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CIRCULAR ECONOMY WHY, HOW AND WHERE

Glasgow, 18th October 2018

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Partner SYSTEMIQ

COOPERATION

WHY WE NEED MORE?

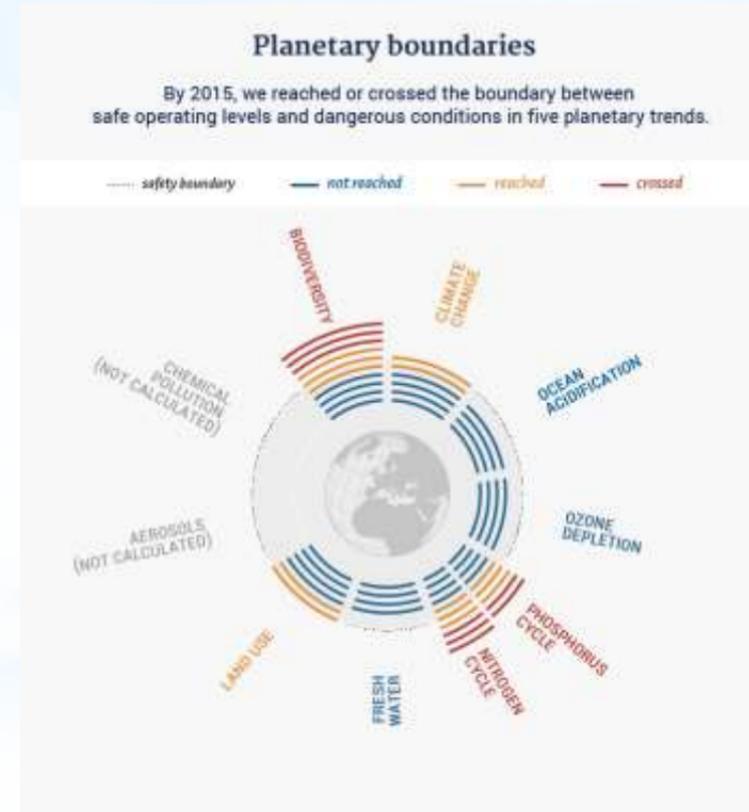


***WE WANT CHANGES ...
BUT WE DO NOT WANT TO CHANGE***

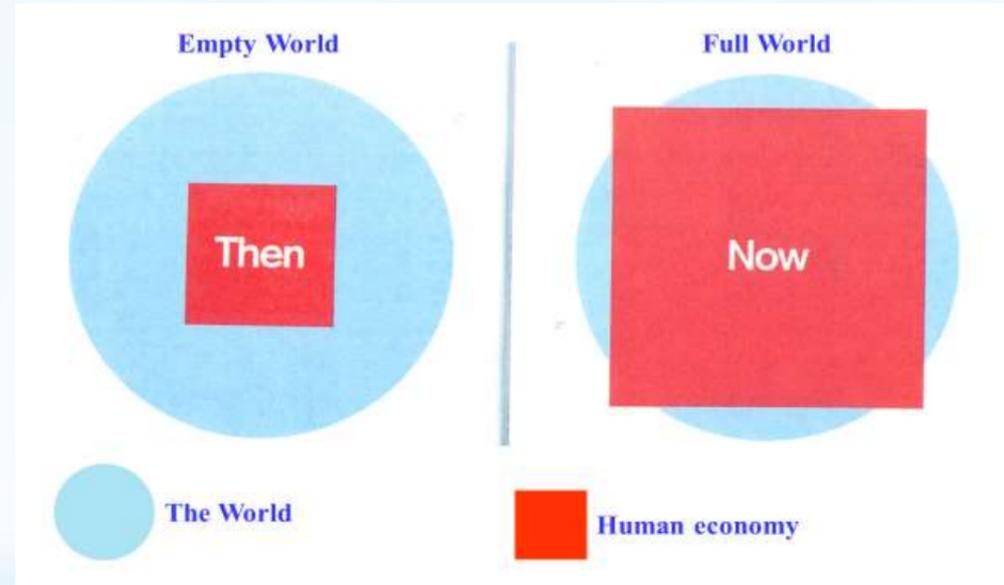
For the first time in a human history we face the emergence of a **single, tightly coupled human social-ecological system of planetary scope**.

We are more **interconnected and interdependent** than ever.

Our individual and collective **responsibility** has enormously increased.

