



System Change Compas

- navigacija do celovite in sistemske rešitve



S SISTEMSKIM POGLEDOM DO PREBOJNEGA PROJEKTA

Urnik srečanja

- **09:30 – 10:15** uvodni pozdrav, predstavitev Systemskega kompasa
- **10:15 – 11:00** 3+1 projekti »preverjeni« v luči Systemskega kompasa, umeščeni v širši kontekst transformacije Zasavja – odprta diskusija
- **11:00 – 11:15 ODMOR** za kavo in mreženje
- **11:15 – 12:00** Delo v skupinah – finalizacija projektnih listov, zapis »pticha« za vsakega od projektov
- **12:00 – 12:30** Vsaka skupina izvede 5 min pitch, komentarji, dogovor za pripravo naslednjih korakov in za jesensko konferenco

15:00 Nogometna vročica



Z nami je - **dr. Janez Potočnik**

Sopredsedujoči Mednarodnemu panelu za vire v okviru programa ZN za okolje

Predsedujoči mednarodnemu svetu Circular Change



Z nami je - **dr. Janez Potočnik**

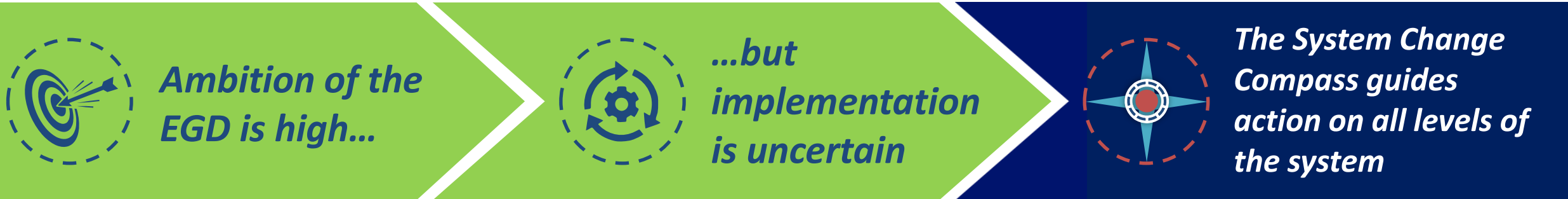
Obrnimo trend – kako učinkovito do večje krožnosti našega gospodarstva?

12. 6. 2024



V torek, 11. junija 2024, so se na Ljubljanskem gradu na mednarodni konferenci v organizaciji Regionalne razvojne agencije Ljubljanske urbane regije (RRA LUR) zbrali priznani strokovnjaki z Norveške, Islandije in Slovenije, da bi predstavili nekatere najboljše krožne prakse, odkrivali nove potenciale za krožnost in raziskali vlogo in možnosti javnega sektorja pri vzpostavljanju krožnega gospodarstva ter zaščiti naravnih virov. Izkoriščanje lokalnih potencialov, krožna miselnost na vseh ravneh, posluš za razvojno naravnane organizacije ter sodelovanje zasebnega in javnega sektorja se kaže kot recept, ki zagotavlja uspeh.

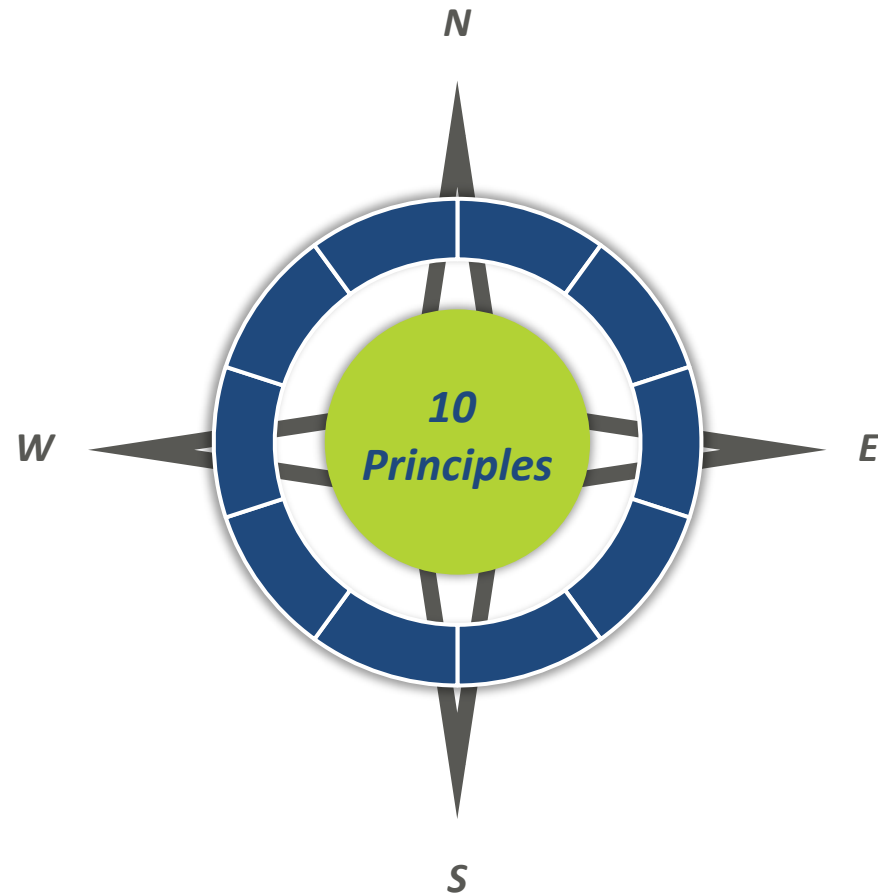
*The System Change Compass contributes to the implementation of the ambitions of the **European green Deal***



