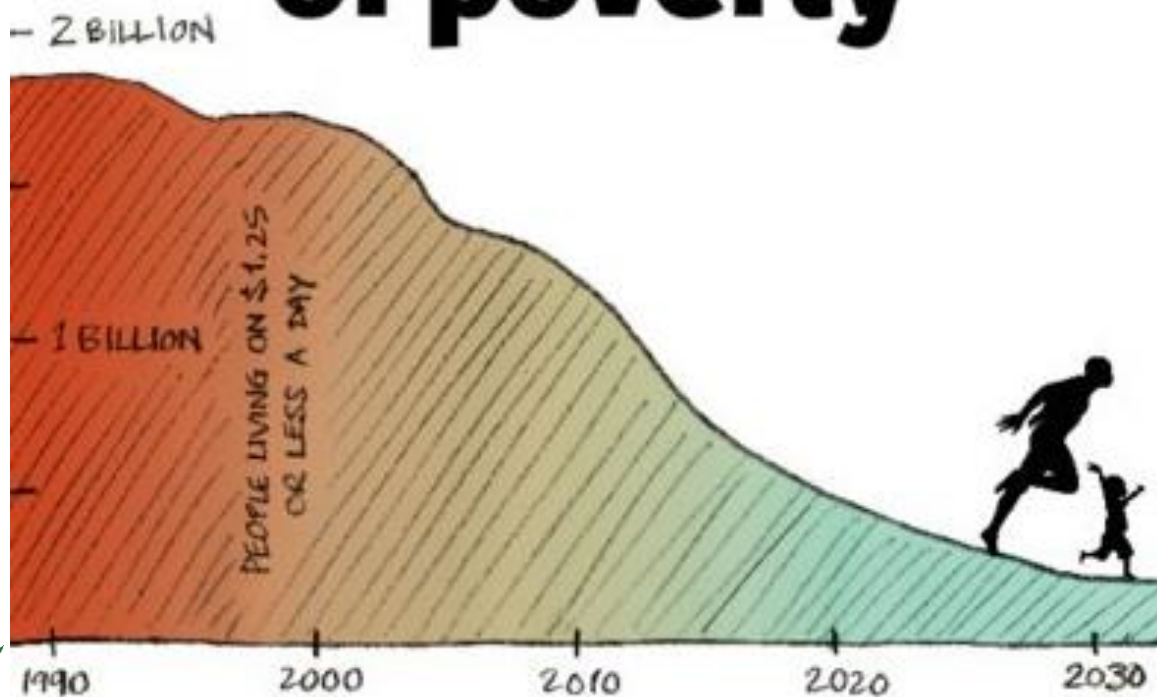
Towards the end of hunger ...



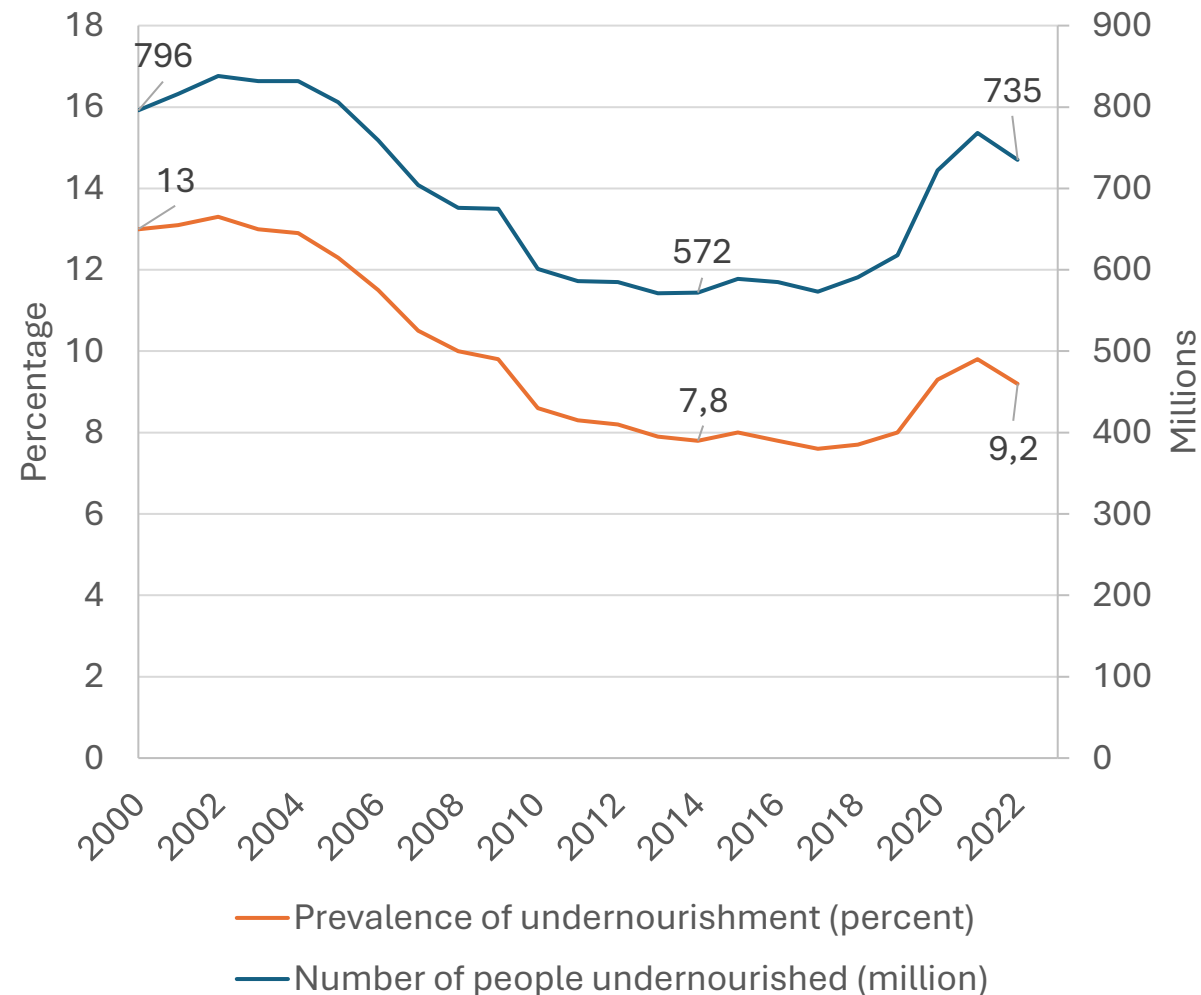
From June 2013 ...



Towards the end of poverty

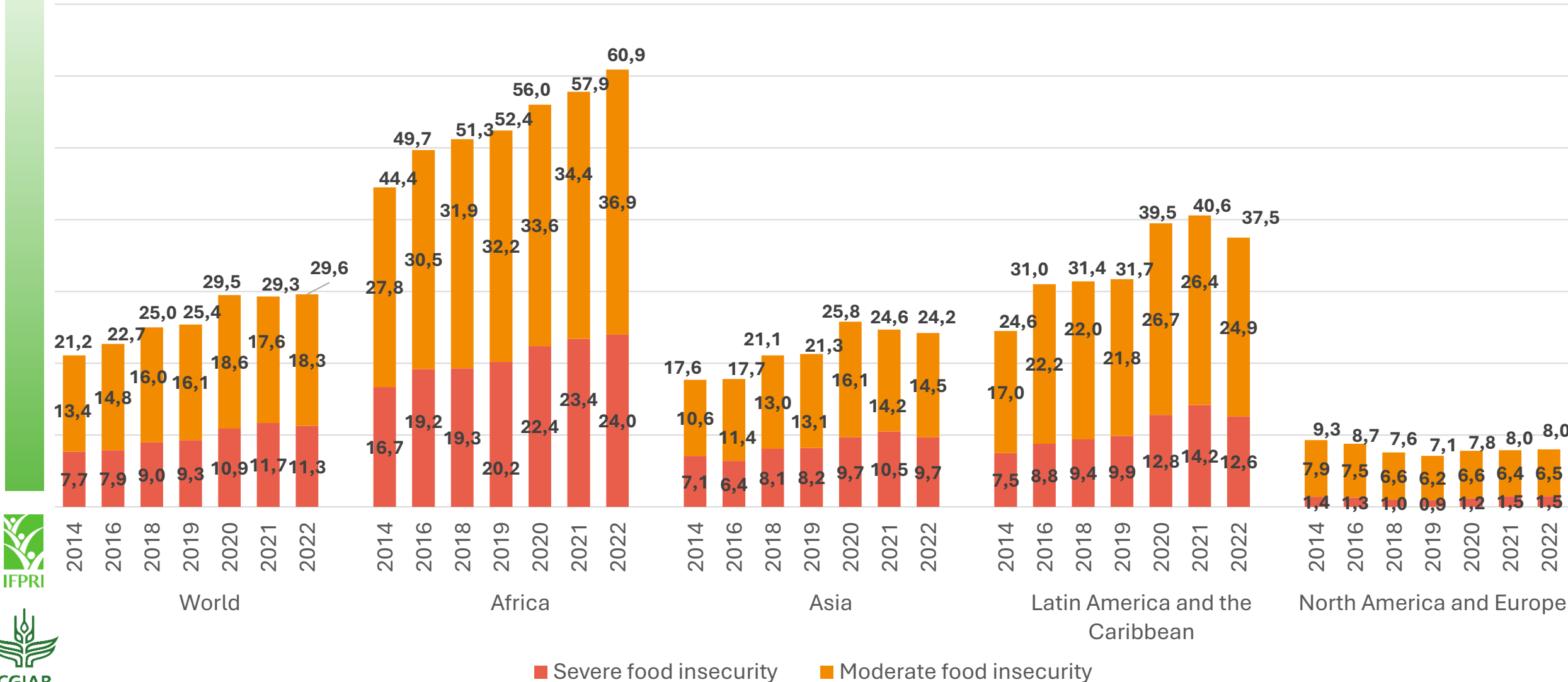


Towards the end of hunger ... ?



Regional differences in food security

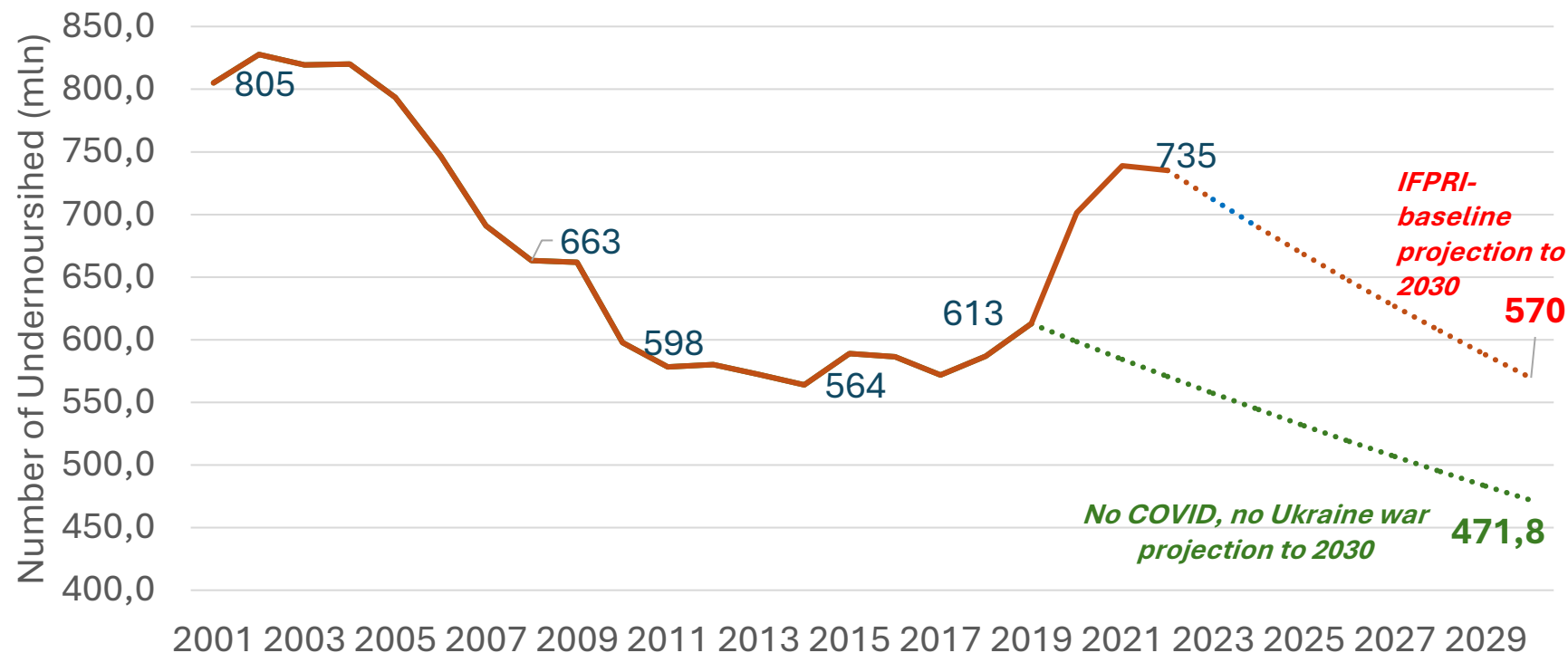
Prevalence of severe and moderate food insecurity by region (%)



■ Severe food insecurity ■ Moderate food insecurity

Global chronic hunger has increased in all regions of the world between 2014 and 2022, now affecting almost 750 million people

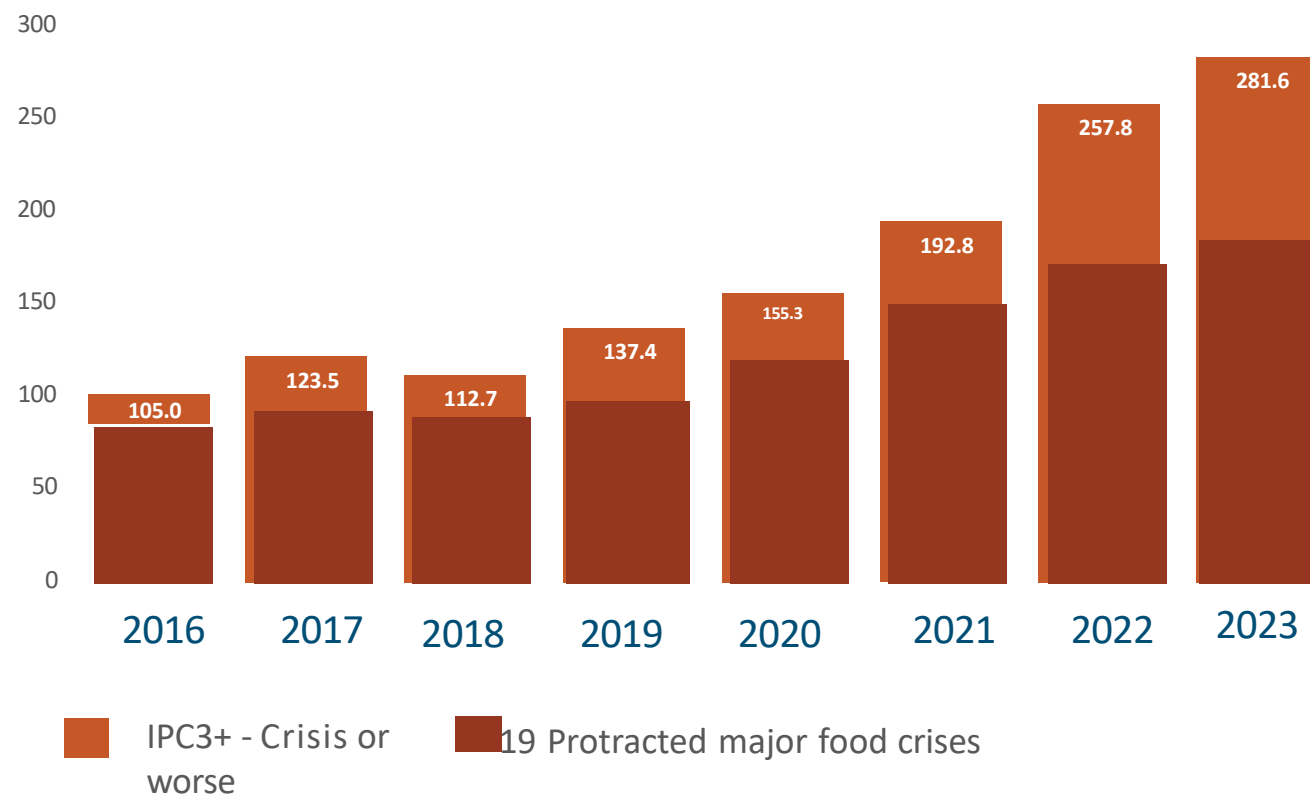
- Under no plausible scenario will SDG target 2.1 to end hunger by 2030 be met



Source: FAO et al. 2023. The State of Food Insecurity and Nutrition in the World, Fig. 5; and Glauber, J. & Laborde, D. 2023. Repurposing food and agricultural policies to deliver affordable healthy diets, sustainably and inclusively: what is at stake? Background paper for The State of Food Security and Nutrition in the World 2022. FAO Agricultural Development Economics Working Paper 22-05. Rome, FAO. <https://doi.org/10.4060/cc4348en>

Acute food insecurity almost tripled since 2016

- The EU-supported **Global Report on Food Crises** shows an increase of people in **acute food crisis** from 105M to 282M between 2016 and 2023
- Almost two thirds are facing **protracted** food crises in fragile settings