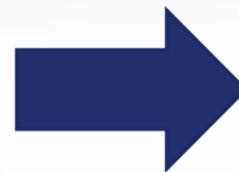


EMPTY WORLD AND THE FULL WORLD



Source: Club of Rome: Simplified after Herman Daly

Labour and Infrastructure
limiting factors of human
wellbeing



Natural resources and
Environmental sinks limiting
factors of human wellbeing

System Initiative on Environment and Natural Resource Security

World Economic Forum - Annual Meeting 2018



- *The challenge seems to not be one of not inadequate scientific evidence anymore; rather it is one of **cooperation and implementation**.*
- *There is a deepening perception of a lack of **synchronicity between economic and environmental policy** responses to global risks.*

SYSTEM INITIATIVE ON ENVIRONMENT AND NATURAL RESOURCE SECURITY

World Economic Forum - Annual Meeting 2018



*Complexity and scale of these challenges requires a space that allows actors with responsibility for those environmental governance mechanisms to be able to consider and experiment with both **new forms of collaboration and more „systemic“ approaches** ... through promoting multi stakeholder cooperation, more agile governance (including sub-state actors, such as cities, states and provinces), the use of new technologies, and enhanced accountability and transparency.*

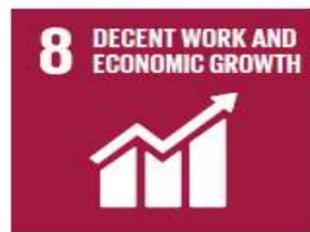
In the 21st Century we do not have any more the luxury of thinking and acting based on short term logic and interests



AND ***OUR COMMITMENT***
OUR OBLIGATION

THE GLOBAL GOALS

For Sustainable Development





International
Resource
Panel



*Trade-offs among various SDGs are unavoidable.
Sustainable Consumption and Production is the most
efficient strategy to mitigate trade-offs and create
synergies to resolve the development and
environmental challenges articulated in the SDGs.*