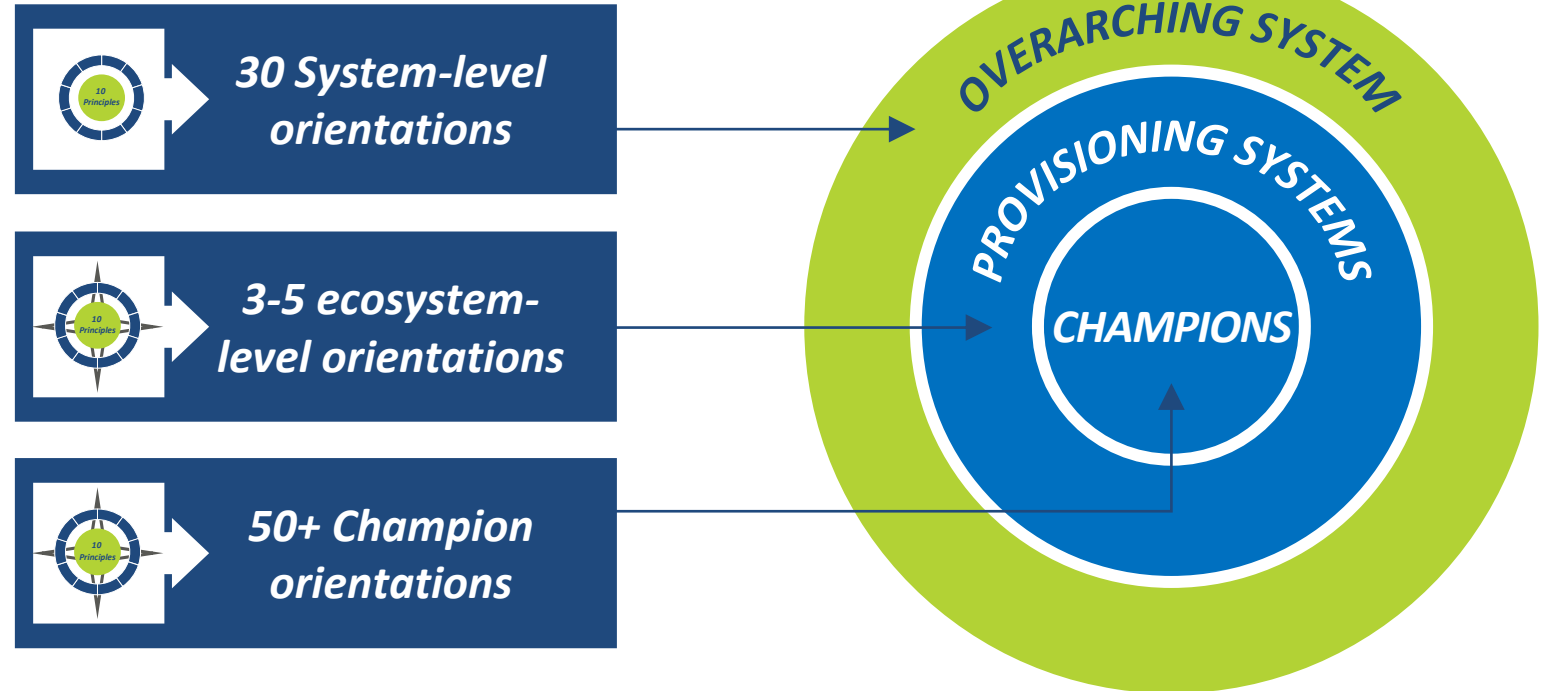
- **Sets zero net emissions** of GHG by **2050** and **decoupling of growth and resource use**
- Acknowledges need for fair and **just transition**
- Aims at **strongly interlinked and mutually reinforcing** policy recommendations
- **Does not sufficiently address drivers and pressures** that cause environmental damage
- **Does not offer systemic perspective** to guide decision-making
- Implementation is put at extra risk due to **war in Ukraine and polycrisis**
- **Maps and envisions** the system in service of people and planet
- **Derives system level orientations** towards desired state
- Charts pathway towards prosperity and wellbeing **within planetary boundaries**