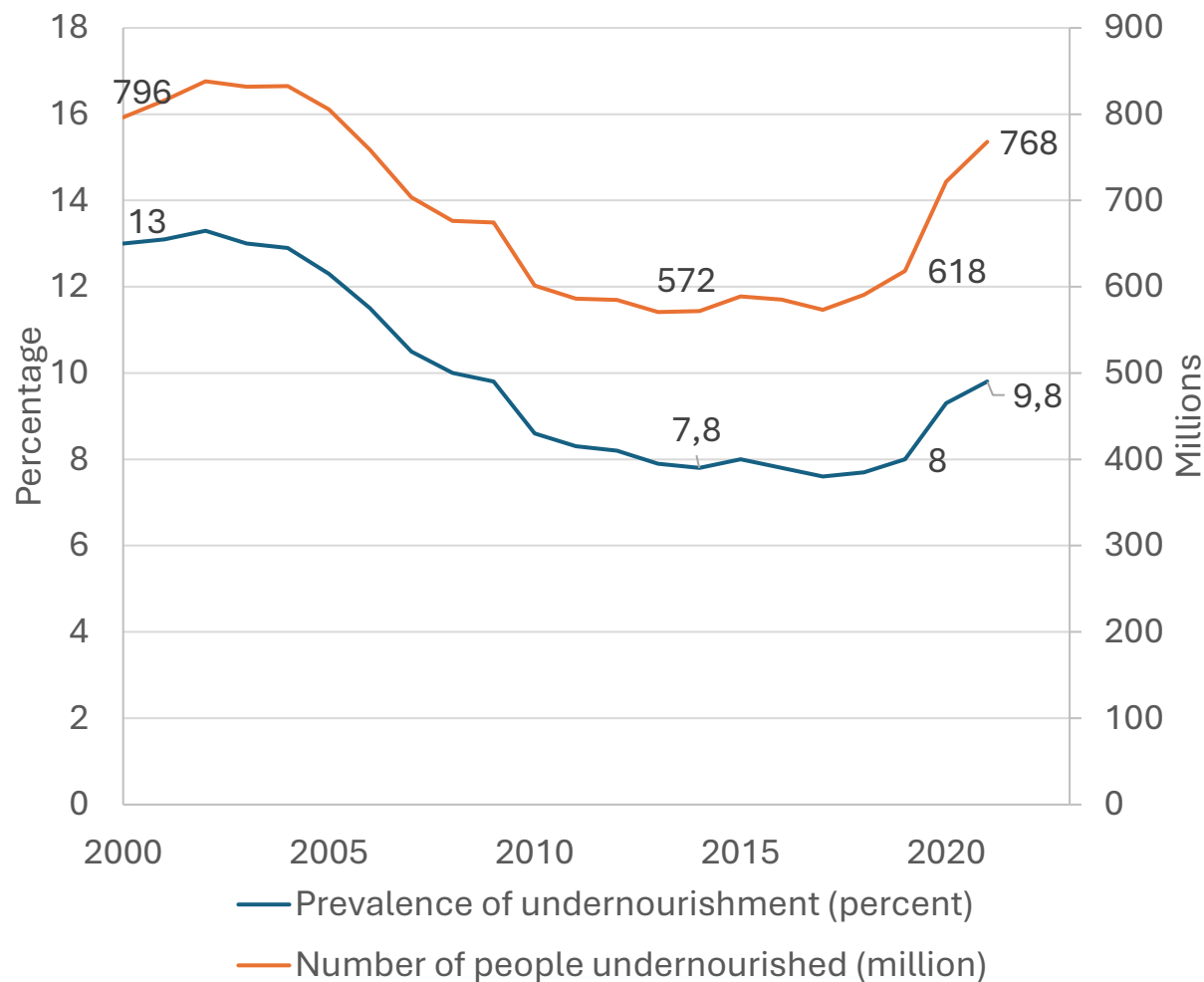
INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE



Driver: #1 Economic recession and shocks

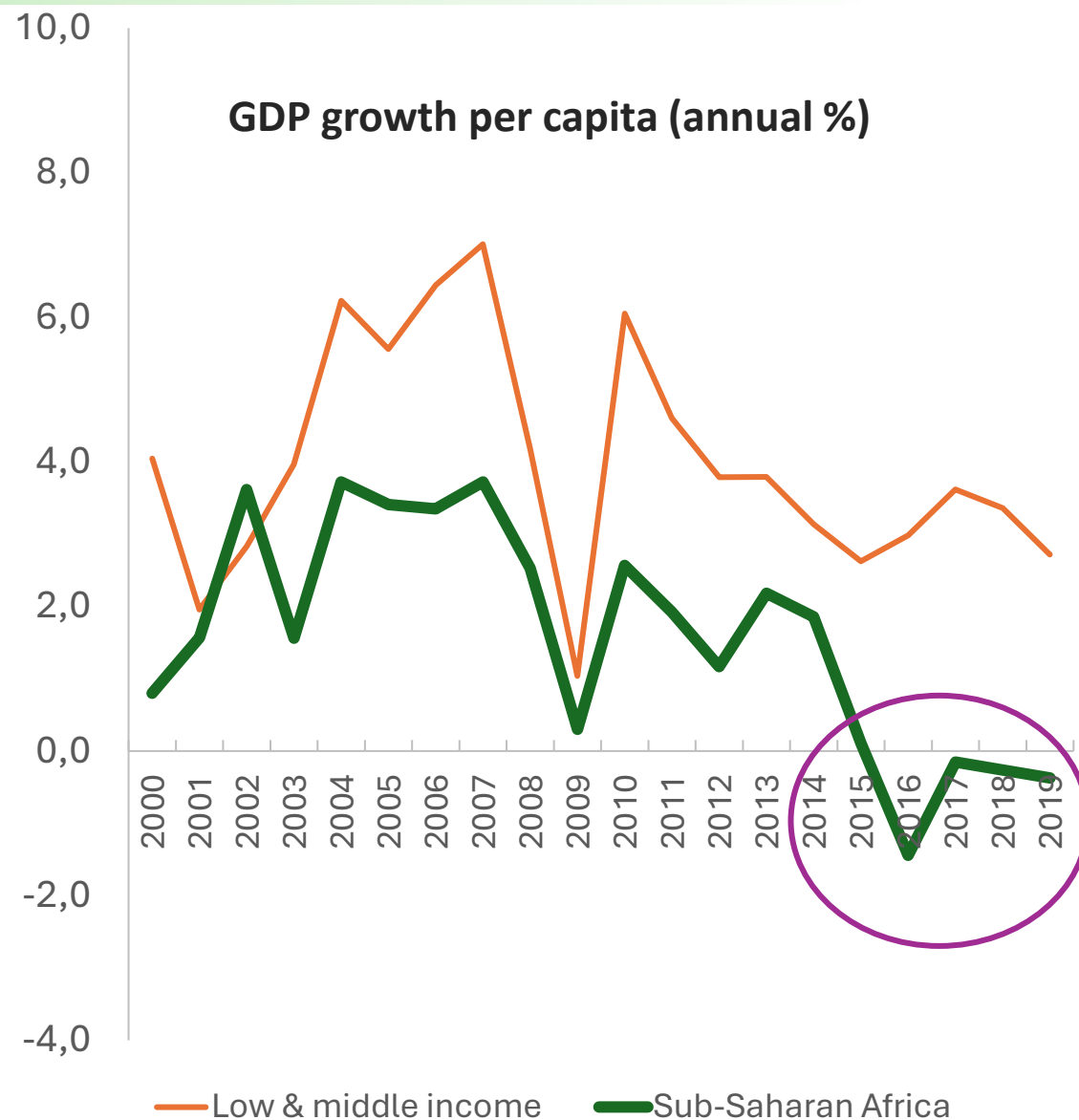
Economic recession and food security

Prevalence and number of undernourished worldwide



Source: FAO 2020

GDP growth per capita (annual %)

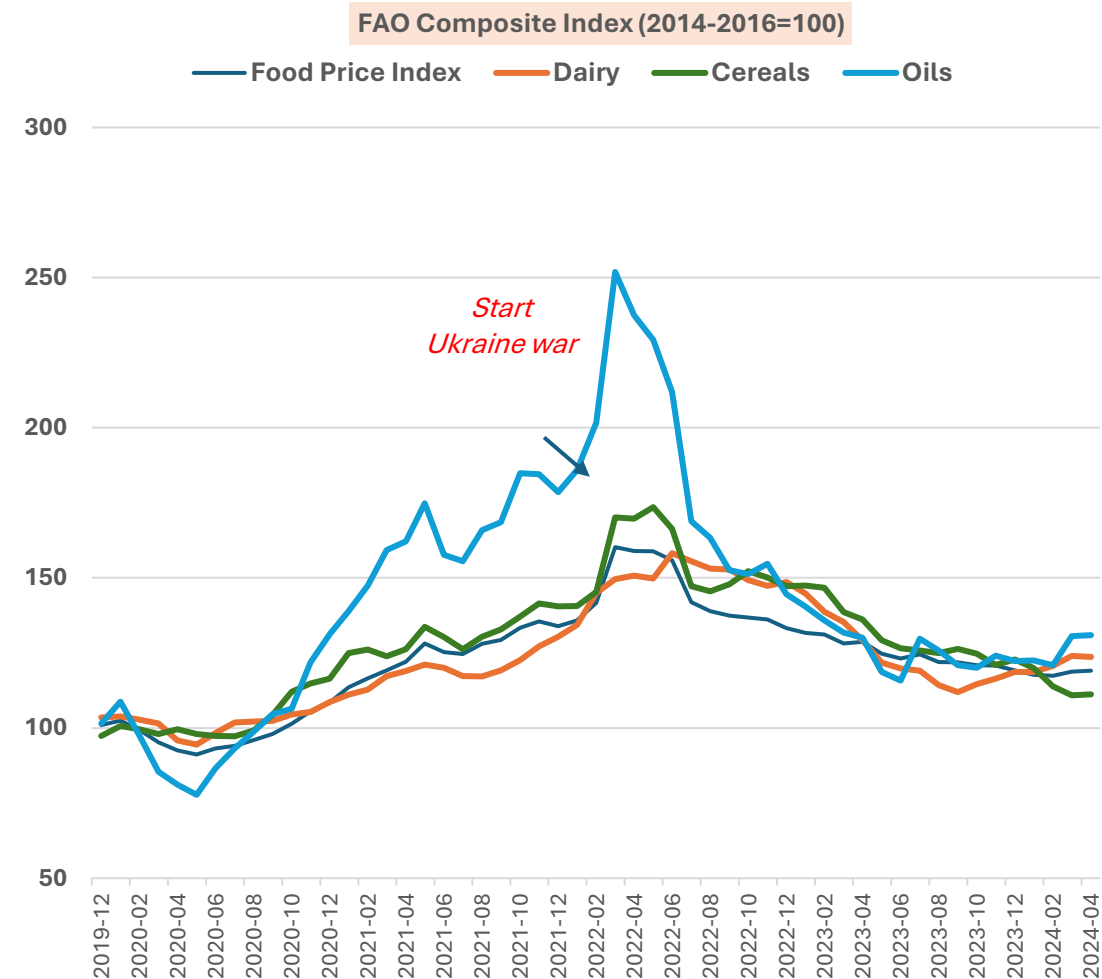


Source: World Bank 2020

Covid-19, Ukraine war and global food security

International prices back to pre-Ukraine war levels, yet above historical average

- Ukraine war exacerbated the global food and fertilizer price shocks from post-COVID supply chain disruptions.....
- ... but international staple food prices have declined since mid-2022, falling below pre-Ukraine war levels by early 2023
- Global markets have adjusted, so war in Ukraine no longer the major, **direct** driver of global food insecurity

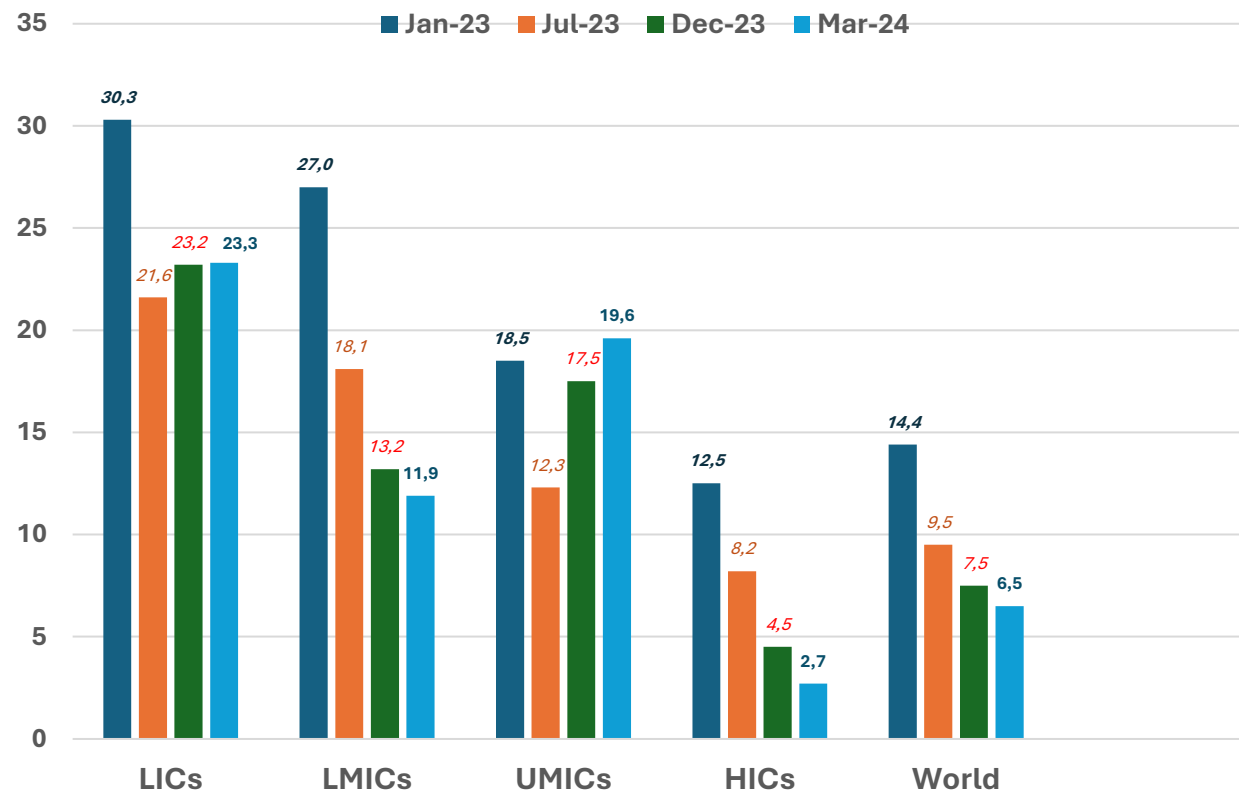


Persistent high domestic food inflation continues to affect food access in low-income countries

- Despite lower international prices, domestic food inflation is still high
- Coping with the impacts of COVID and the Ukraine war has caused fiscal and foreign-exchange constraints in many low-income countries...
- causing debt distress, weakening currencies, and persistent high domestic food and general inflation
- Hence, global shocks may be short lived, but “after shocks” may linger in contexts of poorer nations

Domestic (consumer) food price inflation, remains high, especially in LICs

Consumer Food Price Inflation, Jan 2023 - March 2024 (in %; y-o-y)



Source: IFPRI, Food Security Portal; weighted averages for 152 countries



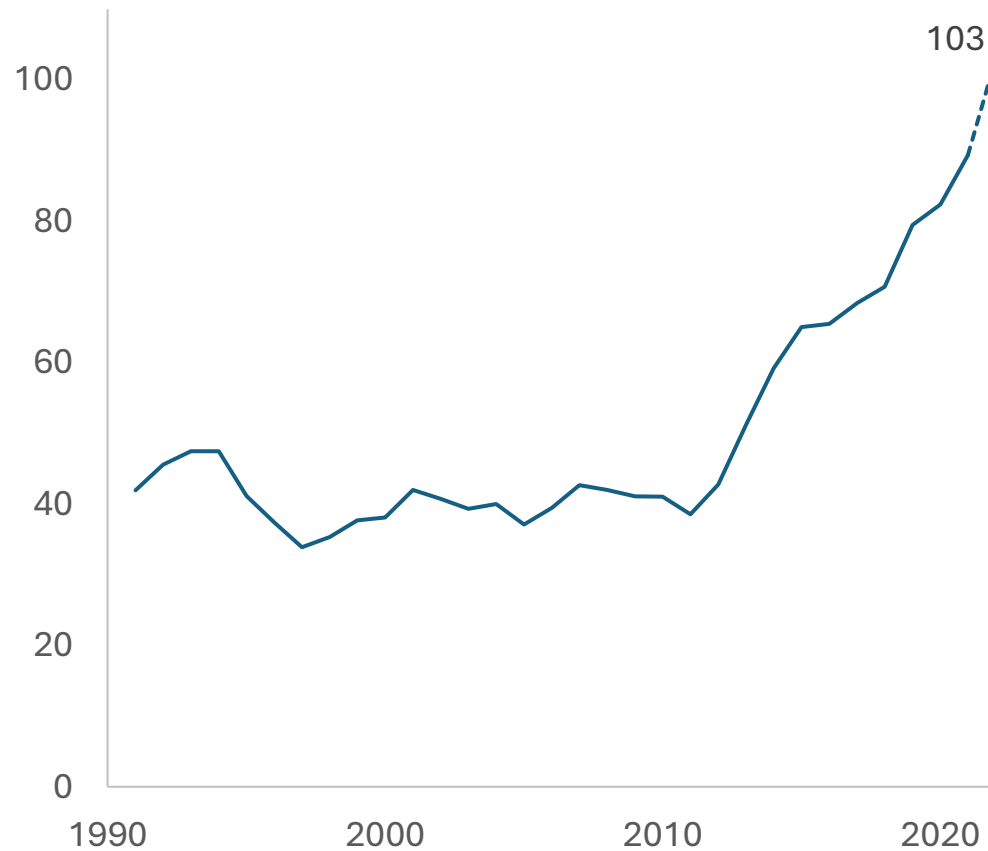
INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE



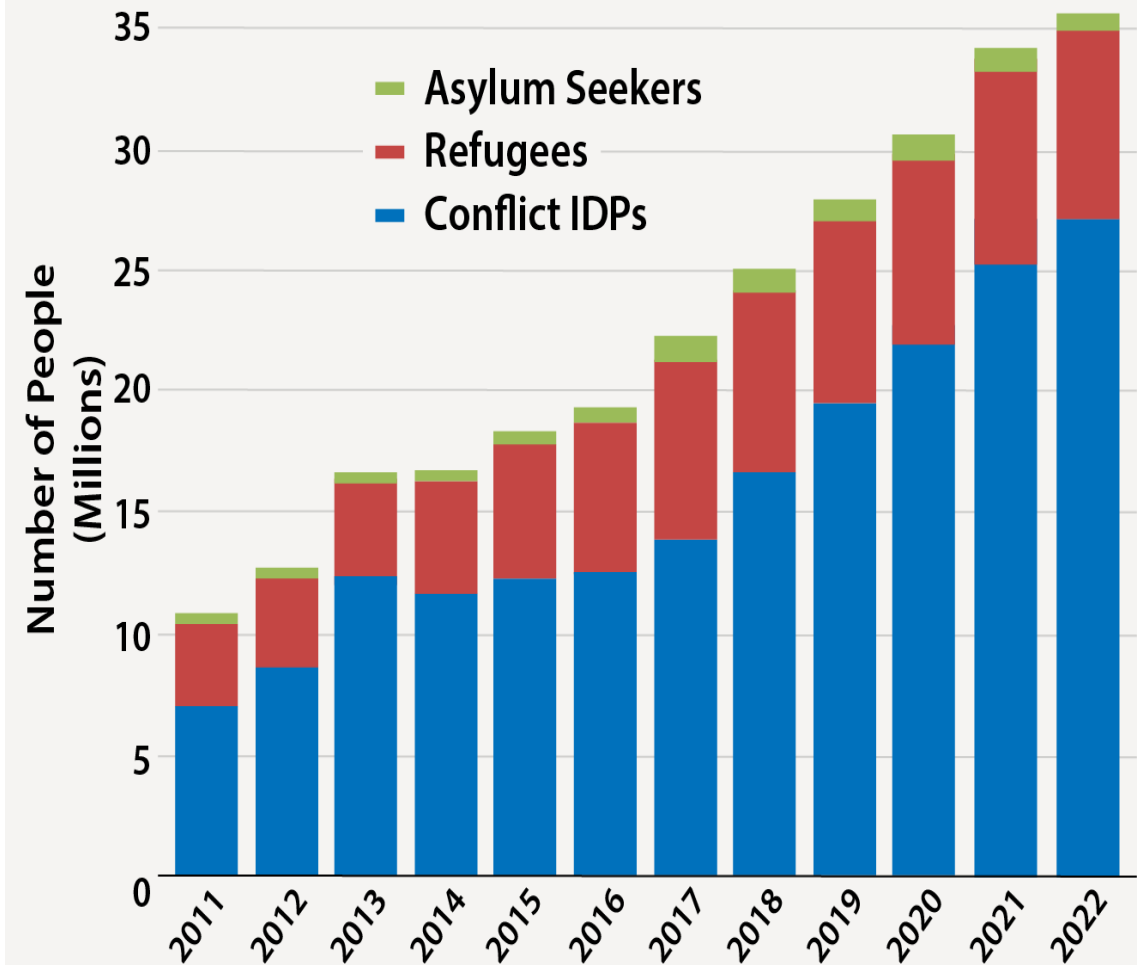
Driver: #2 Conflict

Conflict, Migration and Food Security

Forcibly displaced people worldwide (Millions)