SDGs DIRECTLY DEPENDENT ON NATURAL RESOURCES



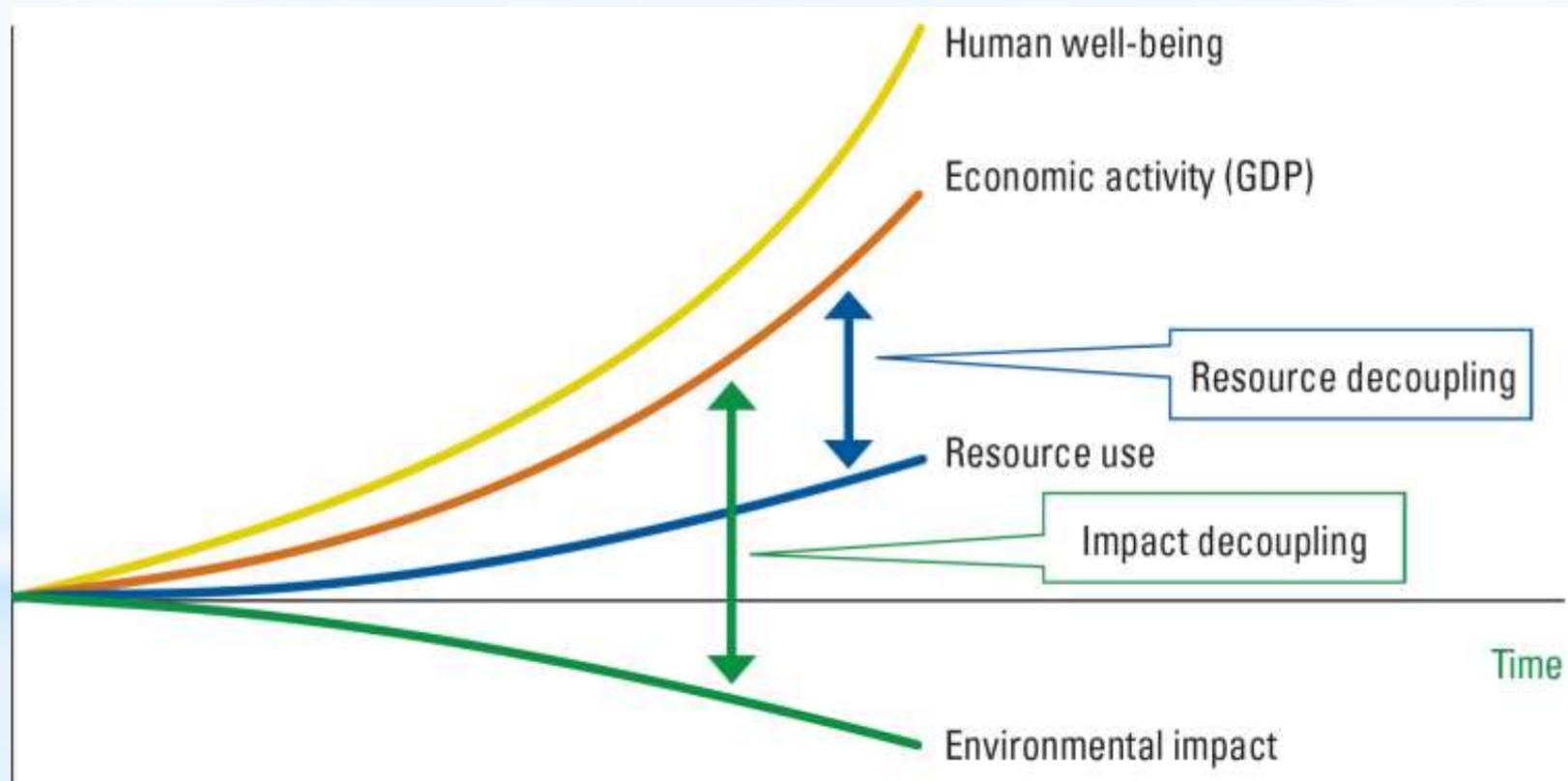


RESOURCES
THE MISSING LINK



International
Resource
Panel

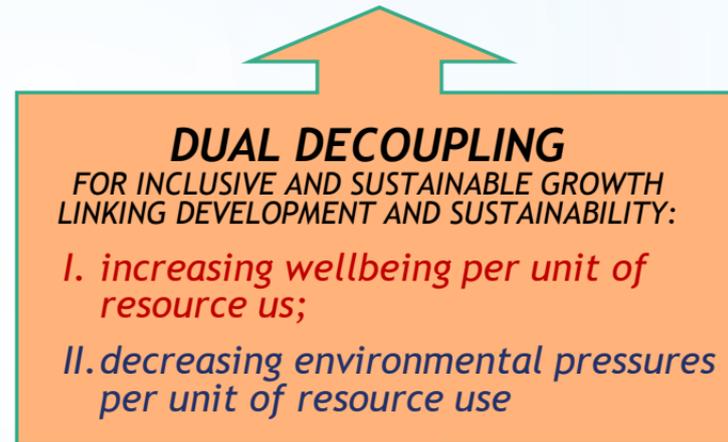
DECOUPLING IS THE IMPERATIVE OF MODERN ENVIRONMENTAL AND ECONOMIC POLICY



AN IMPLEMENTABLE PARADIGM FOR SUSTAINABILITY TRANSITIONS



Essential development needs and provisioning systems

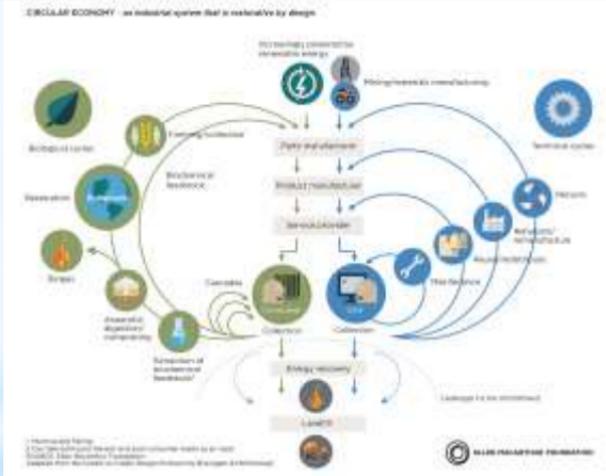


Natural and social capital required to underpin sustainable development



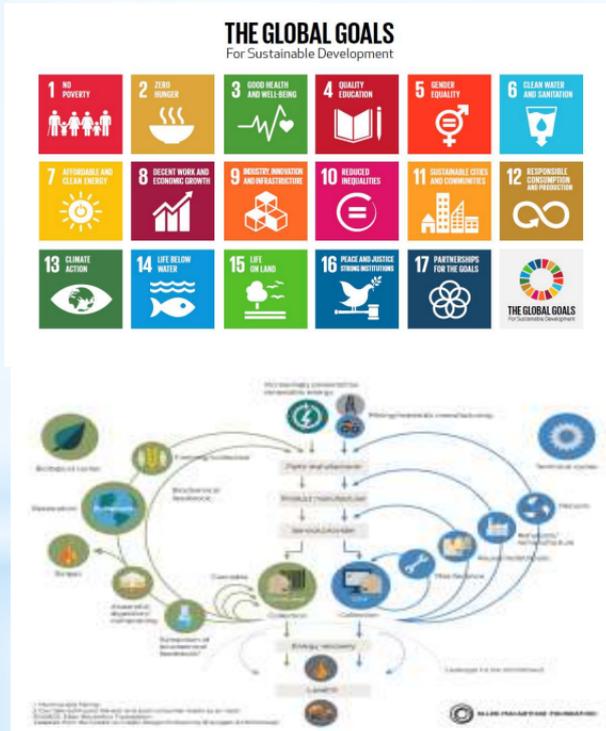
CIRCULAR ECONOMY
PROSPECTS

CIRCULAR ECONOMY



- Started as an **environmental initiative**
- In two years it was **transformed to an economic based initiative** with positive environmental and health consequences
- In reality it should be seen as a **part of the bigger picture of societal and cultural transformation** needed to sustain the humanity and its prosperity central to SDG delivery.

SDGs AND CIRCULAR ECONOMY



SDGs are a new global societal contract to sustain human development and wellbeing. **Sustainable Consumption and Production (SCP)** is an unavoidable ingredient to deliver SDGs and **Circular Economy** is the most important instrument leading to SCP.

WORK ON ALL LEVELS OF GOVERNANCE

Cities and Regions



*A lot could be done on that level due to **relative autonomy** of the governance and many **concentrated CE related problems and opportunities***

Sharing Models, Mobility systems, Waste Recycling, Sustainable Buildings, Energy Efficiency ...

WORK ON ALL LEVELS OF GOVERNANCE

National Level



Encourage governments to strategically approach Circular Economy as an agenda for change for the the **SDG compliant economy transformation**. Many EU Member States have already prepared **Circular Economy Roadmaps or/and Action Plans**. Our aim should be to cover **all EU Members states**

WORK ON ALL LEVELS OF GOVERNANCE

European Union



*Set Circular Economy on the top of the agenda of the next **EU Commission** and future **EU Council Presidencies**.*

- *Start building the **coalition of CE MS frontrunners** ready to put CE as one of **Presidency priorities**.*
- *EC should signal that they are already putting together the ingredients of an **Action plan for the next Commission** to stay in the global lead and also demonstrate they are understanding the opportunity, which exists.*

WORK ON ALL LEVELS OF GOVERNANCE

European Union



- Establish a credible, mutually reinforcing **link between circular economy/SDGs and competitiveness**