From the IRP science to the System Change Compass

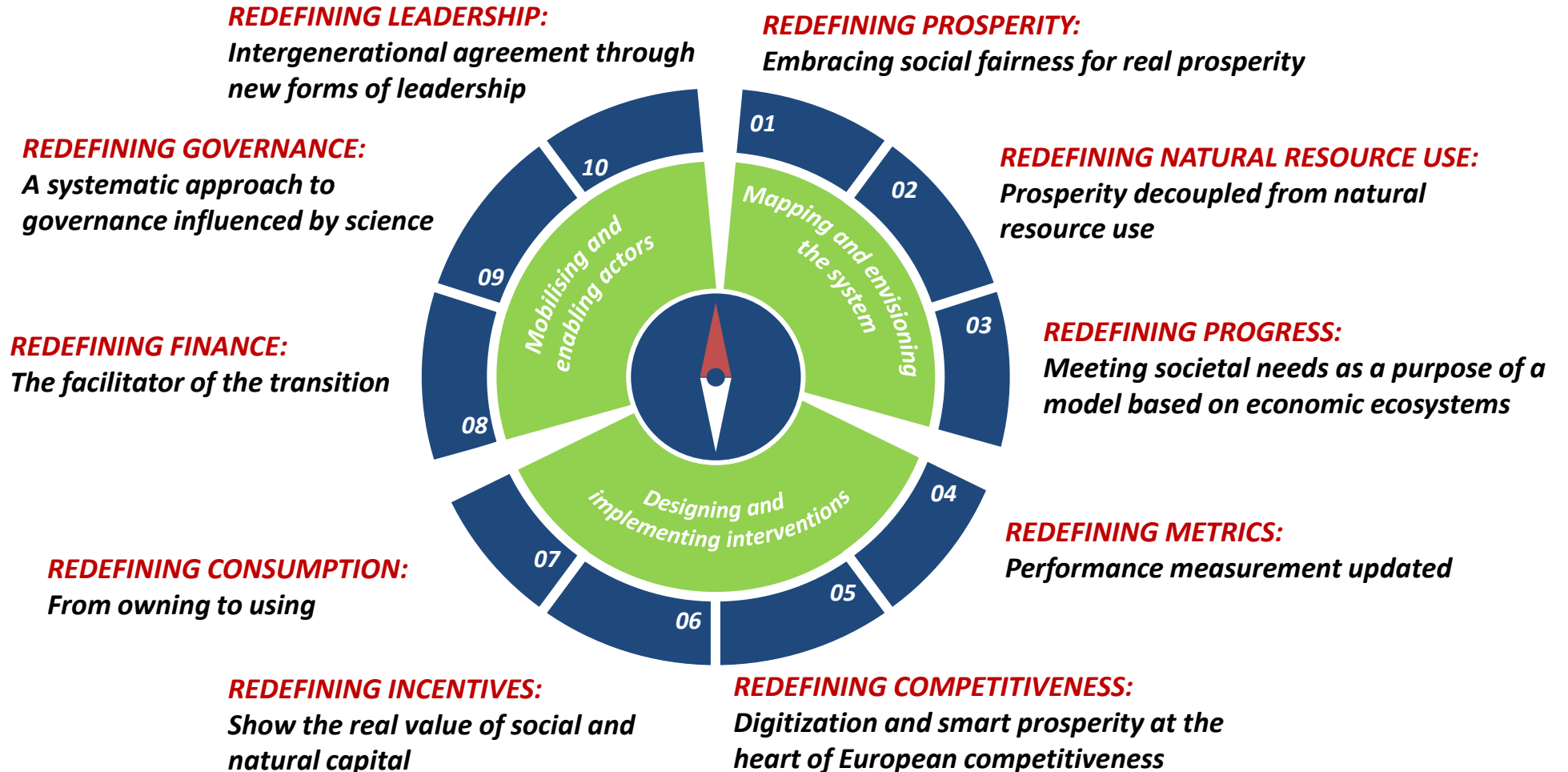
System Change Compass (10 Principles)