Forced Displacement Trends in Africa

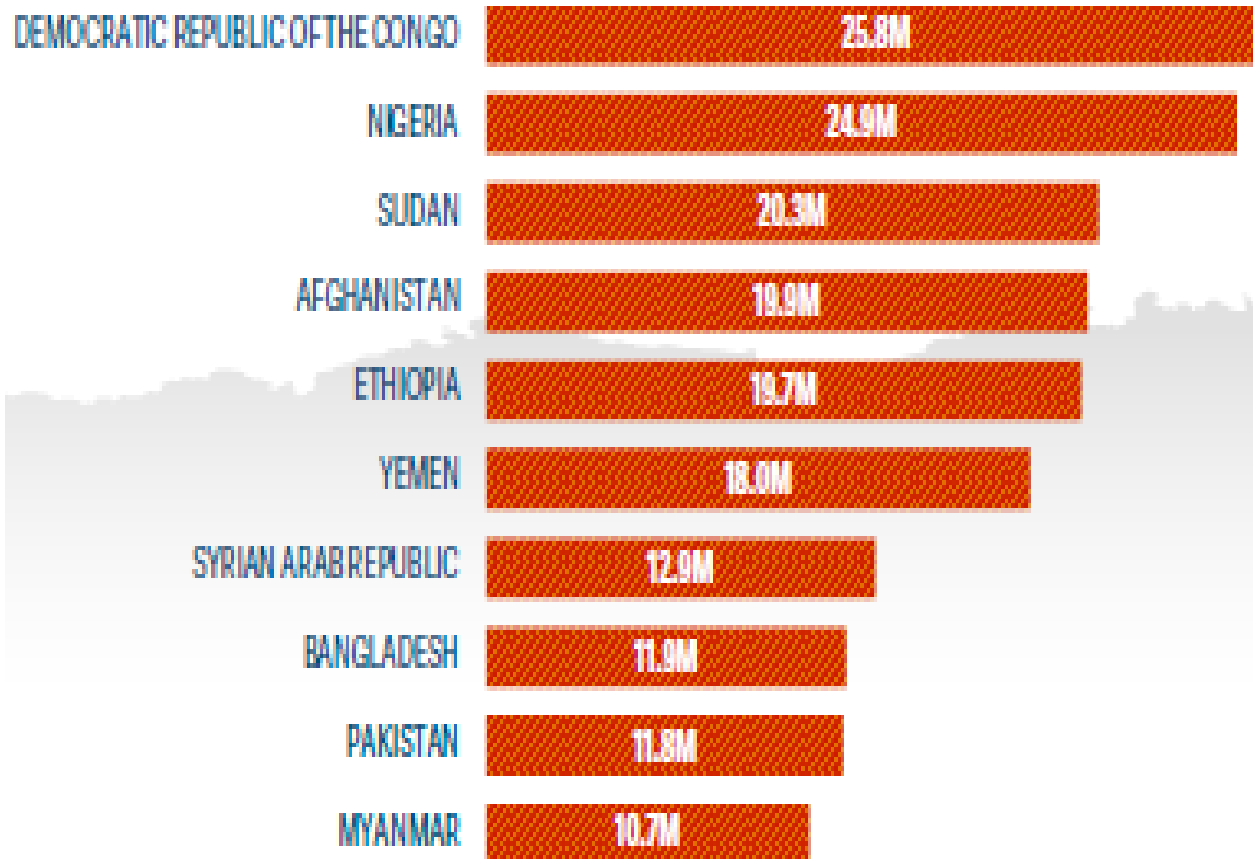


Data Source: UNHCR, IDMC

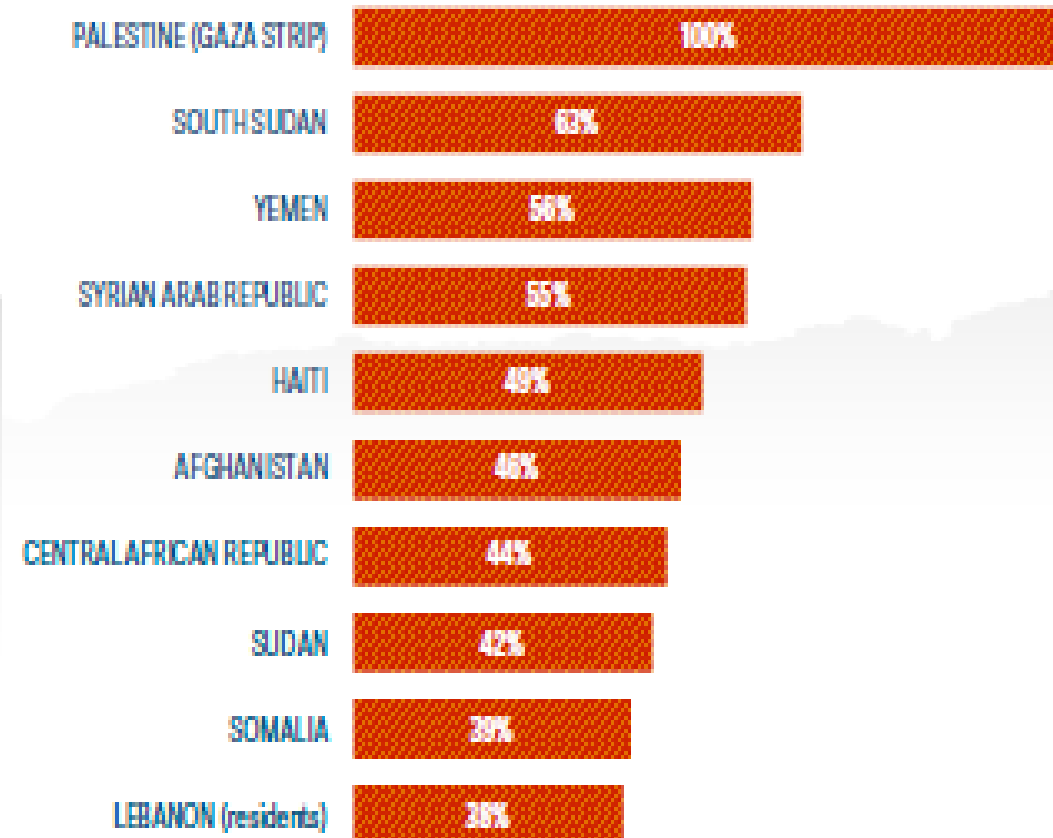


Acute food insecurity crises by country/region (# people (in IPC3+) and prevalence in 2023)

people



% of population





INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE



Driver: #3 Climate change and weather extremes

Weather extremes and CC are already a key cause of acute and structural food insecurity

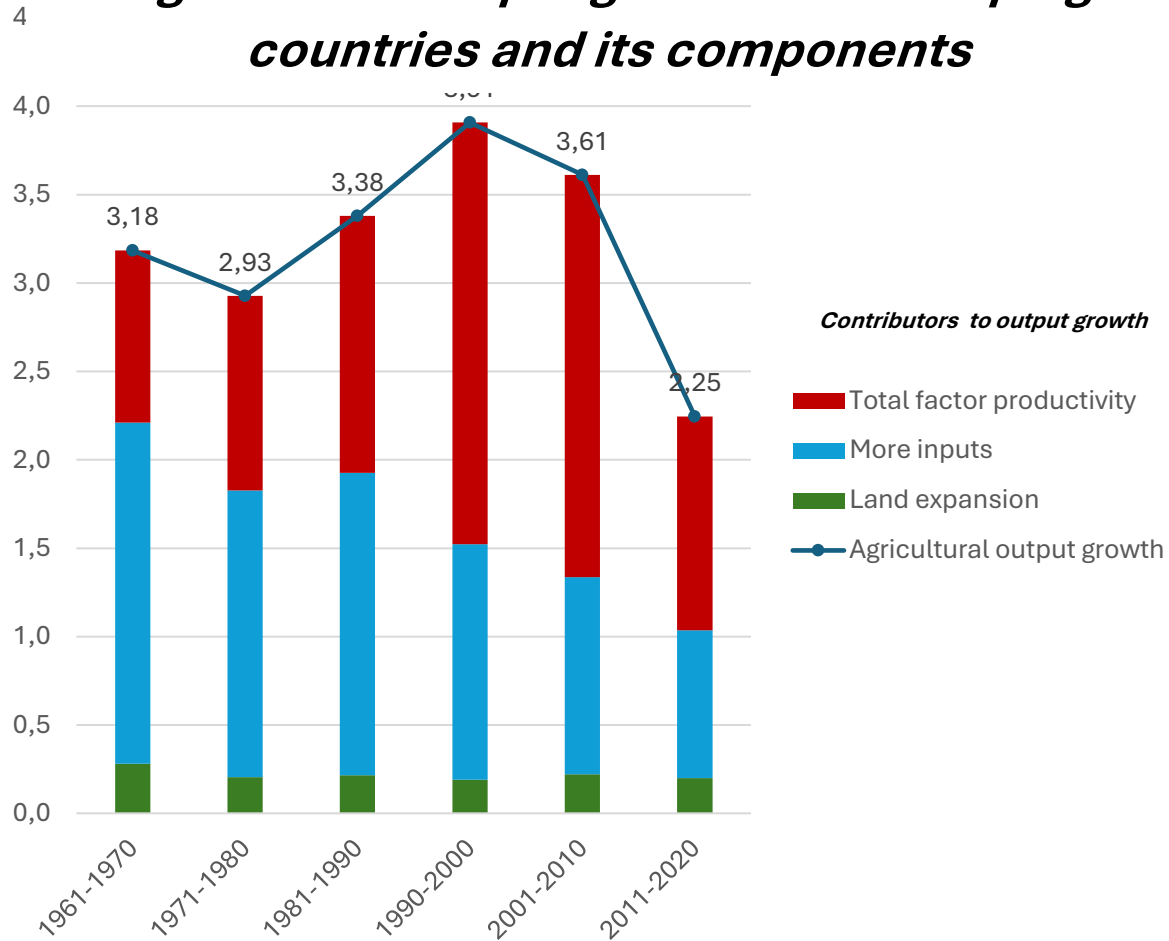
In 2023-24:

- **El Niño** was a major driver in 18 countries and compounding factor in 27 food crisis countries
- Causing mostly droughts, affecting the Horn of Africa and Eastern and Southern Africa the most

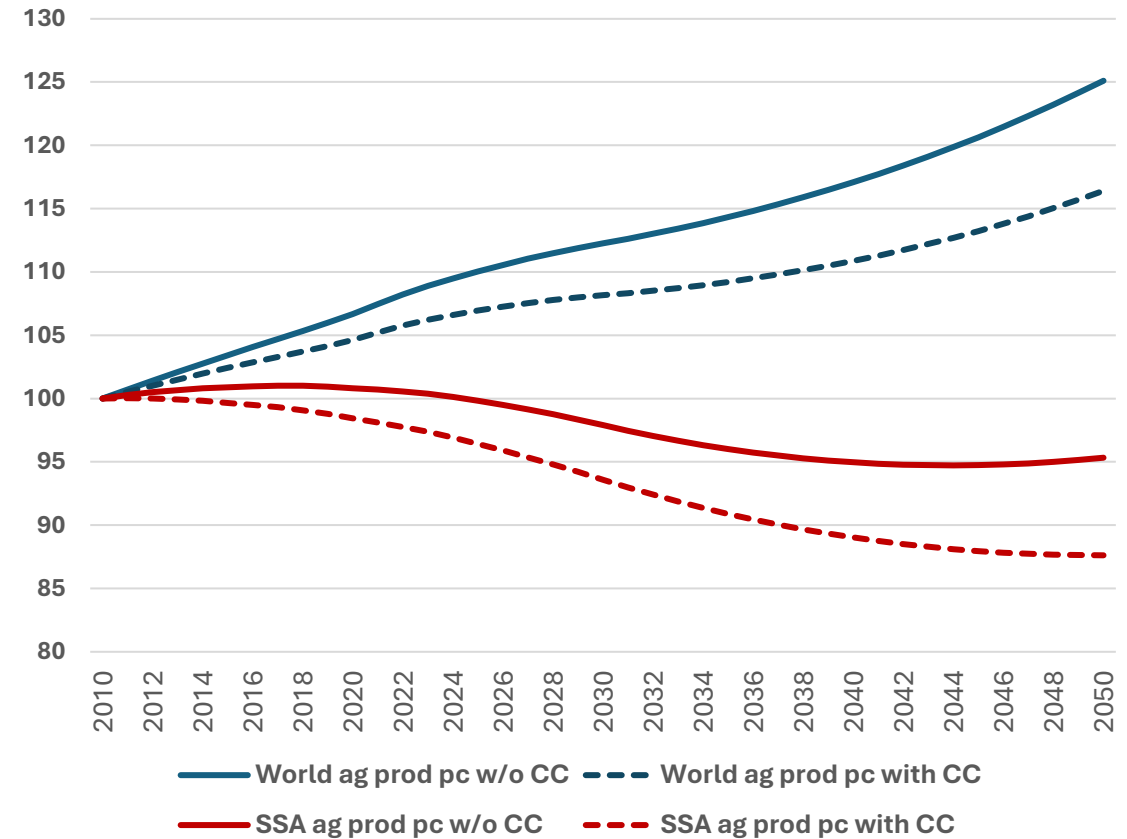


Climate change is slowing agricultural productivity growth, affecting tropical agriculture the most

Agricultural output growth in developing countries and its components



Per capita agric output with and without climate change



Source: Estimates based on USDA, Economic Research Service (ERS) International Agricultural Productivity data product (<https://www.ers.usda.gov/data-products/international-agricultural-productivity/>)

Source: Projections based on IFPRI's IMPACT model (see IFPRI 2022) and UN Population Division for Population Projections (medium variant).



INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE

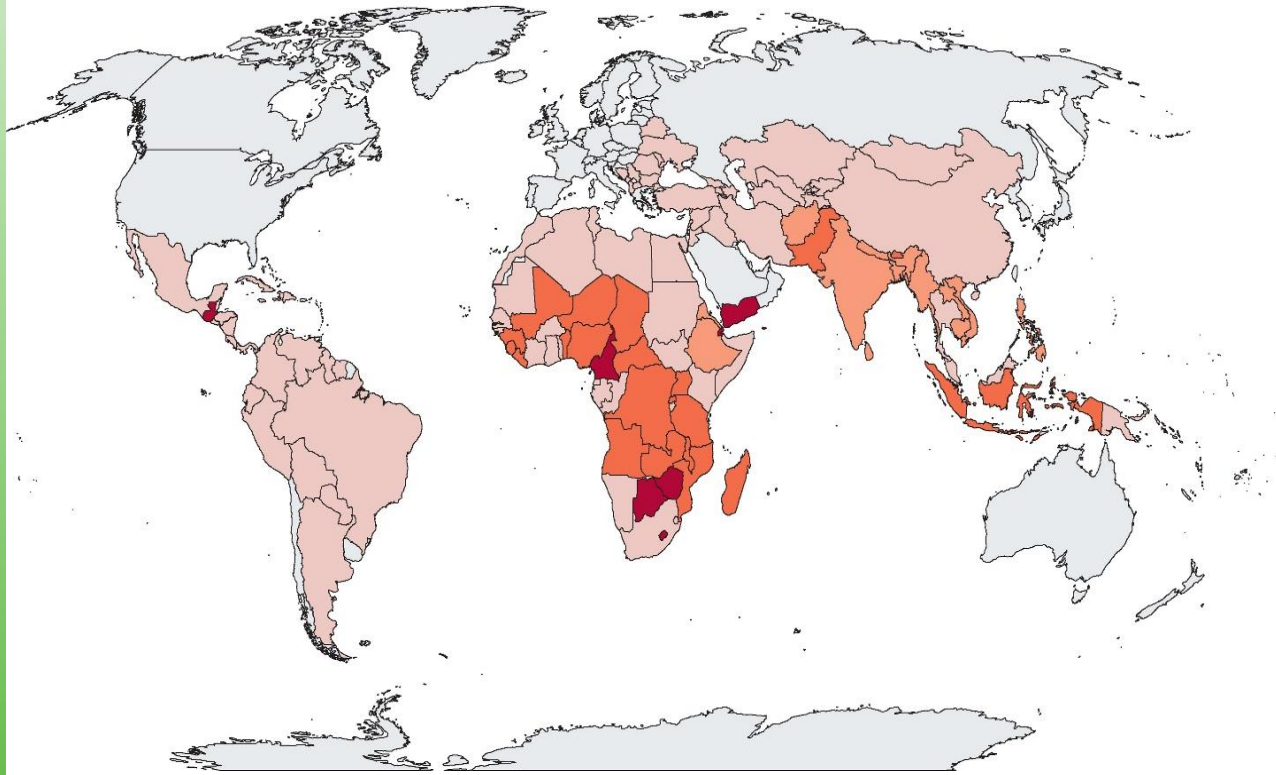


Further concerning trends

Triple burden of malnutrition

Coexistence of **undernutrition**, **micronutrient deficiencies**, and **overweight and obesity**