- **Build new coalitions for CE change** by broadening ownership of the CE idea - partnering with those dealing with climate change, bio-economy, health, digital transformation, R and I, international relations, development aid, trade ...
- Continue working on **plastics** but add also the **product groups** beyond the plastics (textile, food ...) into future CE programmes, improve the **extended producer responsibility and eco-design** to deliver the whole potential and focus on **economic signals and drivers** - taxes, subsidies, public procurement
- Continue working on **greening the financing** and exploit the potential of blended finance logic and initiatives. Focus on **retaining value** in the CE process and on **social aspects of CE transition** (employment, inclusiveness, local benefits)

WORK ON ALL LEVELS OF GOVERNANCE

Global Level



Building new coalitions for by broadening ownership of the CE idea:

- Exploit all the possibilities of *linking CE to already existing international initiatives*, conventions in particular those around climate change and biodiversity loss. Bring closer also the *science-policy interface* bodies (IPPC, IPBES, IRP).
- *Broaden the coalition of UN bodies* around CE: UNEP, WHO, UNDP, UNIDO, UNCTAD would be first logical choices. A lot of knowledge has already been created in various circular economy related circles and we should figure out how to organise ourselves to use it more effectively.
- Extend political and policy presence from UN Environment Assembly (*UNEA*) to High Level Political Forum (*HLPF*) and UN General Assembly (*UNGA*)

WORK ON ALL LEVELS OF GOVERNANCE

Global Level



- Special attention should be given to **least developed countries**. Their problems are different, solutions have to be specific, acknowledging differences. We need to be able to show how transitions can work, specifically for developing countries and resource exporters - what does leap-frogging to a CE mean for them.
- In that context we should in particular **focus on social aspects of CE processes** (employment, inclusiveness, local benefits), which are crucial for better acceptance of the CE. It should be understood that CE is not another western type of model used to expand to protect our own competitiveness and interests.
- Transition to a CE will inevitably lead also to some who will lose in transition. Many of them have in the past invested in good faith not being aware of negative side effects of their activities. We have to help them with public support and make sure that the **transition** will be **fair and inclusive**.