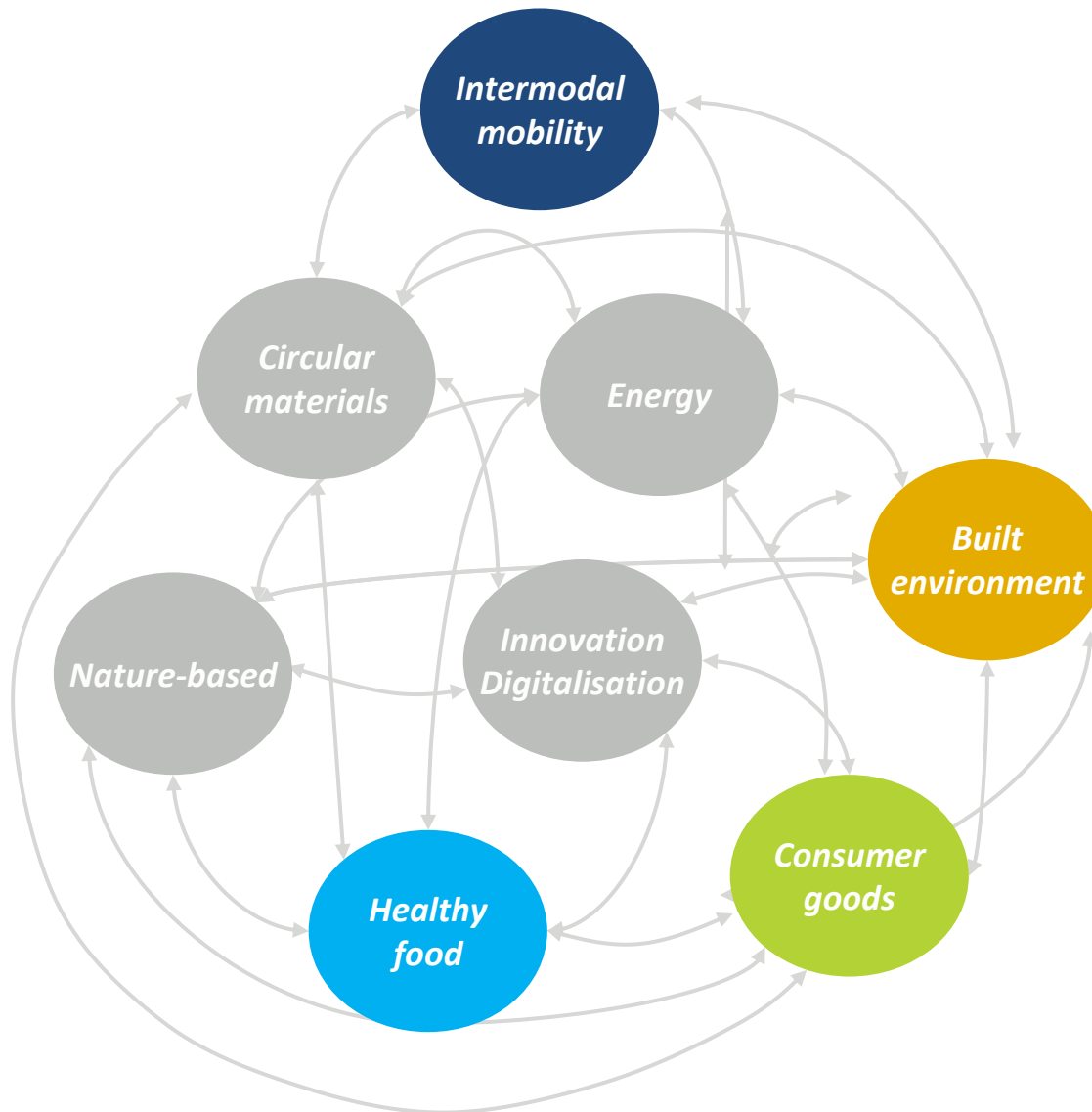
Application to the system to derive systemic orientations



Redefining the Socio-Economic System



Provisioning Systems



Related to resource intensive human needs

 Nutrition  Mobility

 Housing  Daily functional needs

 Resource relevant systems enabling and supporting the provisioning systems delivering societal needs



50+ nascent industrial investment opportunities that should be supported to built ecosystems based on compass orientations

Healthy food



- Organic food and beverages
- Regenerative agriculture
- Sustainable aquaculture and fishing
- Reduce and valorise food waste
- Urban agriculture
- Product reformulation for nutritious food
- Alternative proteins

Built Environment



- Smart urban planning
- Rethink built environment ownership
- Repurpose underutilized buildings
- Retrofit existing buildings
- Fluid and sufficiency-oriented space management
- Circular and net-zero housing

Intermodal Mobility



- Fast charging infrastructure
- High-speed railway infrastructure
- Modern and adapted transit infrastructure
- Car- and ride-sharing models
- End-of-life management for cars
- Electric and autonomous vehicles
- Infrastructure to improve traffic flow and AV adoption
- Green aviation
- Green shipping
- Walking/cycling infrastructure

Consumer goods



- Product-as-a-Service models
- Maintenance and value retention in products
- Peer-to-peer product sharing platforms

Nature-based



- Restoration of degraded land and coasts
- Smart forest management
- Urban greening
- Systems for paid ecosystem services
- Seaweed
- Marine and land-based environmental protection areas
- Ecotourism

Energy



- Renewable power generation
- Energy storage
- Hydrogen economy
- Smart metering and (point-of-use) energy management
- Grid integration and technologies
- Production of low-carbon gaseous and liquid fuels (transition technology only)
- Carbon capture infrastructure (transition technology only)

Circular Materials



- Localised and distributed value chain systems
- Asset recovery systems and reverse logistics
- Markets for secondary materials
- High-value material recycling
- Materials-as-a-Service models
- New materials and high-performing substitutes
- Additive manufacturing

Information and processing



- Distributed manufacturing
- High-speed digital infrastructure
- Digital material information and tracking systems
- Data generation, processing, and protection
- Artificial Intelligence for societal challenges

Redefining Leadership

• Redefining Natural Resource Use

Redefining Progress

Redefining Metrics

Redefining Incentives

Redefining Consumption

1o Compass redefinitions

8 Economic ecosystems

50+ Development Opportunities

*One overarching system
that consolidates the European
economy in its entirety.*

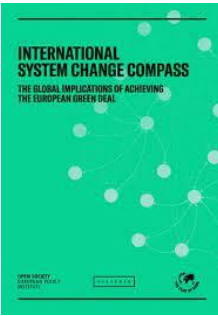
Economic ecosystems can meet a specific societal need (e.g. intermodal mobility system) or support the fulfilment of multiple societal needs (e.g. new energy system).