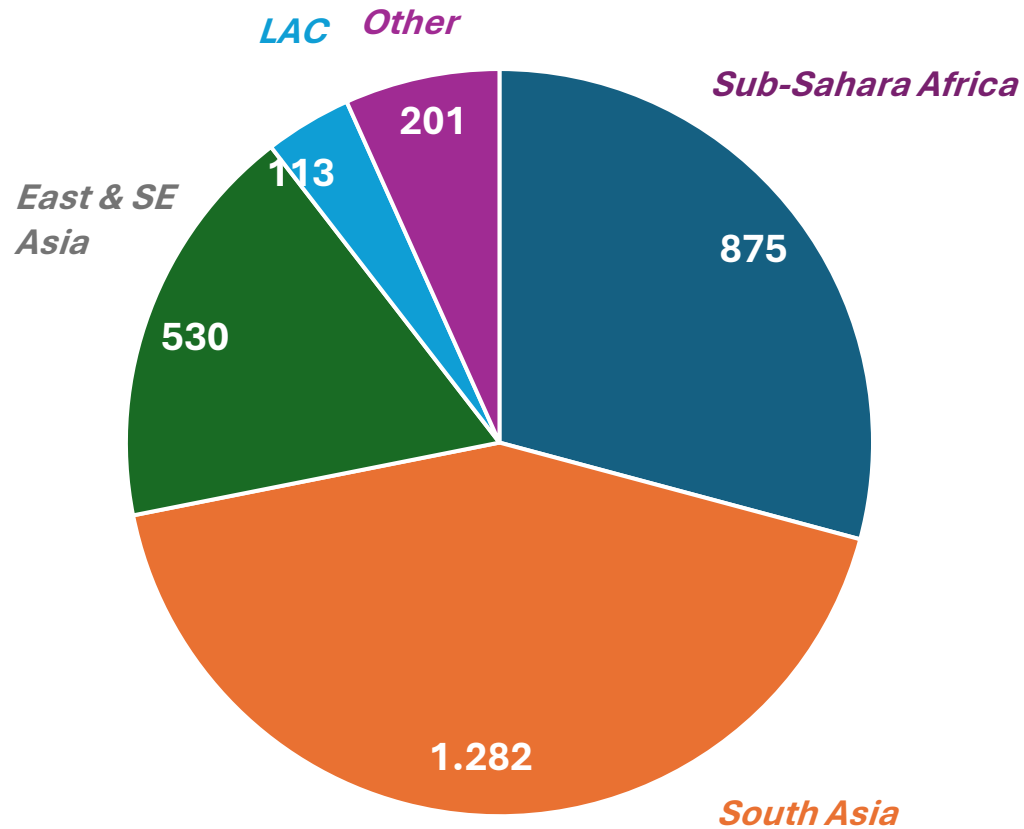
Countries with both undernutrition and overweight, 2010



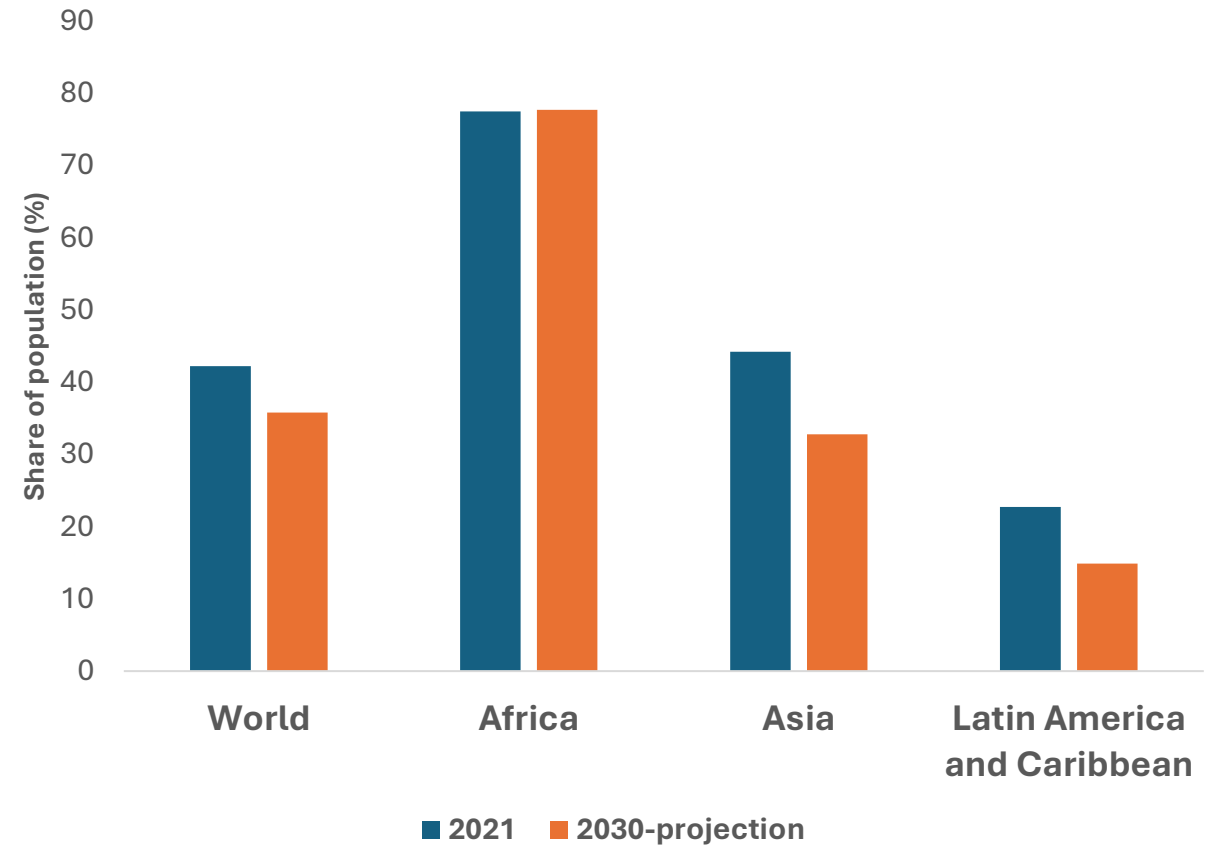
- **3 billion** people **cannot** afford a healthy diet
- **2 billion** people have **micronutrient deficiencies**
- **2 billion** people are **overweight or obese**
- **A third** of LMI countries face **undernutrition and obesity**

Malnutrition by region

Number of people that cannot afford a healthy diet



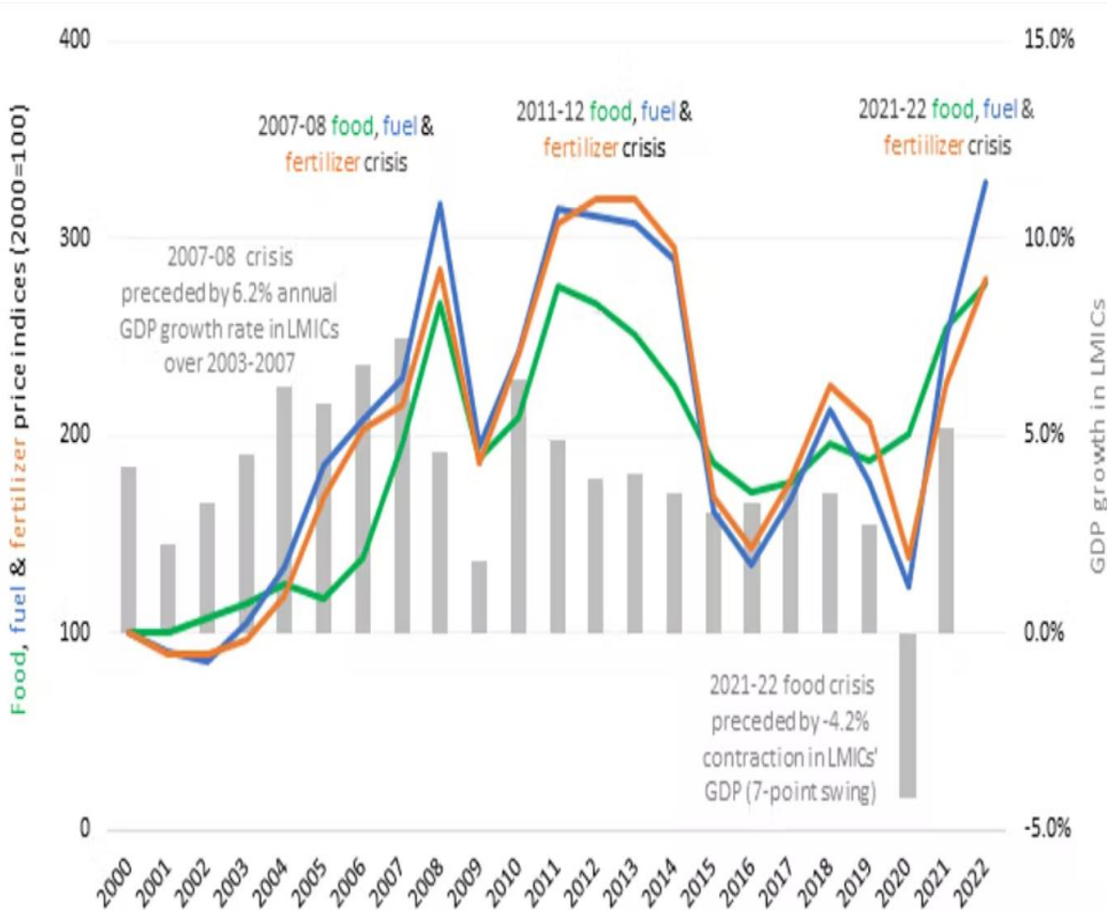
Affordability of healthy diet projections



Source: FAO et al. 2023. The State of Food Insecurity and Nutrition in the World, Fig. 5; and Glauber, J. & Laborde, D. 2023. Repurposing food and agricultural policies to deliver affordable healthy diets, sustainably and inclusively: what is at stake? Background paper for The State of Food Security and Nutrition in the World 2022. FAO Agricultural Development Economics Working Paper 22-05. Rome, FAO. <https://doi.org/10.4060/cc4348en>

Price shocks and volatility: “the new normal” ?

Food, fertilizer, oil prices 2001-2022



Cereal Price Indexes (January 2021=100)





INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE



Getting the SDGs back on track

Food Security

Ending hunger, poverty, and reducing malnutrition

- Structural income growth
- Social security systems and safety nets
- Climate- and shock-resilience programs
- Multisectoral responses to conflict
 - Peacebuilding operations
 - Aid and recovery support
 - Livelihood-oriented relocation or settlement strategies
- Early warning systems to anticipate and prevent
- Finance and investment in climate smart food systems
- Repurposing subsidies and inclusive value chains

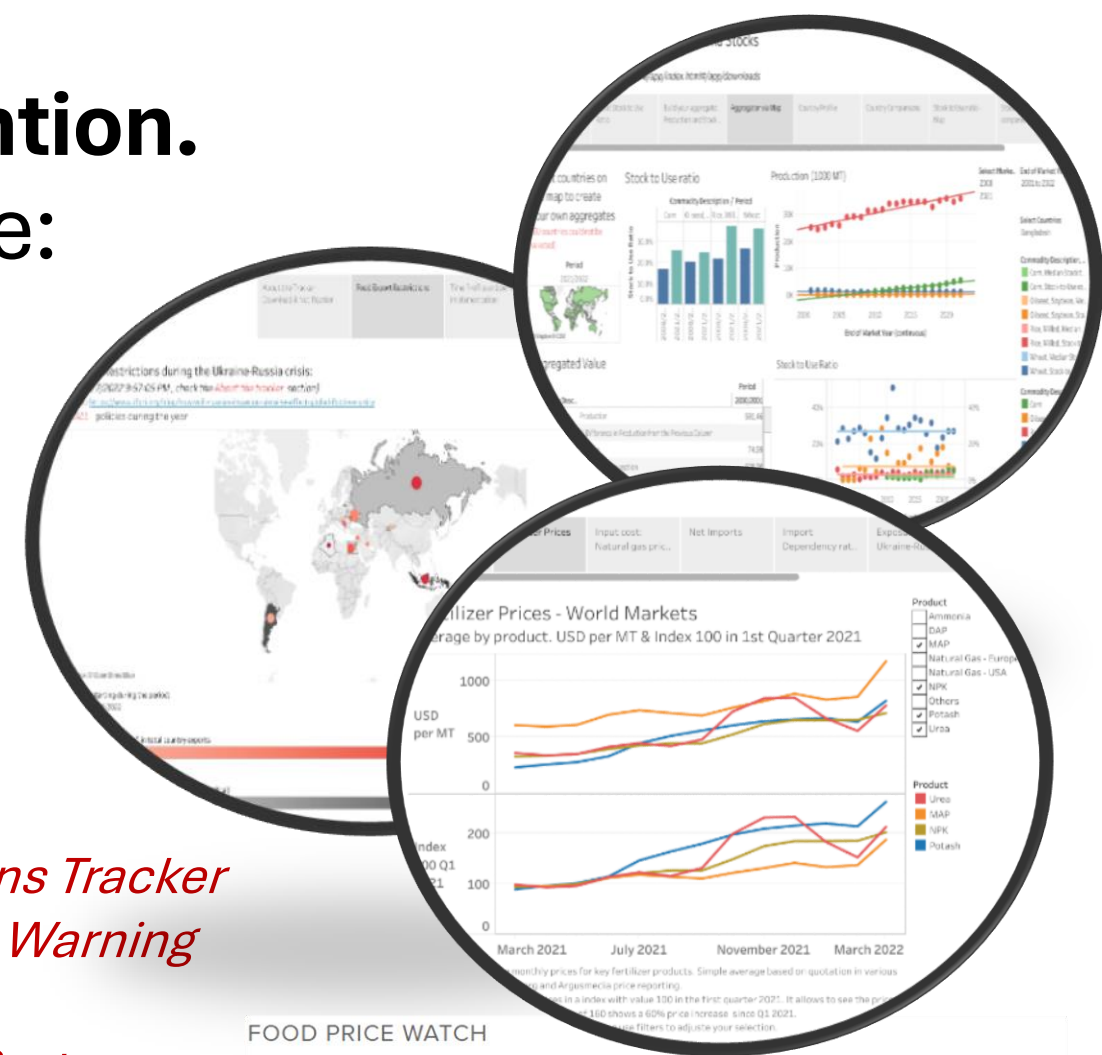




Thank you for your attention.
For more information, see:

www.ifpri.org

- ***Special Blog Series***
- ***Special Indicator Series***
 - *Food and Fertilizer Export Restrictions Tracker*
 - *Excessive Food Price Volatility Early Warning System*
 - *Staple Food Stock-Use Monitoring System*
 - *Vulnerability Dashboard*
 - *Fertilizer Market Dashboard*



FOOD PRICE WATCH

Volatility Warning Commodity Prices COVID-19 Price Monitor



ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





Moderator

**Maithreyi
Seetharaman**



**Camilla
Brückner**

Director of UN/UNDP
Brussels Office



**Koen
Doens**

Director-General
of DG International
Partnerships



**Carsten
Staur**

Chair of OECD
Development Assistance
Committee



**Guillaume
Lafortune**

Vice President and
Head of Paris Office
at the UN Sustainable
Development Solutions
Network



Coffee break



15:10 – 16:20

PROF PHOEBE KOUNDOURI

Professor at AUEB and DTU, President of EAERE,
Chair at UN SDSN Global Climate Hub

Sustainable Transformation of the Interaction between Economy-Society-Environment: If you can't measure it, you can't manage it, and you can't improve it!

Prof. Dr. Phoebe Koundouri

Professor Athens University of Economics and Business & Technical University of Denmark

Director Sustainable Development Unit ATHENA Information Technologies RC

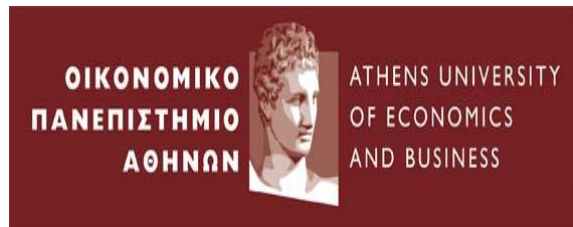
Chair Alliance of Excellence for Research and Innovation in Aephoria (AE4RIA)

Chair UN SDSN Global Climate Hub and UN SDSN European Hub

Fellow World Academy of Art & Science, Academia Europaea, European Academy of Science Technology

President European Association of Environmental and Resource Economists

President World Council of Environmental and Resource Economists

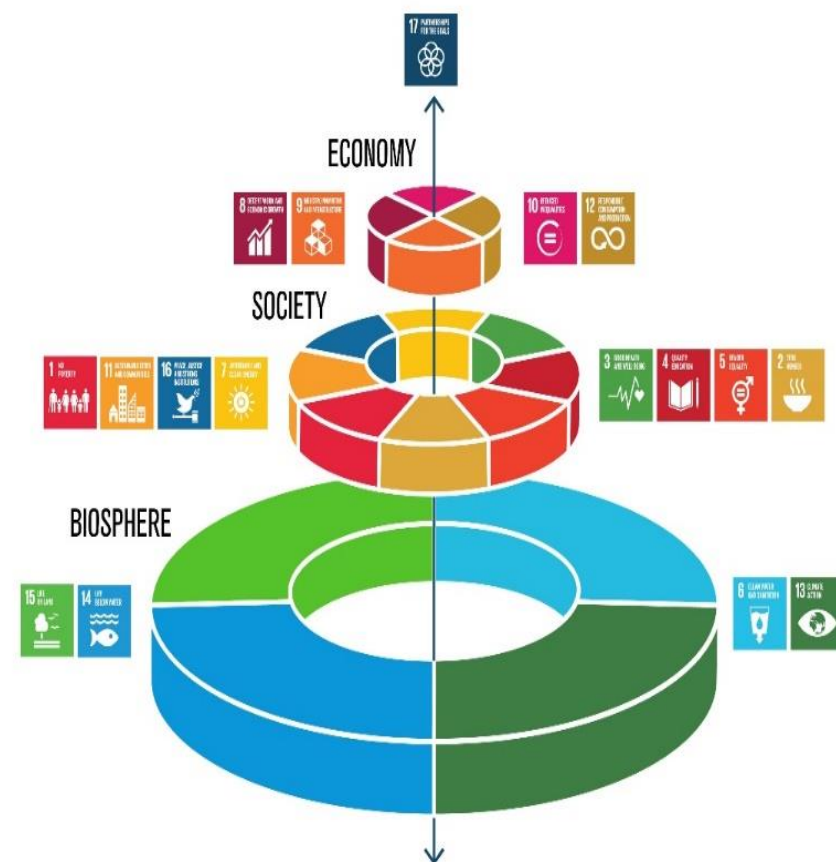


Technical
University of
Denmark





SUSTAINABLE DEVELOPMENT GOALS





200
RESEARCHERS

100
PROJECTS

120
COUNTRIES

150
CONFERENCES

1,000
PUBLICATIONS

500_M
MILLION FUNDING

**WORLD LARGEST RESEARCH
AND INNOVATION TEAM
ON SCIENCE-BASED
SUSTAINABILITY TRANSITION**

Research and Innovation Centers

ReSEES
Research laboratory on Socio-Economic and Environmental Sustainability
ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

Stochastic Modeling and Applications Laboratory
ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS

ATHENA
Research & Innovation Information Technologies Sustainable Development Unit
Sustainable Development Unit - Athena Research Center

DTU
DTU Management Department of Technology, Management and Economics
Department of Technology, Management, and Economics - Technical University of Denmark