WORK ON ALL LEVELS OF GOVERNANCE

Global Level



- Work on an agreement on the *cross-cutting key importance of natural resource use for all levels of human wellbeing*.
- This could potentially be organised in a form of an *UN Convention for Natural Resources Management*. Option should be carefully exploited. It could also help bringing more coherence in the CE developments and help establish necessary *global standards* enabling better development of CE concept also in international trade. It could also be helpful in establishing the *comparable CE indicators* to measure and follow the progress.

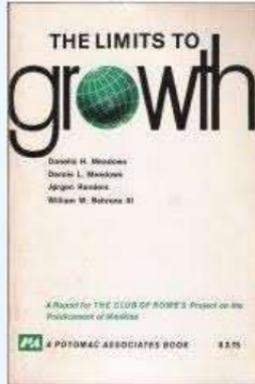
WORK ON ALL LEVELS OF GOVERNANCE

Global Level

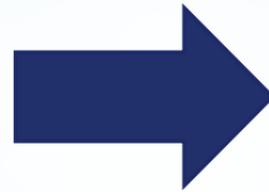


We should continue working actively to *bringing together the leading business actors*. Many businesses express that they are not afraid of more regulation but of *unfairness, free riders and uncertain risk*. If we make policies fair, consistent and reliable - we can work together across policy and business actors for a real transition.

BETTER LINK CIRCULAR ECONOMY AND COMPETITIVENESS



From
Limits to growth



To
Growth of Limits



- *Those* that will be *best able to cope with these limits* (i.e. those that will create most value with least virgin or finite resources) should/will also be *most competitive*

BETTER LINK CIRCULAR ECONOMY AND COMPETITIVENESS

- *We have to engage more directionality in the development and use of new technologies so that they create value for society. We need **more creative destruction** rather than destructive creation*
- *More **innovation imperative** will also be needed in policy-making*
- *We have to start better linking the **longer term** perspective with actions in the **short term***