“Champions” are economic subsystems which could become the new spearheads of the green, resilient and fair post-COVID economy Europe wants to build

10*3 = 30 system-level policy orientations

3-5 specific economic ecosystem policy orientations 50+ economic subecosystems orientations

We need a systemic approach aligned with SDGs and countries most responsible for the current situation should take the lead



- *The **map of resource use** still shows the shadows of an imperialist world, where wealthy nations pursue their ambitions at the expense of others. Making our economies and societies more resilient and fair is **our best defence against any future crises**.*
- *In the longer term any security and stability related issues are not about opening a new economic front. They are, first of all, about **reassessing our values, rethinking our economies and reducing overconsumption and resource use**.*
- ***Standards and behaviour patterns linked to the current economic model were set by high-income countries**. They are ethically bound to show the world, that they are willing and able to change a reality we created, and to lead the essential transition – at home and globally. While the responsibility for the past is clear, responsibility for future is joined and common.*

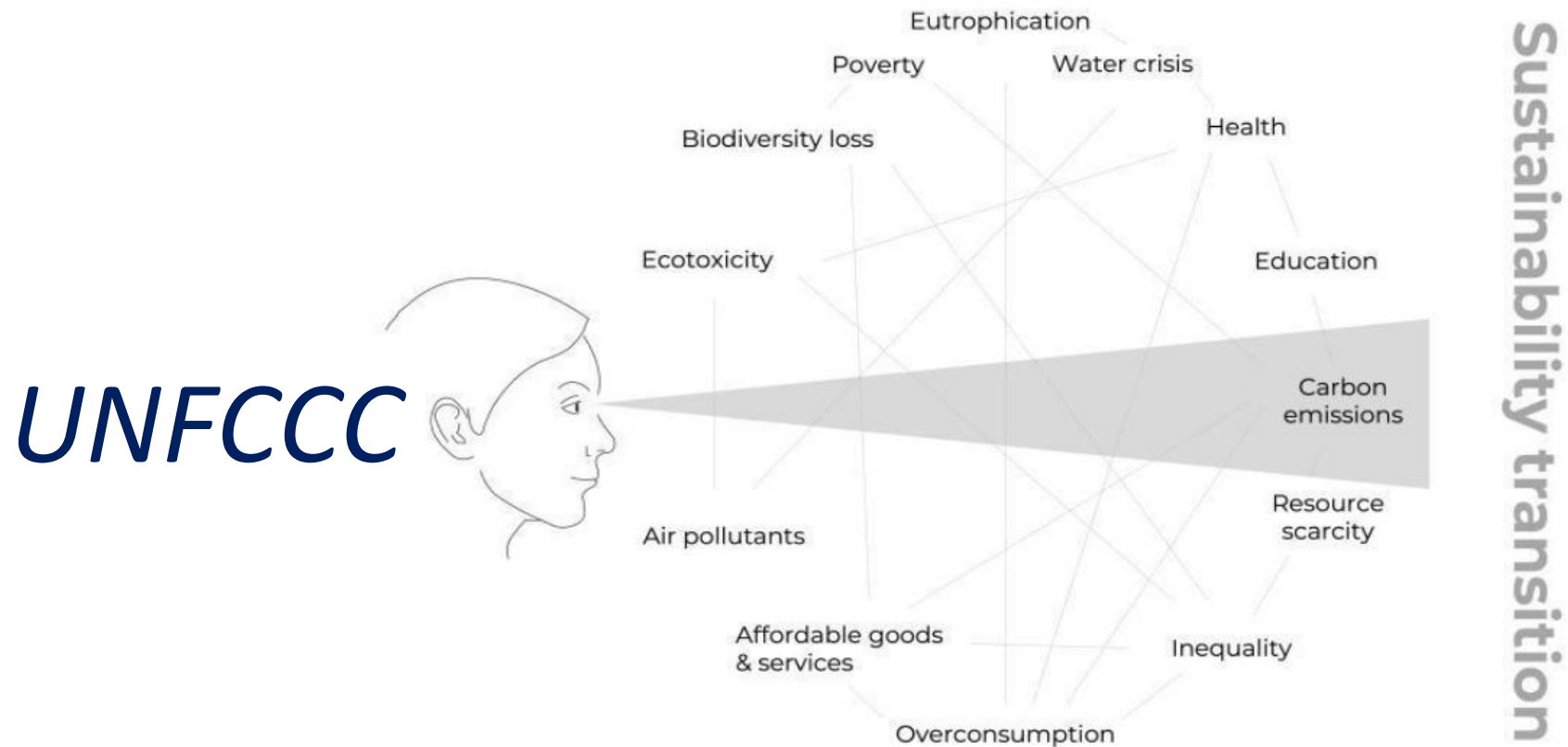
SLEPE PEGE PRI NAČRTOVANJU

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Lack of Holistic System approach

Public leaders lack capacity or knowledge of how to translate system change visions into their concrete policies/investment structures which ends in conflicting policy logics that hinder real transformation

*We need to extend the optic and potential policy options
beyond the currently prevailing energy supply*



This leads to trade-offs and future lock-ins rather than synergies and potential multiple-benefits ➤ and resilient economy and society

A ‘*Glasgow Breakthrough*’ was announced on *road transport* aiming for zero emission vehicles to be the new normal, accessible, affordable, and sustainable in all regions by 2030.