Innovation Acceleration Hubs

United Nations Climate Change Global Innovation Hub
UN Climate Change Global Innovation Hub

EIT Climate-KIC
EIT Climate-KIC

BRIGAD CONNECT
Brigaid Connect

MENA MARITIME Accelerator
MENA Maritime Accelerator

The Black Sea Accelerator
Black Sea Accelerator

Science - Policy Networks

Sustainable Development Solutions Network (SDSN)

SDSN Global Climate Hub

SDSN Europe

SDSN Greece

Water Europe

Nexus cluster

Scientific Associations and Academies

World Council of Environmental and Resource Economists Associations (WCEREA)

European Association of Environmental and Resource Economists (EAERE)

World Academy of Art and Science (WAAS)

Academia Europaea

European Academy of Sciences and Arts

InterAcademy Partnership (IAP)

SDGs - ESG measurment
Sustainable Finance

Sustainable pathways to
Climate Neutrality and Resilience

Sustainable pathways for
Seas and Oceans

Sustainable pathways
Land Use and WFEb Nexus

Innovation Acceleration
Education Upskilling Reskilling

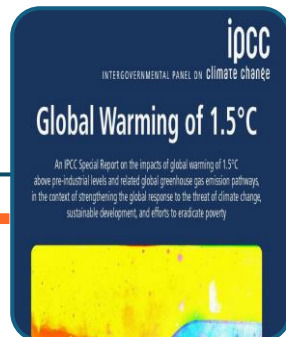
Prof. Phoebe Koundouri Founder and Scientific Chair
phoebekoundouri.org

Summary Policy Framework Green-Digital Transition

2015



2018



2019



2020



Σχέδιο Ανάπτυξης
για την Ελληνική Οικονομία

ΤΕΛΙΚΗ ΕΚΔΕΣΗ

"Next Generation EU"

Ελλάδα 2.0

ΕΘΝΙΚΟ ΣΧΕΔΙΟ ΑΝΑΠΤΥΞΗΣ
ΚΑΙ ΑΝΘΕΚΤΙΚΟΤΗΤΑΣ

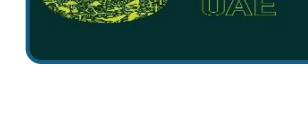
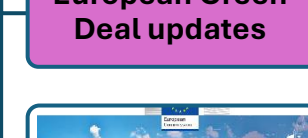
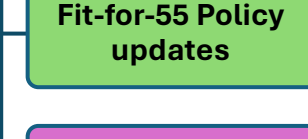
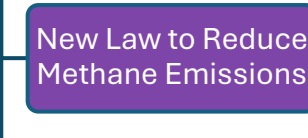
2021



2022



2023

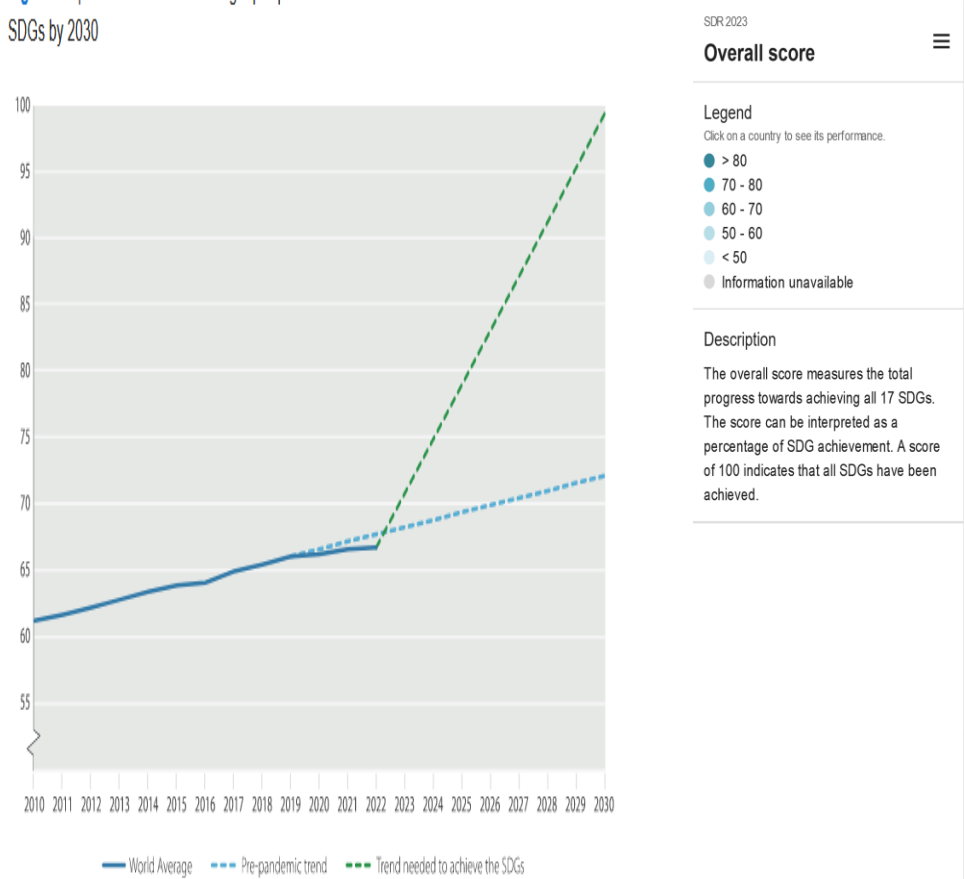


Measuring Sustainability

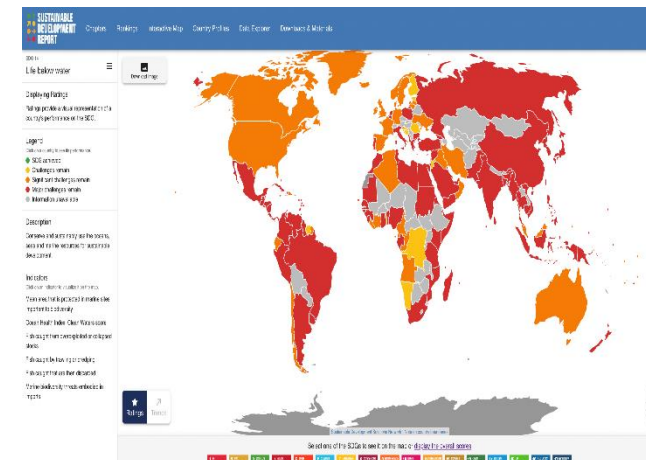
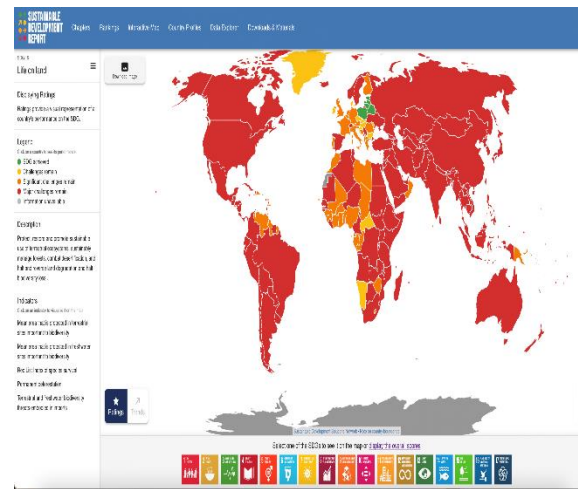
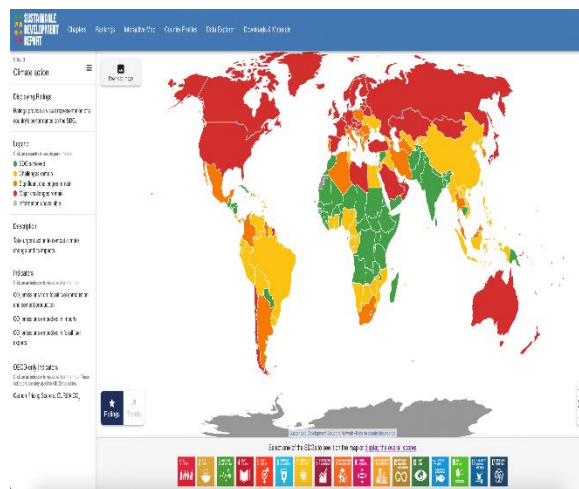
If you can't measure it, you can't manage it, and you can't improve it!



Figure 1.1 | SDG Index world average: pre-pandemic trend and trend needed to achieve the SDGs by 2030



SUSTAINABLE SYSTEMS?



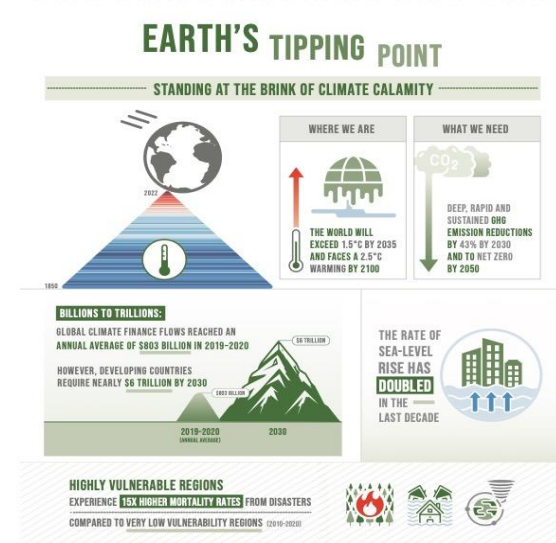
2 ZERO HUNGER

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE



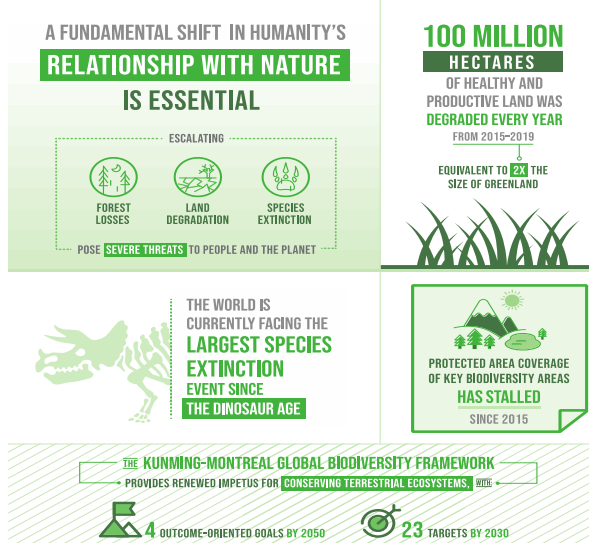
13 CLIMATE ACTION

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS



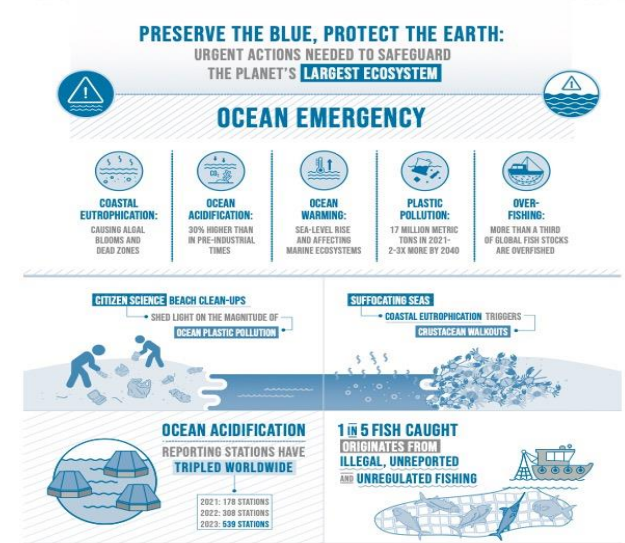
15 LIFE ON LAND

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS



14 LIFE BELOW WATER

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEA AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT



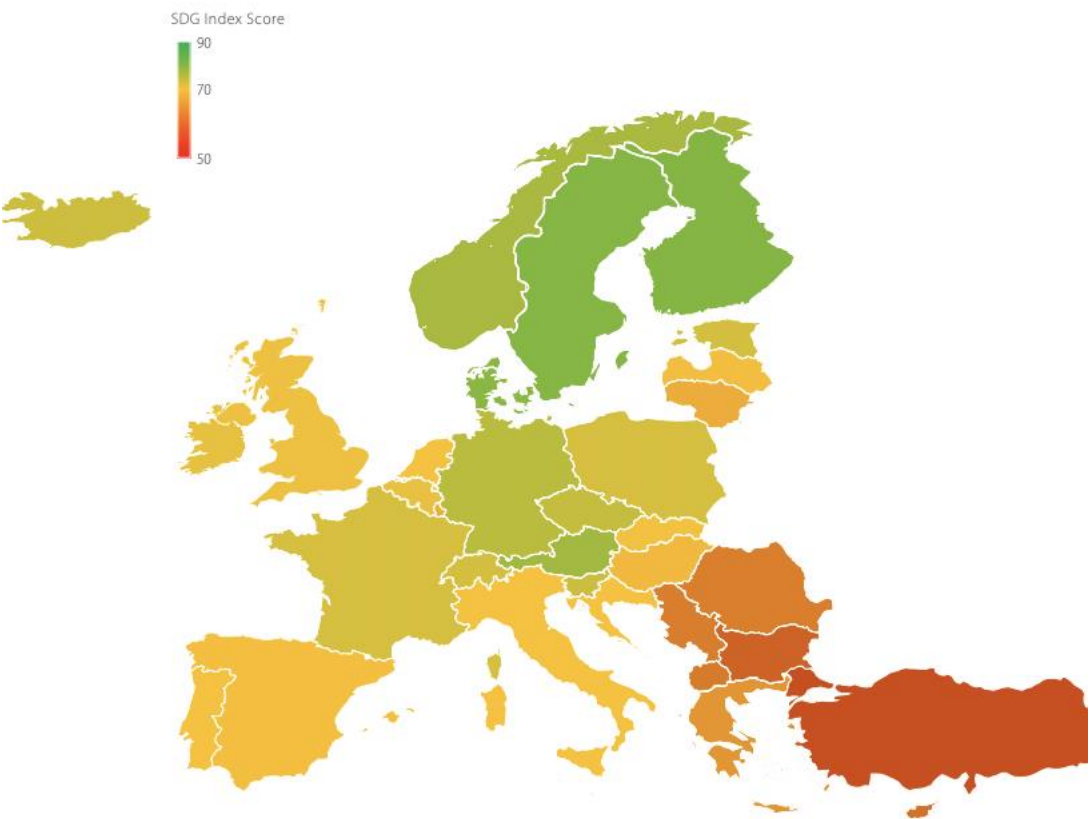
Guillaume Lafortune, Grayson Fuller, Adolf Kloke-Lesch, Phoebe Koundouri and Angelo Riccaboni (2024).

European Elections, Europe’s Future and the SDGs: Europe Sustainable Development Report 2023/24. Paris: SDSN and SDSN Europe and Dublin: Dublin University Press,

<https://doi.org/10.25546/104407>



Figure 4 | The 2023/24 SDG Index Scores and Rankings by country



SDG Index Rank	Country	SDG Index Score				
1	Finland	80.6	18	Netherlands	70.1	European Union 72.0
2	Sweden	80.6	19	Croatia	70.0	
3	Denmark	80.0	20	Portugal	70.0	
4	Austria	77.7	21	Italy	69.9	
5	Norway	77.0	22	Spain	69.6	
6	Germany	75.4	23	Latvia	69.5	
7	Czechia	74.4	24	Hungary	69.0	
8	Slovenia	73.7	25	Luxembourg	67.8	
9	Iceland	73.7	26	Lithuania	67.7	
10	Estonia	73.0	27	Malta	65.9	
11	Switzerland	72.9	28	Greece	65.2	
12	France	72.9	29	Romania	62.6	
13	Poland	72.8	30	Serbia	62.5	
14	Ireland	71.4	31	North Macedonia	62.2	
15	Belgium	71.0	32	Cyprus	61.0	
16	United Kingdom	70.7	33	Bulgaria	59.5	
17	Slovak Republic	70.1	34	Türkiye	57.1	

European Union



OVERVIEW INDICATORS



SDG Dashboards and Trends

Click on a goal to view more information.



Dashboards: ● SDG achieved ● Challenges remain ● Significant challenges remain ● Major challenges remain ● Information unavailable

Trends: ↑ On track or maintaining SDG achievement ↗ Moderately improving → Stagnating ↓ Decreasing ** Trend information unavailable

Cyprus

Southern Europe



OVERVIEW INDICATORS



SDG Dashboards and Trends

Click on a goal to view more information.



Dashboards: ● SDG achieved ● Challenges remain ● Significant challenges remain ● Major challenges remain ● Information unavailable

Trends: ↑ On track or maintaining SDG achievement ↗ Moderately improving → Stagnating ↓ Decreasing ** Trend information unavailable

CSRD-consistent Holistic Approach for Businesses

Create value and move beyond compliance-based codes



Mapping

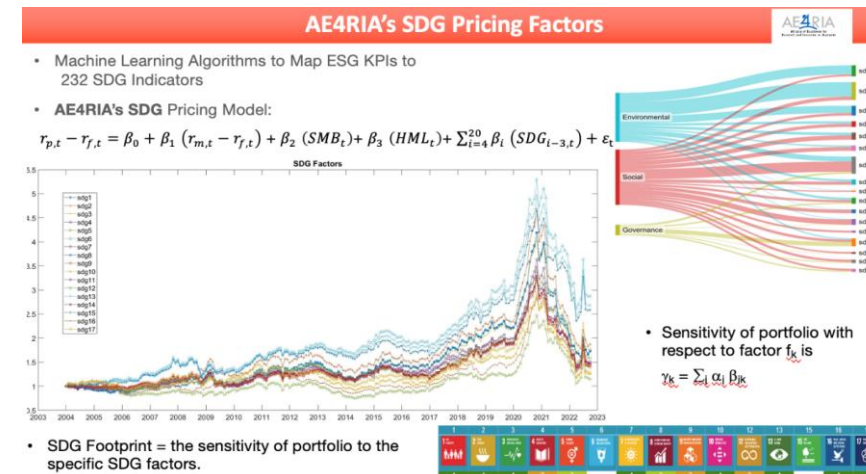
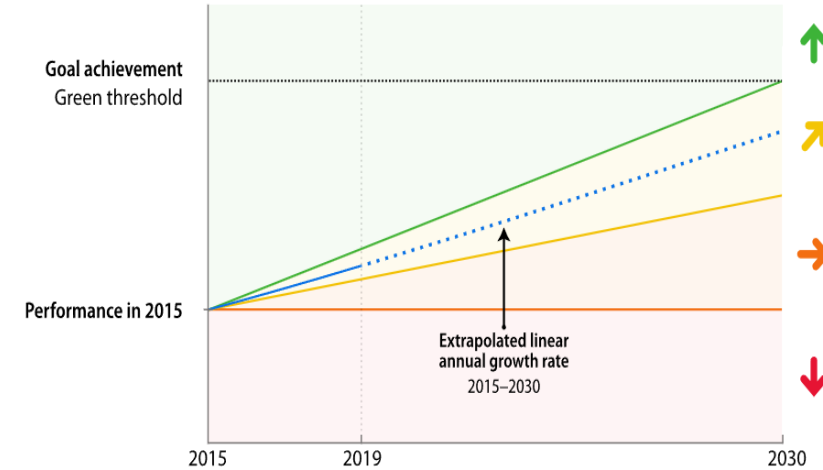
- Map Entire Value Chain of Company - Products and Services
- Map Stakeholders
- Materiality Assessment By Stakeholder

Measurement

- ESG KPIs in accordance with Sustainability Reporting Standards (2023, 2024)
- Map ESG KPIs across the Value Chain
- Map ESG KPI's to SDGs Indicators
- Set Targets

Assessment & Monitoring

- ESG/SDG Dashboards – Level of Implementation of SDGs and trends to 2030/2050
- Monetization of externalities/ intangible assets
- Design Hybrid Metrics to Optimize for Value
- Restructure Business Plan





The Global Climate Hub

 Check for updates

Phoebe Koundouri, Professor of Environmental Economics and Sustainability at Athens University of Economics and Business, talks to *Nature Sustainability* about how the Global Climate Hub can help countries achieve sustainability against the backdrop of interconnected, complex challenges.