CIRCULAR ECONOMY
AND CLIMATE CHANGE

CLIMATE

CARBON MANAGEMENT

LAND

WATER

ENERGY

MATERIALS

DECOUPLING

RESOURCES

PILLARS FOR EFFICIENT CLIMATE CHANGE POLICY

*SUPPLY SIDE
SOLUTIONS*

*DEMAND SIDE
SOLUTIONS*

*NATURE BASED
SOLUTIONS*

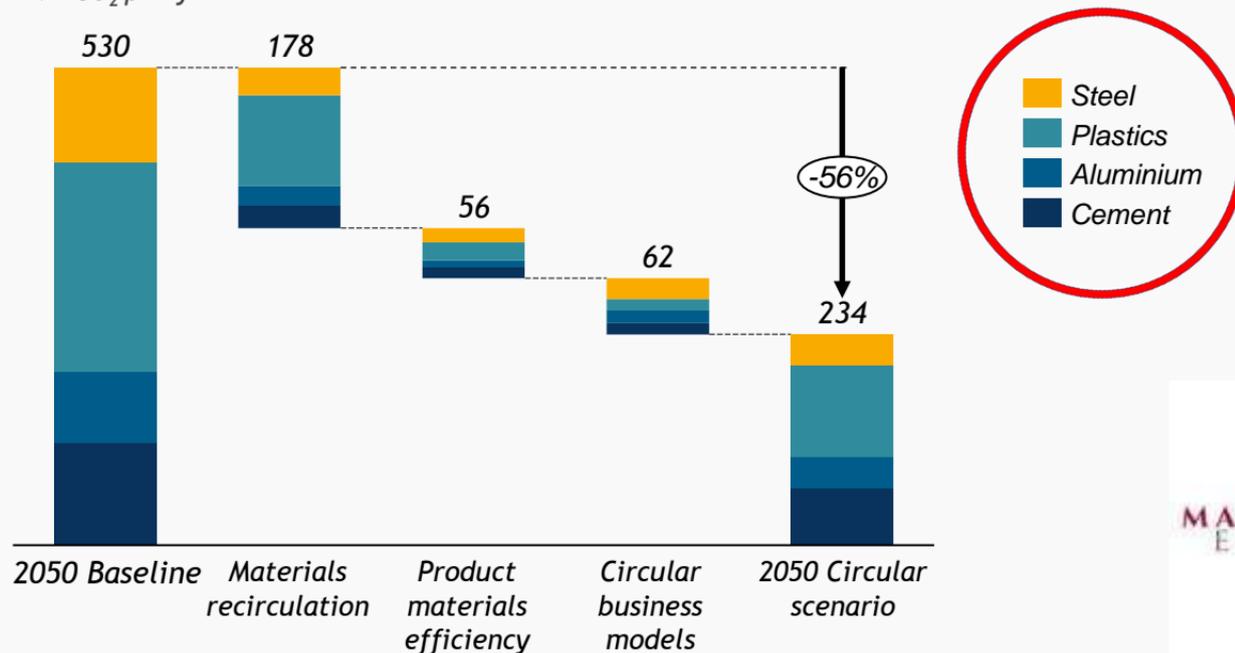
*Energy,
Carbon management*

*Circular Economy,
Land, Water,
Materials
Management*

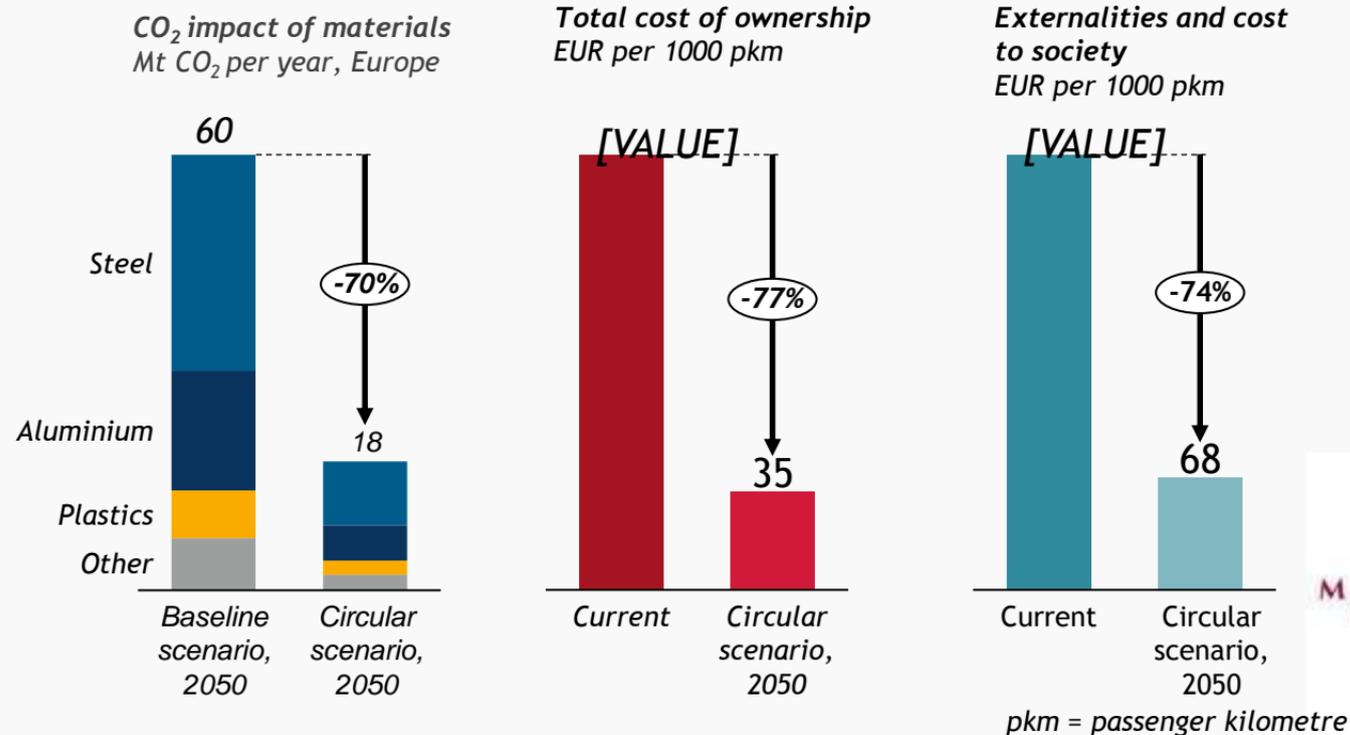
*Eco-system services
Environmental sinks*