**UN CLIMATE
CHANGE
CONFERENCE
UK 2021**

IN PARTNERSHIP WITH ITALY

System change in road transport means less and more efficient traffic, for more value



Five Levers for Sustainable Car-Based Transport

*Reduce demand
for car-based
transport*



- *Reduce* overall **mobility need** (e.g., through remote work)
- **Modal shift** from cars to foot, bike, & public transport
- **Higher utilization of vehicles** through sharing

*Ensuring remaining
vehicles are as
sustainable as
possible*

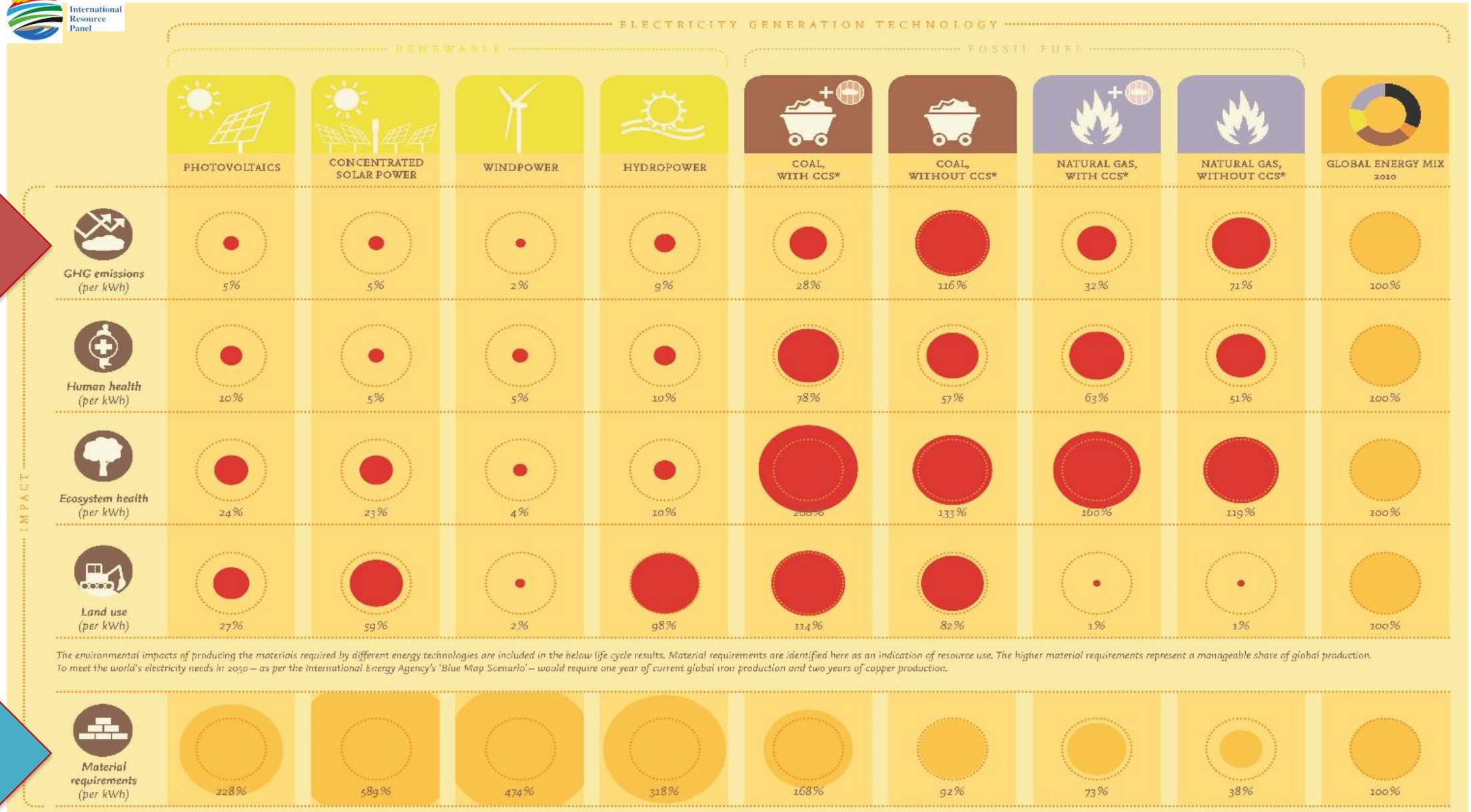


- **Electrification** based on renewable energy
- **Circularity**, maximizing value of used materials

Lack of Resource Perspective

Resource management is not given enough importance within policy making which is linked to the lack in actionable system thinking insights for concrete decisions