What is the Global Climate Hub?

The Global Climate Hub (GCH), an innovative initiative under the United Nations Sustainable Development Solutions Network (SDSN), focuses on the development of science-based solutions and regional, national and sub-national pathways for the transition to a climate-neutral and resilient world. These efforts are co-designed with, for example, central and local government representatives and the respective SDSN national hubs. As the aim is to deliver optimal dynamic mixtures of technological, policy, fiscal and financial measures to help countries reach climate neutrality and resilience, fostering cross-disciplinary col-



and on governance. Our current economic system is based on unsustainable production and consumption practices responsible for frightening global temperature increases that threaten both natural ecosystems and human well-being: they impact social inequalities, public health and economies worldwide. That is why we need urgent and collaborative action from all segments of society.

systems. The second is the development of a socio-economic narrative for a just and equitable implementation of the science-based pathways. The third is adopting transformative participatory stakeholder approaches to co-design pathways, co-owned across scientists and technology developers, politicians, policymakers, finance and business sectors, non-governmental organizations and civil society. The fourth is developing powerful digital artificial intelligence (AI)-driven infrastructure that supports model and data integration, as well as data harmonization, management and visualization.

The GCH consists of nine separate units – data platforms and digital applications, atmospheric physics and climatology, energy and transport systems modelling, land, water-food-energy-biodiversity and marine systems modelling, climate and health, innovation/acceleration, policy, finance and labour markets for just transition, transformative and participatory approaches, and finally education, training, upskilling and reskilling.

The activities of each unit intersect with, and feed into, an overarching strategy faci-



Modelling Net Zero Pathways Report



Science for climate policy

The **Global Climate Hub** (GCH) provides science-based solutions for combating the climate crisis. As an offshoot of the UN Sustainable Development Solutions Network, it harnesses a global network of experts.

The GCH works with all relevant stakeholders to design country-specific action plans. It functions in 9 interlinked units that reflect the stages a country will transition through until it achieves climate neutrality and resilience.

- Climate data platforms & digital applications
- Atmospheric physics & climatology
- Energy & transport modelling
- Land use & WFEB nexus modelling
- Climate & health
- Innovation acceleration for climate neutrality & resilience
- Socioeconomic narrative & labor market
- Transformative & participatory approaches
- Education, training, upskilling & reskilling


Located at the ReSEES Laboratory of AUEB and SDU of ATHENA Information Technologies Research Center, the GCH is supported by the Atmospheric Physics Department of the Academy of Athens. The organization is chaired by the world-renowned natural resource economist, Professor Phoebe Koundouri.

Learn more: unsdsn.globalclimatehub.org

Learn more about SDSN Global Climate Hub's involvement in COP28







Climate Data
Platforms and Digital
Applications

Inter-disciplinary mathematical MODELLING: Mitigation and Adaptation Pathways



DownScaling
Climate
Scenarios



Energy &
Transport
Systems



Land & Marine
Systems



Health
Systems



Socio-
Economic
Systems

Trans-disciplinary CO-DESIGN: Mitigation and Adaptation Pathways



Innovation
Incubation
Acceleration



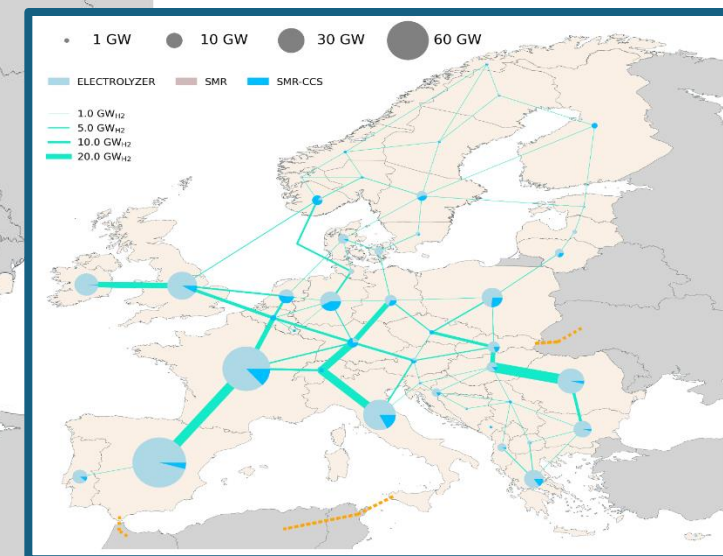
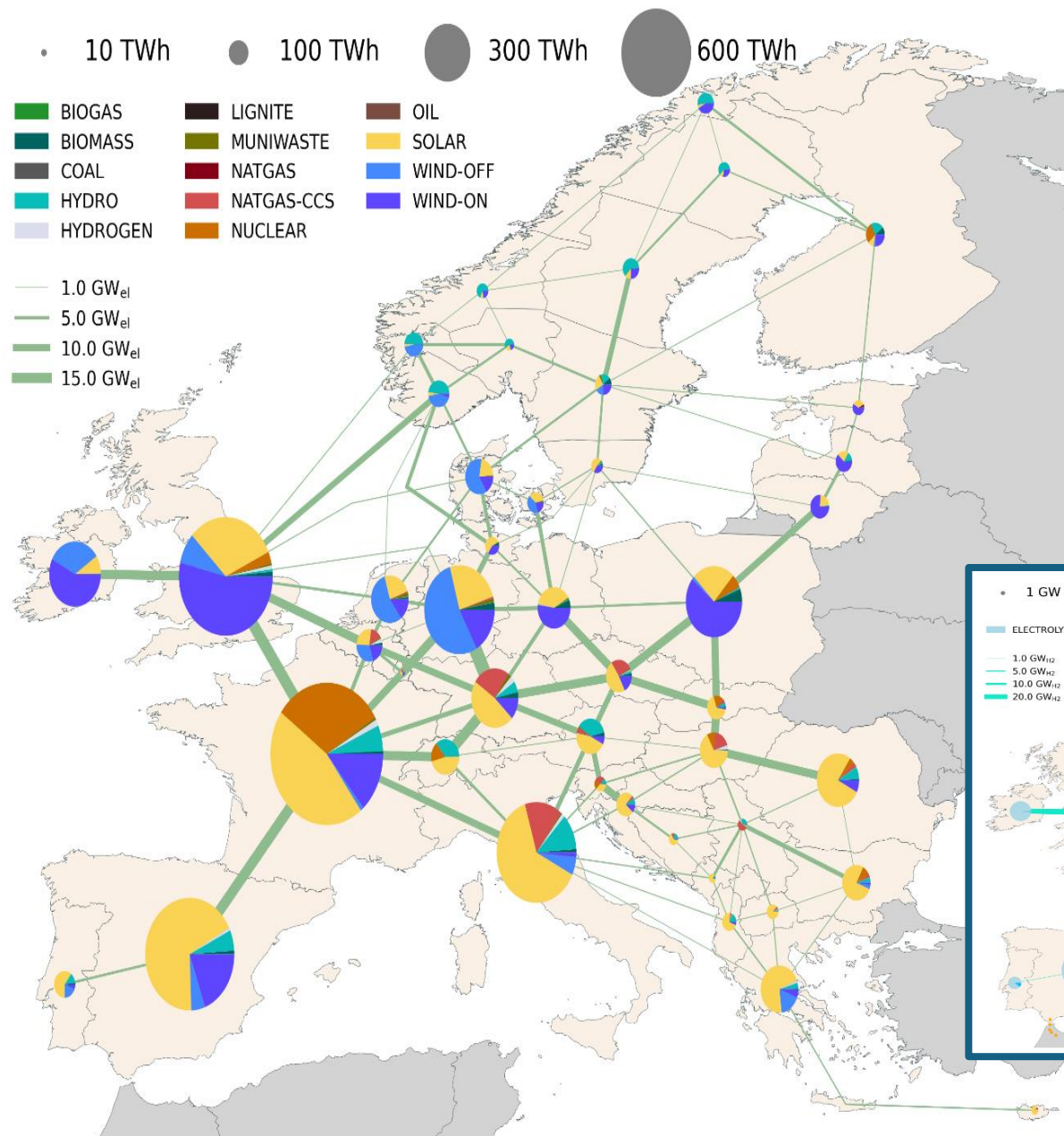
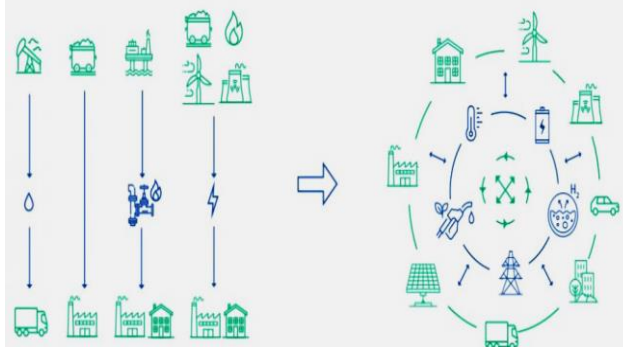
Transformative
Participatory
Approaches



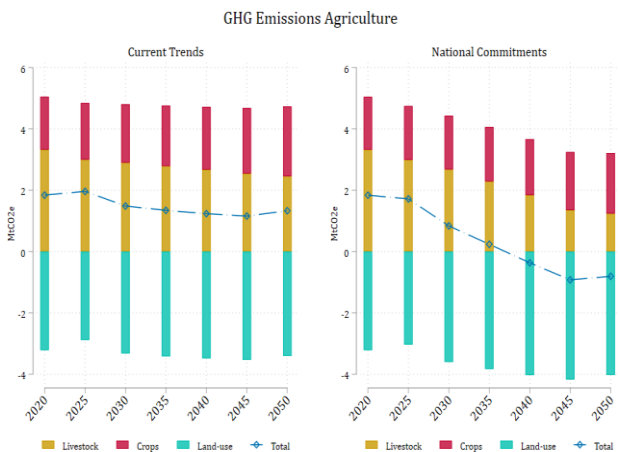
Education
Training

Balmorel

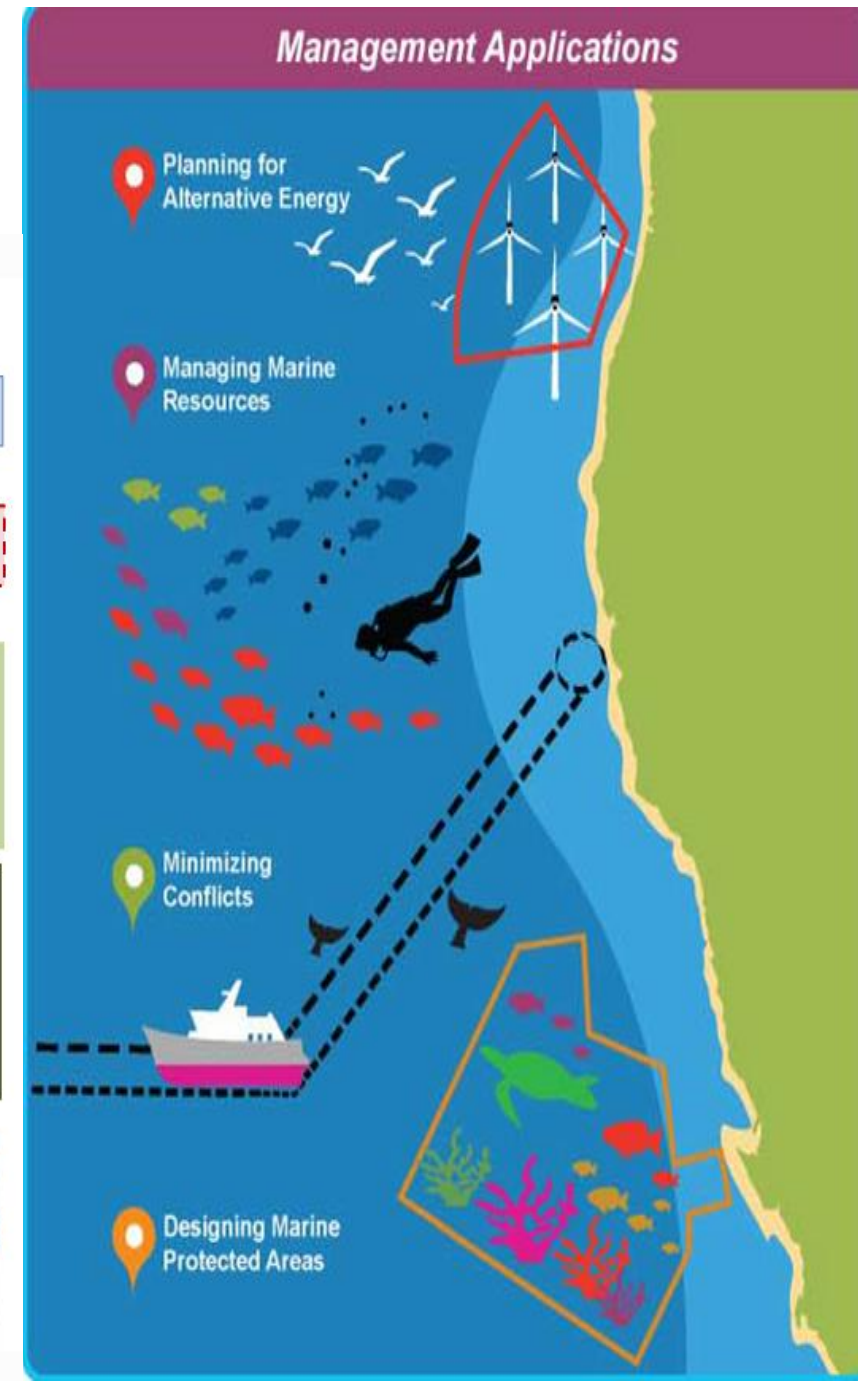
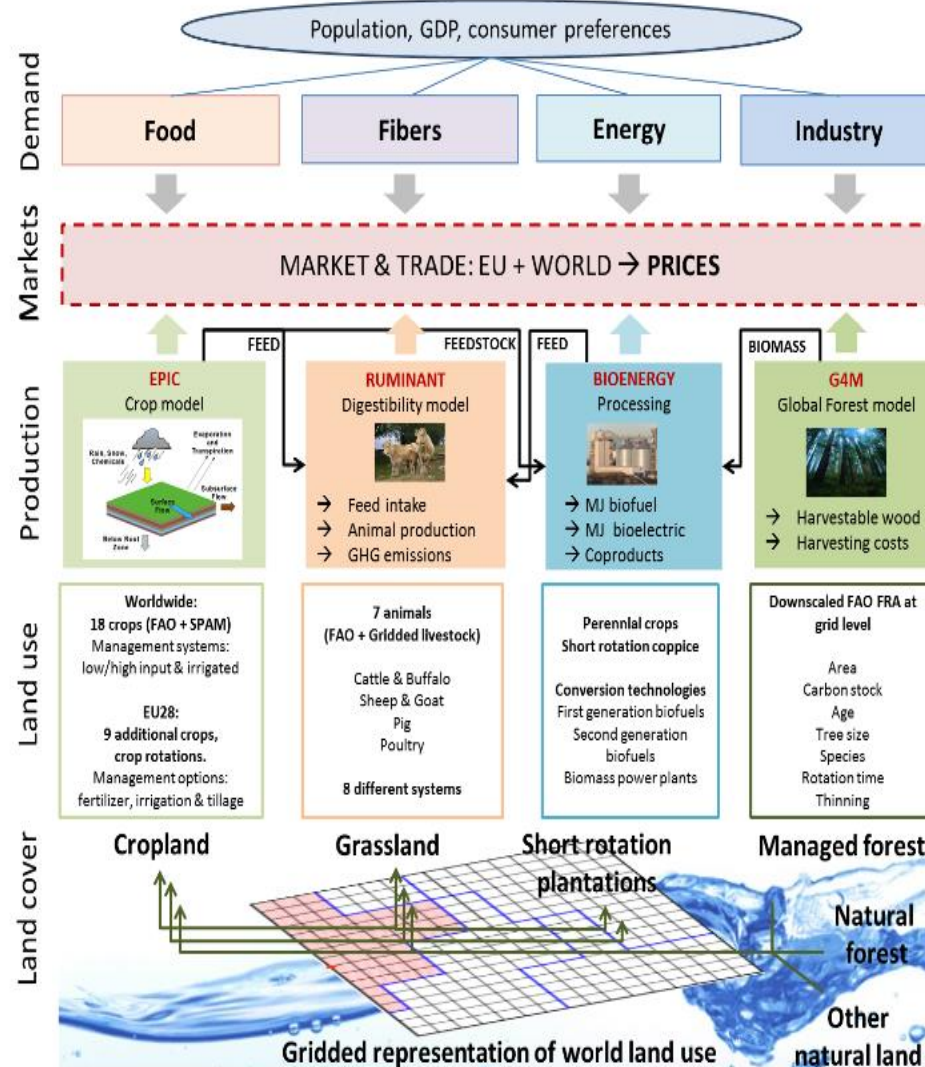
Energy system model