A MORE CIRCULAR ECONOMY CAN REDUCE EU EMISSIONS FROM **MATERIALS** BY 56%

EU emissions reductions potential from a more circular economy, 2050
Mt CO₂ per year



A **SHARED MOBILITY** SCENARIO IS A HIGHLY ATTRACTIVE VISION FOR **PASSENGER CARS**



IRP

FOCUS AND DEVELOPMENTS

Address a request from the second session of the **UNEA - United Nations Environment Assembly (Resolution 2/8)**

- Provide reports on the state, trends, and outlook of **sustainable consumption and production**.
- Prepare a global assessment on **natural resource use and management** (to be submitted to the UNEA4 in 2019).

Presented to the **G7** and **G20**: Intellectual work on the **linkages between resource efficiency and economic growth** as requested by the two groups in 2016 and 2017.

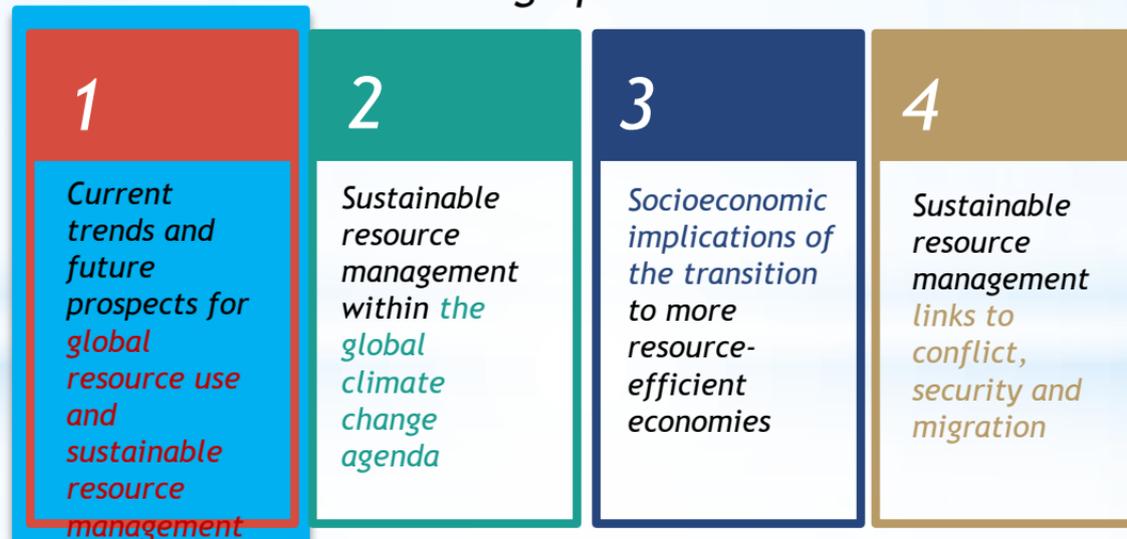


21st Meeting of the International Resource Panel, Lima, Peru, 2017



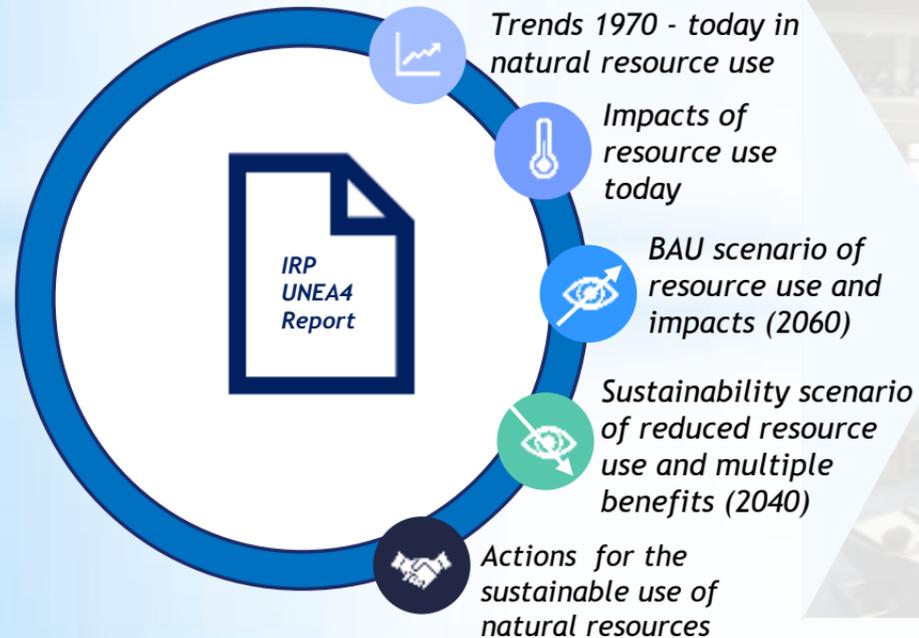
THE WAY FORWARD: 2018-2021 STRATEGY

High Impact Priority Areas for IRP's upcoming knowledge production



To engage the private sector more in the Panel's scientific and policy results

Structure of the report



Purpose of the report

- contribute to a better understanding of sustainable development from a natural resources perspective