Impact of Electricity Generation Technologies

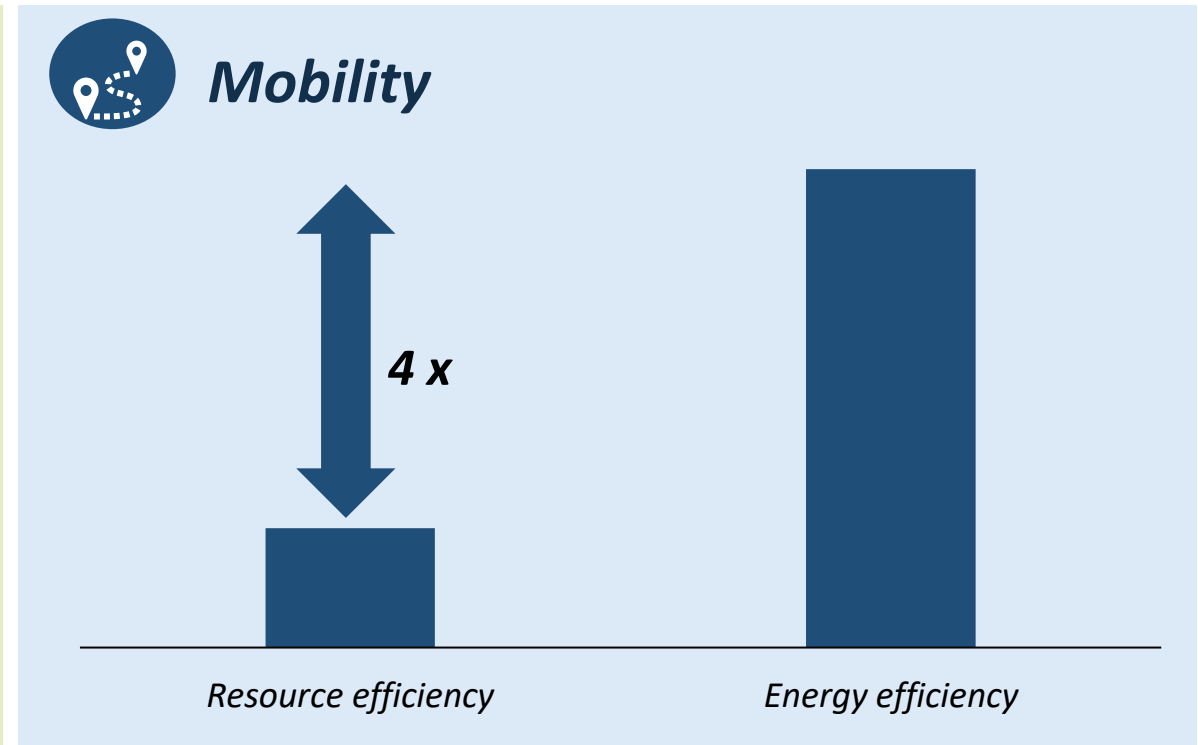
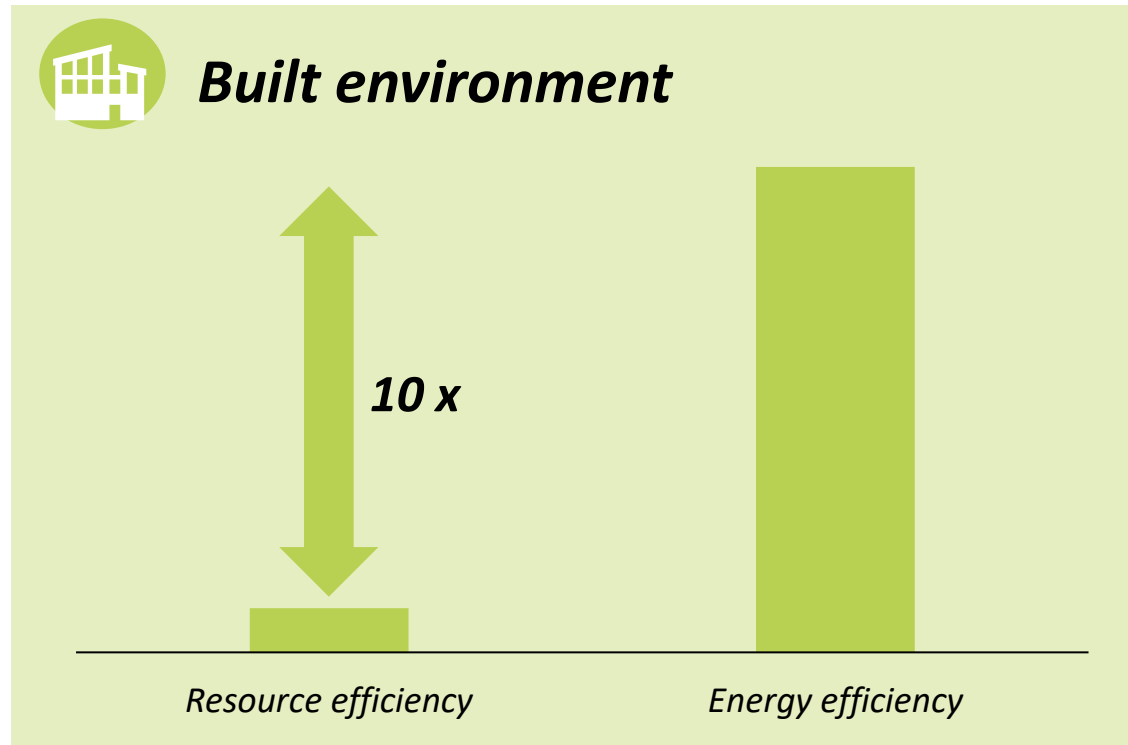


Most climate policies still neglect systemic resource efficiency solutions, and thus miss major opportunities for climate and society

Examples - non exhaustive

G20 Nationally Determined Contributions and **Long-term Climate Plans** focus on energy efficiency and miss out on more systemic resource efficiency opportunities.