Land-use & Marine-use

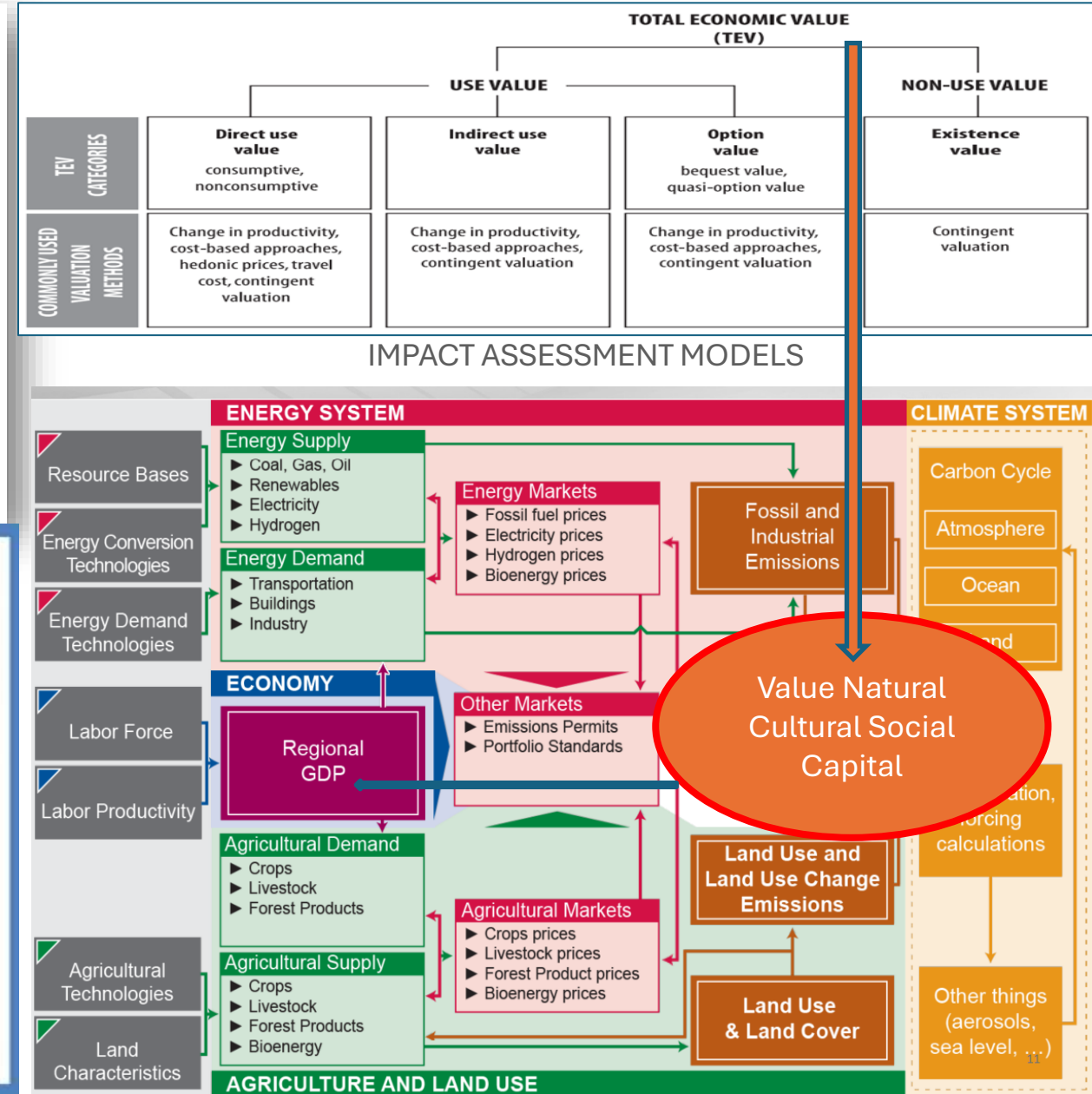
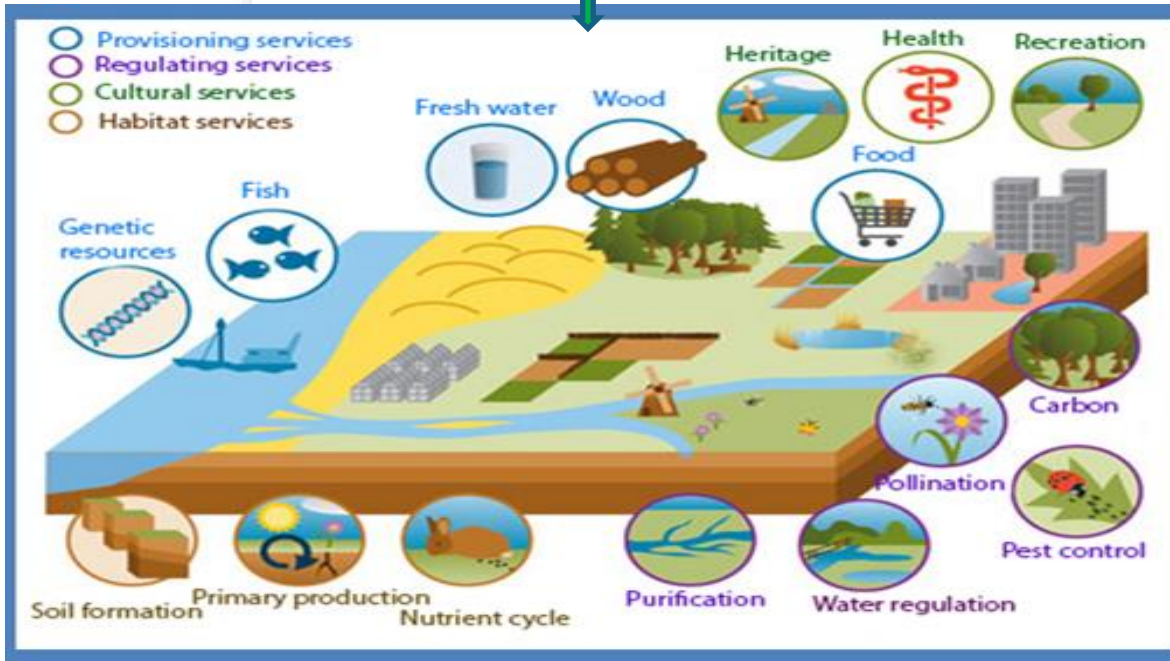
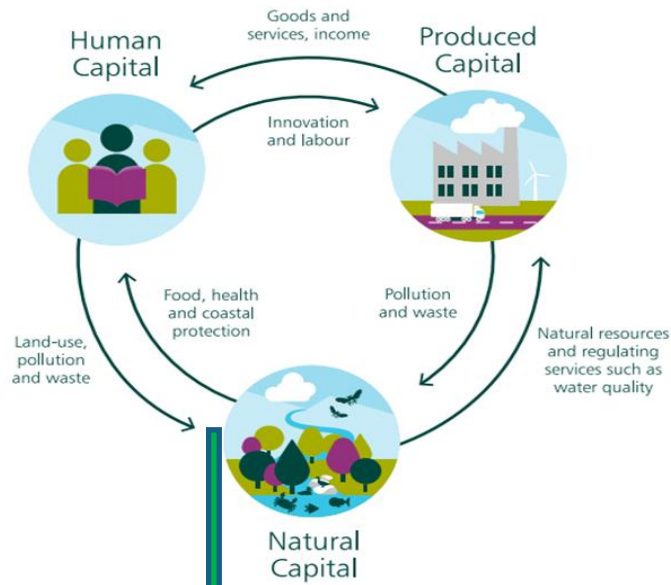


Source: FAO and Authors' Calculations



Socio-Economic Systems

Natural, Social, Cultural Capital in Sustainable Finance & National Accounts

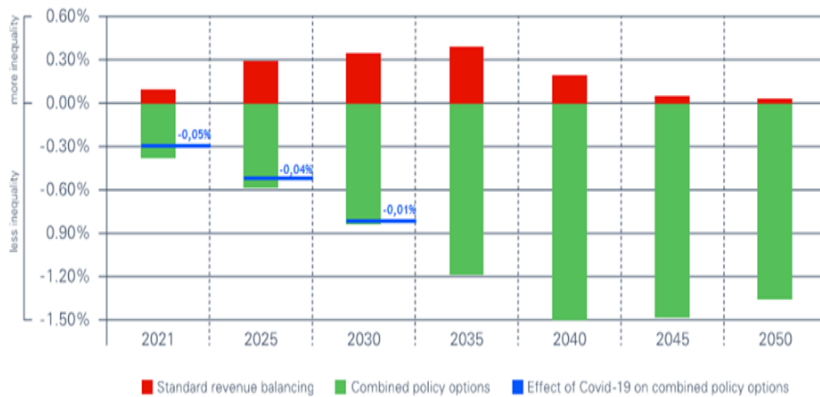


Socio-Economic Systems

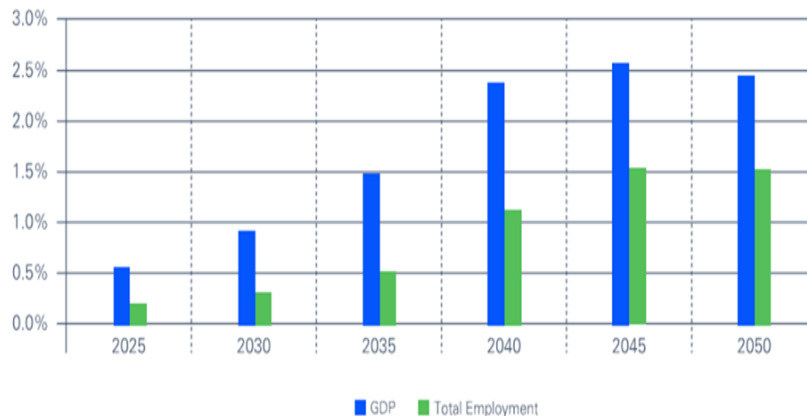
FISCAL INNOVATION

GE MODEL: Distributional effects of EU climate policies until 2050: Identifying measures to Mitigate Regressive Effects
SDSN, EGD SWG report,

Combined mitigation policy options can ensure more equality, increase GDP and employment...



Mitigating the negative social impacts of climate policies is essential to ensure a broad support for the energy transition.



Regressive effects can be fully offset with targeted policies.

UN SDGs Stimulus for Agenda 2030 Reform of the Global Financial Architecture The Pontifical Academy of Social Sciences G20 Advisory Work

The impact of the multi-crisis on developing countries is aggravated by an unfair global financial system that is short-term oriented and crisis-prone, and that further exacerbates inequalities.

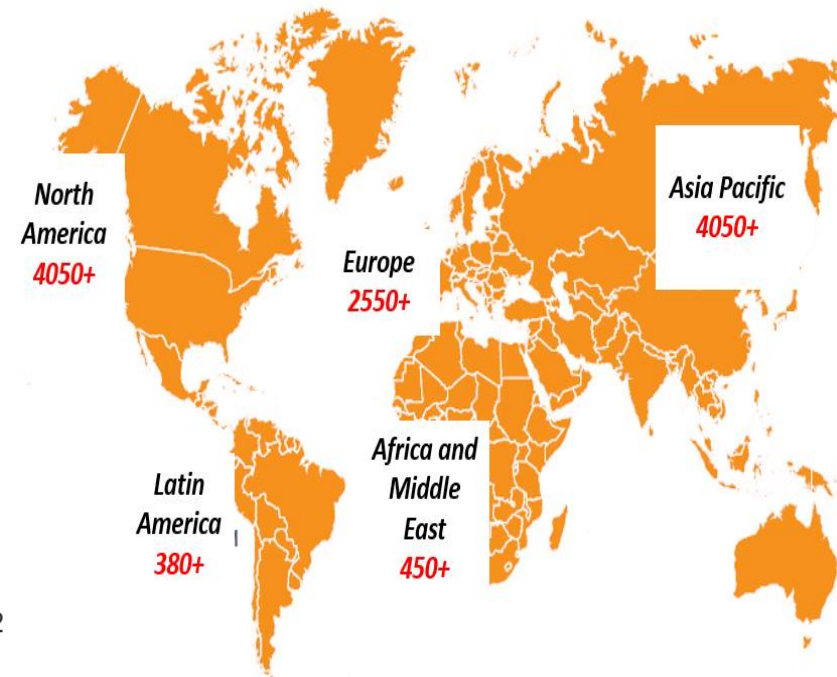
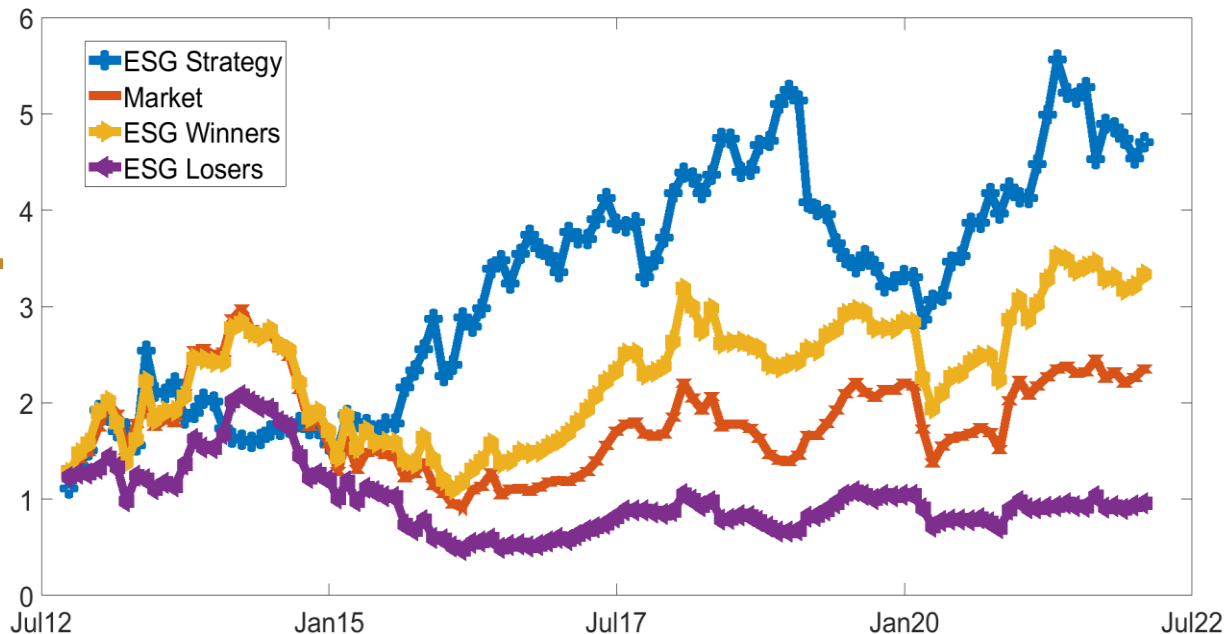


- Tackle the high cost of debt by converting short-term high interest borrowing into long-term (more than 30 year) debt at lower interest rates.
- Massively scale up affordable long-term financing for development, especially through public development banks (PDBs), multilateral development banks (MDBs), and by aligning all financing flows with the SDGs.

Socio-Economic Systems

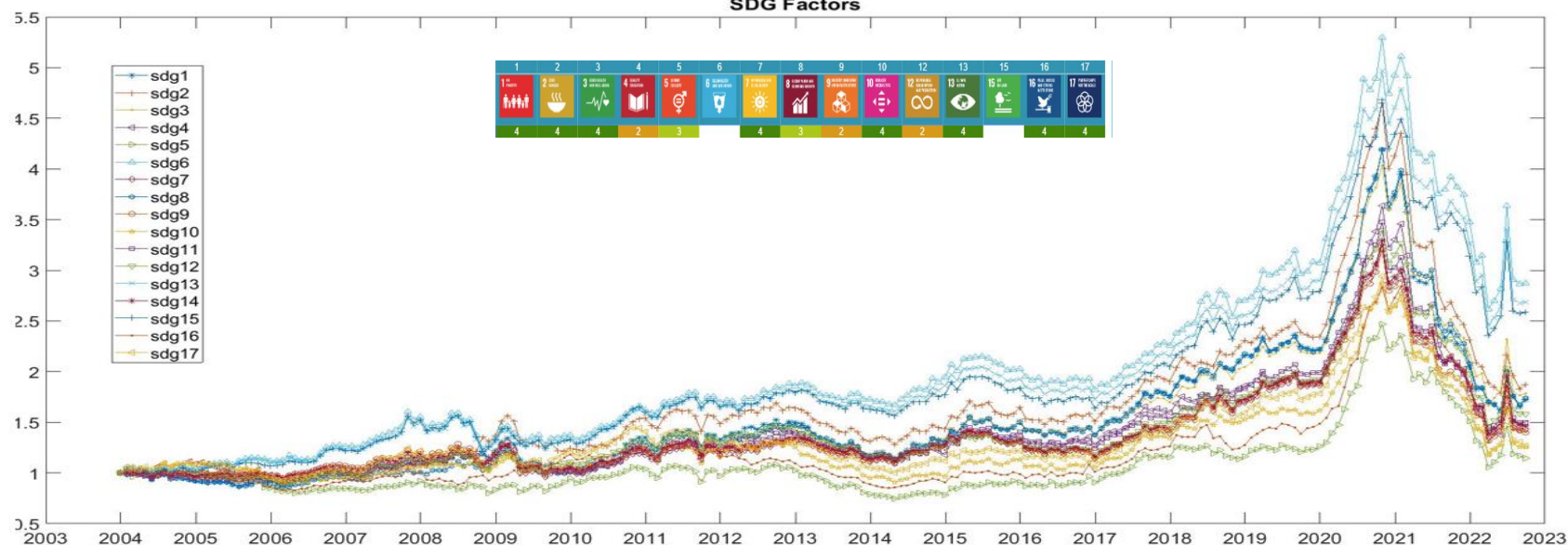
Dataset 11.000+ Companies Worldwide (97% of Global Market Cap)

Strong ESG-SDG Momentum in International Stock Markets




- Value of 1 dollar Invested to ESG Winners vs ESG Losers
- ESG Winners significantly outperform the market
- ESG Losers significantly underperform the market
- SDG Footprint = the sensitivity of portfolio to the specific SDG factors.

SDG Factors







Climate Data
Platforms and Digital
Applications

Inter-disciplinary mathematical MODELLING: Mitigation and Adaptation Pathways



DownScaling
Climate
Scenarios



Energy &
Transport
Systems



Land & Marine
Systems



Health
Systems



Socio-
Economic
Systems

Trans-disciplinary CO-DESIGN: Mitigation and Adaptation Pathways



Innovation
Incubation
Acceleration



Transformative
Participatory
Approaches



Education
Training

Transformative Participatory Approaches: National Living Labs and Systems Innovation



Bridge the gap between science, policy and society, by supporting key actors to utilize model outputs to make sustainable decisions.

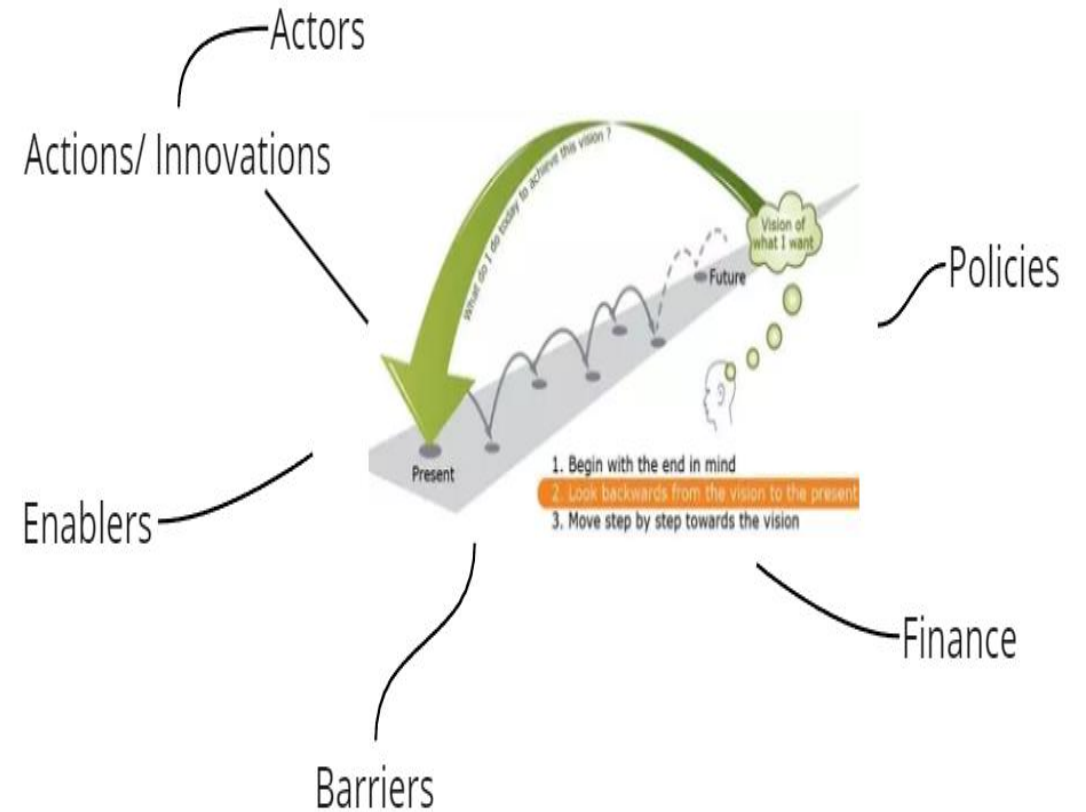
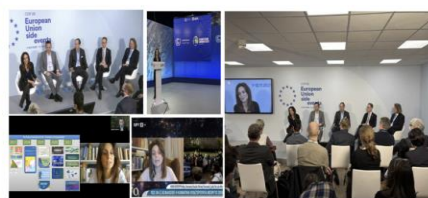
COP28, Dubai UAE



COP27, Egypt



COP26, Glasgow



**Technological, Social, Financial and Policy
Innovations**

 Search

Hazards ▾

- ☐ Coastal floods (43)
- ☒ Droughts (23)
- ☐ Frost (12)
- ☒ Heatwaves (35)
- ☐ Pluvial floods (5)
- ☐ River floods (13)
- ☐ Sea level rise (22)
- ☐ Storms (17)
- ☐ Wildfires (9)
- ☐ Multi-hazarddds (40)

Area ▾

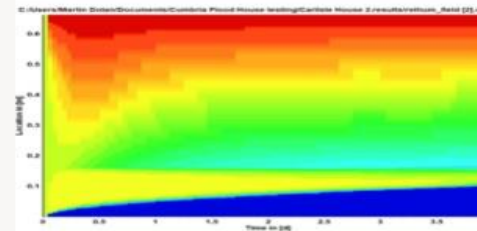
Area ▾

- ☐ Agriculture (2)
- ☐ Biodiversity (23)
- ☐ Buildings (6)
- ☒ Coastal areas (5)
- ☐ Disaster risk reduction (16)
- ☐ Ecosystem-based approaches (2)
- ☐ Energy (22)
- ☐ Financial (17)
- ☒ Forestry (40)
- ☐ Health (10)
- ☐ Marine and fisheries (23)
- ☐ Transport (14)
- ☐ Urban areas (29)
- ☐ Water management (29)

Solution ▾

Technology ▾

Search



RIVER FLOODS

SimuRes

Urban Areas, Water safety
Aquobex



DROUGHTS

The Honey Olive Grove

Agriculture
Javier Domínguez (Freelance landscaper)



RIVER FLOODS

**Water retention through
restoration [...] drained soils**



RIVER FLOODS

NOAQ Boxwall



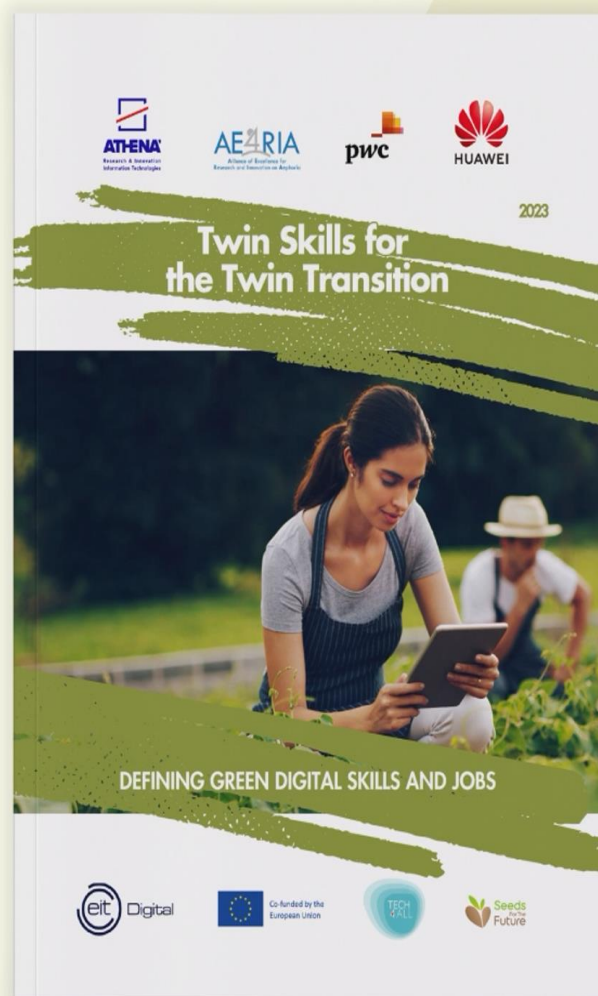
HEAVY PRECIPITATION

**Seed blanket for Extensive
Green Roofs**

DROUGHTS

Halophyte Zeolite Wetlands

Education, Training, Upskilling and Reskilling



DOWNLOAD THE REPORT



***85% of Jobs that will exist in 2030
haven't been invented yet!***

Professor Phoebe Koundouri

Prof. Athens University of Economics and Business

Prof. Technical University of Denmark

Director AE4RIA

Director Athena ICT RC, Sustainable Development Unit

President European Association of Environmental Resource Economists

Chair World Council of Environmental Resource Economists Associations



and SDSN Europe



RESULTS: The New Set of Green Digital Skills

Table 1 Top Green Digital Skills and Occupations (Jobs)

EU Policy ¹⁰	Sector (NACE Rev. 2)	Green Digital Skills	Green Digital Occupations
Corporate Sustainability Reporting (ESG)	All sectors	advising on environmental issues	environmental education officer
EU Taxonomy Regulation		analysing and evaluating information and data	environmental expert
EU Sustainable Finance Disclosure Regulation (SFDR)		complying with environmental protection laws and standards	green ICT consultant
EU Sustainable Investment Plan		computer use	natural resources consultant
Corporate Sustainability Reporting Directive (CSRD)		database and network design and administration	nature conservation officer
EU Action Plan on Financing Sustainable Growth		environmental sciences	sustainability manager
Environmental and Energy Policies		analysing and evaluating information and data	electric meter technician
European Green Deal	Agriculture, Forestry and Fishing	complying with environmental protection laws and standards	electrical transmission system operator
EU Biodiversity strategy for 2030	Construction	computer use	electricity distribution technician
Circular Economy Action Plan	Energy Supply	database and network design and administration	energy assessor
Waste Framework Directive	ICT	designing electrical or electronic systems or equipment	energy systems engineer
Air Quality Directive	Manufacturing	disposing of non-hazardous waste or debris	environmental education officer
Water Framework Directive	Transport and Storage	electricity and energy	geothermal technician
Renewable Energy Directive	Water and Wastewater Treatment	environmental protection technology	green ICT consultant
Energy Efficiency Directive		handling and disposing of hazardous materials	hazardous waste inspector
EU Emission Trading System (EU ETS)		maintaining electrical, electronic and precision equipment	irrigation technician
Just Transition Fund		monitoring environmental conditions	recycling specialist
Connecting Europe Facility (CEF)		operating agricultural or forestry equipment	smart home engineer
Fit for 55		using precision measuring equipment	smart home installer
Industry Policies		analysing and evaluating information and data	acoustical engineer
EU Industrial Policy	Construction	analysing scientific and medical data	botanist
Green Deal Industrial Plan	Energy Supply	complying with environmental protection laws and standards	ecologist
EcoDesign	Health and Social Care	computer use	energy assessor
Critical Raw Materials Act	ICT	database and network design and administration	energy systems engineer
Chips Act	Manufacturing	designing electrical or electronic systems or equipment	environmental education officer
	Mining and Quarrying	electronics and automation	green ICT consultant
		maintaining electrical, electronic and precision equipment	smart home engineer
		using precision measuring equipment	smart home installer



EUROPE - Green-Digital Transition

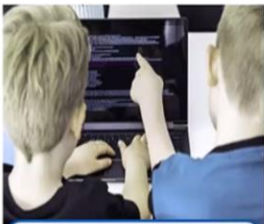
European Green Deal + Recovery Resilience Facility



Supporting the digital transition



Improve connectivity



Help citizens develop digital skills



Deploy cutting edge technologies



Improve cyber security

- Min. 20% of digital-related expenditure

Supporting the green transition = implementation of EU Green Deal



Decarbonise power generation and industry



Promote a more circular economy



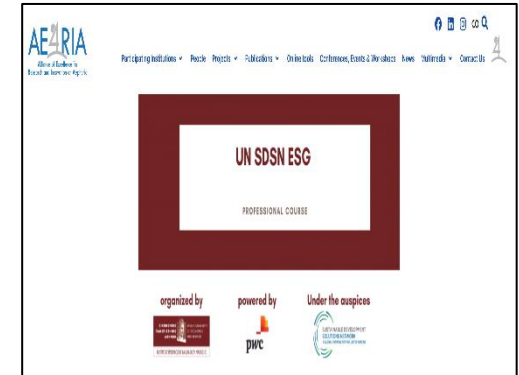
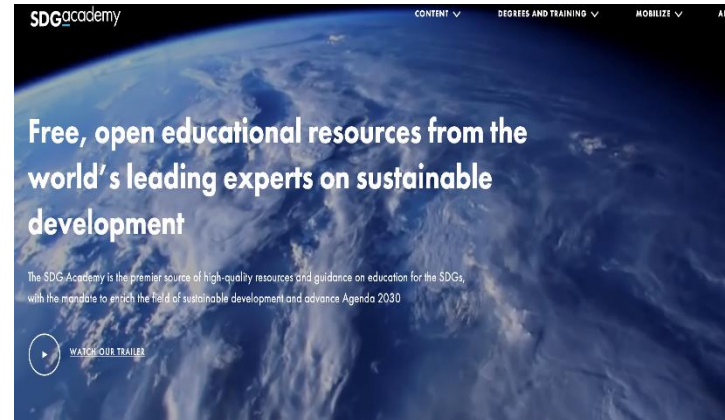
Protect and restore biodiversity



Strengthen sustainable mobility

- Min. 37% of climate-related expenditure
- Each measure to respect “do no significant harm” principle

Education, Training, Upskilling and Reskilling



Mission

To support the green and digital transition by educating and training people, building skills ecosystems, which will also be aligned with national, regional, local and sectoral green strategies.



Supporting Projects



Climate Data
Platforms and
Digital
Applications

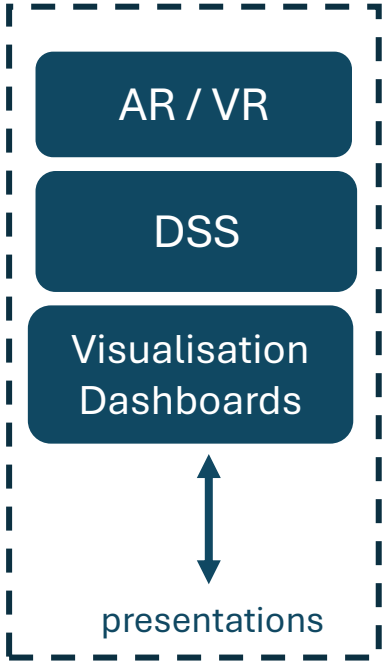
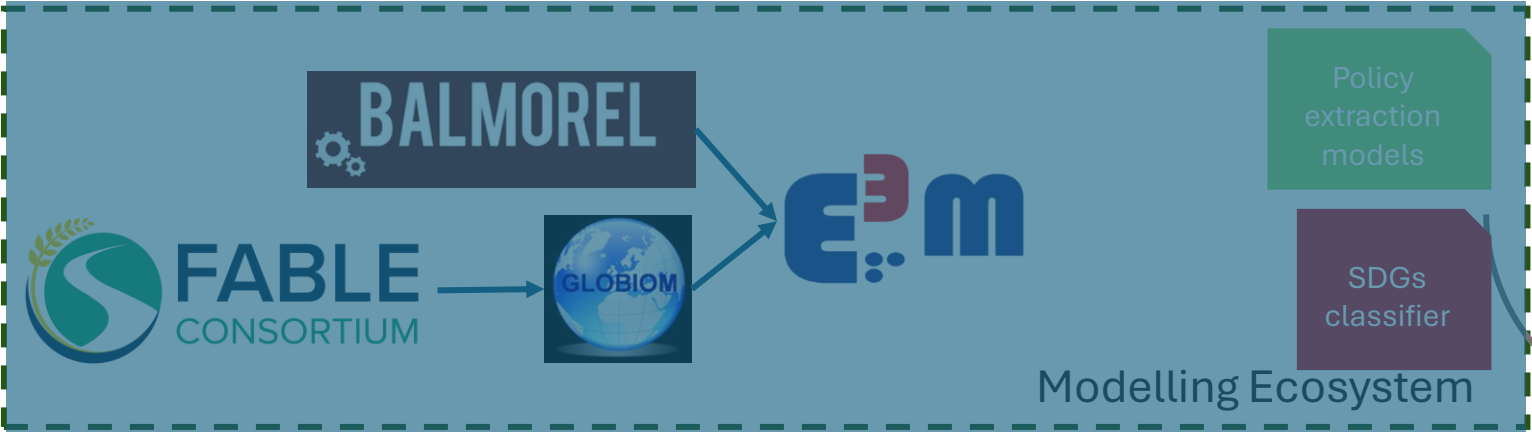


Transition pathways for climate neutrality & resilience

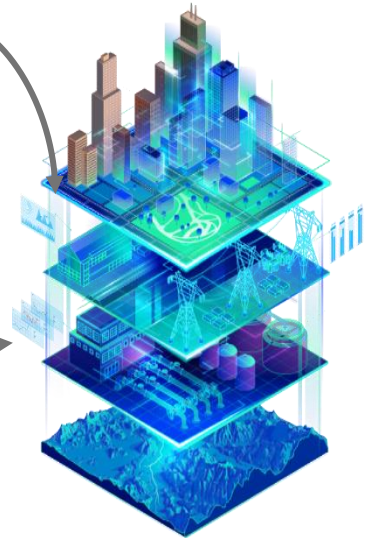
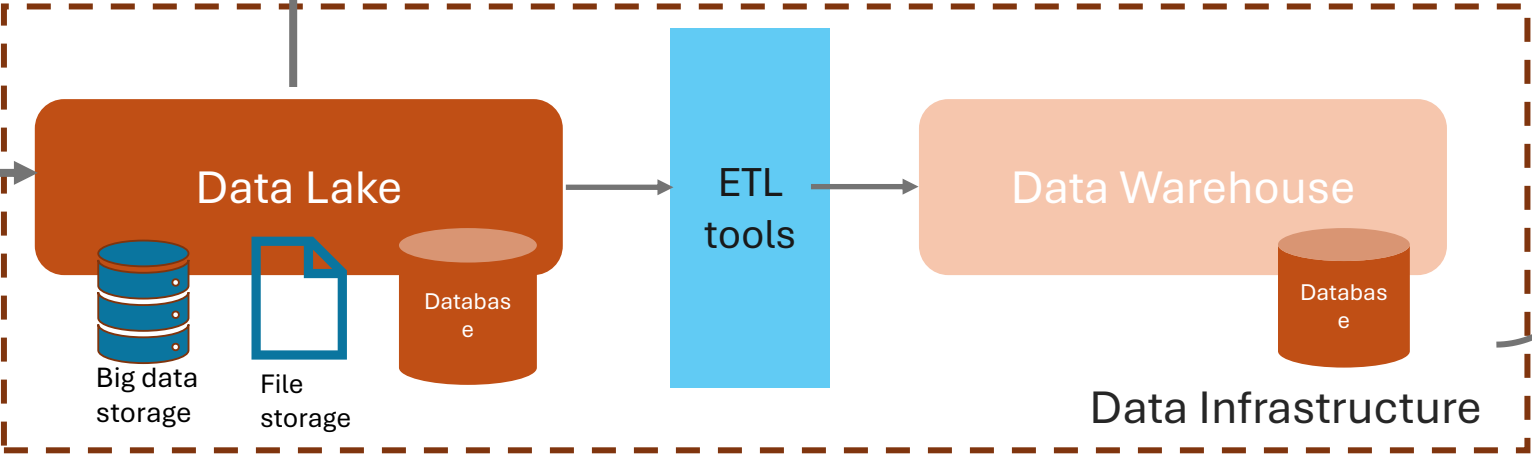
Science-based recommendations

What-if Scenarios and AI-based infrastructure

Supports



- Spatial Data
 - IoT Data
 - Timeseries Data
 - Socio-economic Data
 - Real-time Data
- Data Sources



Digital Twin

THANK YOU

Professor Phoebe Koundouri
phoebekoundouri.org



Alliance of Excellence for Research and
Innovation on Aeiphoria
ae4ria.org



SDSN Global Climate Hub
unsdsn.globalclimatehub.org



ON TRACK TO 2030?

SUSTAINABLE DEVELOPMENT GOALS

DELIVERING ON THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU.

BRUSSELS, 18TH JUNE 2024





Moderator

**Maithreyi
Seetharaman**



**Irene
Tinagli**

Member of European
Parliament



**Mark
Bowman**

Vice President of the
European Bank
for Reconstruction
and Development,
Policy and Partnerships



**Maarten
Verwey**

Director-General
of DG for Economic
and Financial Affairs



**Delphine
Moralis**

Chief Executive Officer
at Philea and
President of the Board
of Directors of Enabel



16:20 – 16:30

VIRGINIJUS SINKEVIČIUS

European Commissioner for the Environment, Oceans and Fisheries

Closing reception