Number of policies with quantified targets, illustrative

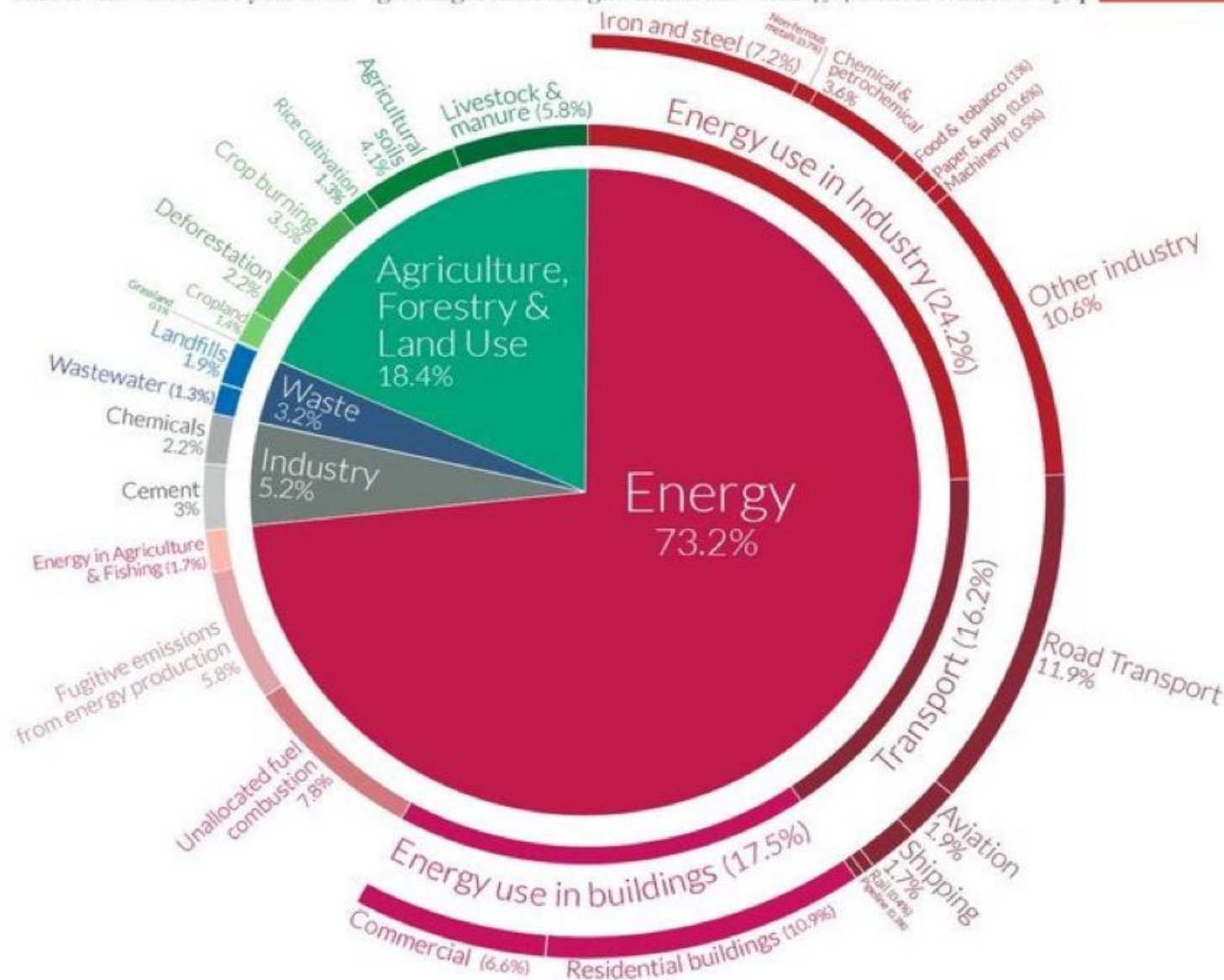


Lack of Demand Side Focus

Policy attention is mainly given to the supply side of the economy, to the cleaning of the existing economic system - lacking the attention to the demand side which is leaving out an important solutions potential and questions of responsibility and equity.

Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.



*Cleaning energy **supply** is central ... but why it is important to look also at energy **demand** side?*

Focusing only on cleaning a supply side will not be enough, nor will lead to a fairer and more equal world

- *Our international efforts, also to fight the climate crisis, remain focused on, and driven by, the supply side. This will not be enough to deliver the targets set.*
- *We must stop ignoring the inherent wastefulness of our production and consumption. For example, it would be in vain to decarbonize the production of steel, if it is used to produce under-used cars and houses, which contribute to traffic and property market bubbles, but not to real social prosperity.*
- *More fundamentally, demand-side measures/consumption side get us closer to the essential questions of responsibility and equity.*
- *National climate commitments should consider including also footprint based indicators and targets*

NAVDIH



OBRUSIMO PROJEKTE: Sistemski pristop, učinkovita predstavitev