- provide science-based options for policy innovations on how to decouple economic growth from environmental degradation while enhancing human wellbeing



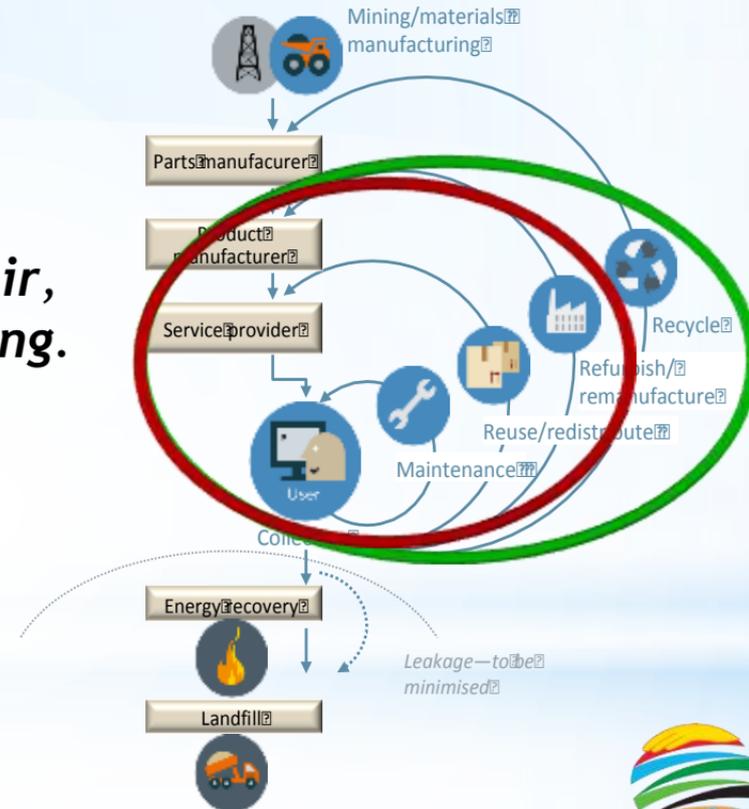
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just
released

Redefining Value - *The Manufacturing Revolution. Remanufacturing, Refurbishment, Repair and Direct Reuse in the Circular Economy*

Focus on production processes that **retain value** within the circular system through: **direct reuse, repair, refurbishment, and remanufacturing.**

- **Product Perspective**
- **Production Perspective**
- **Barriers Perspective**
- **Design Perspective**
- **Policy Perspective**



OVERVIEW OF CASE STUDY SECTORS, PRODUCTS AND SAMPLE ECONOMIES ASSESSED



<i>Case Study Sectors</i>	<i>Case Study Products</i>	<i>Sample Economies</i>
<ul style="list-style-type: none"> Industrial Digital Printers 	<ul style="list-style-type: none"> Digital Production Printer Digital Printing Press #1 Digital Printing Press #2 	 <ul style="list-style-type: none"> Brazil China Germany USA
<ul style="list-style-type: none"> Vehicle Parts 	<ul style="list-style-type: none"> Vehicle Engine Vehicle Alternator Vehicle Starter 	
<ul style="list-style-type: none"> Heavy-Duty and Off-Road (HDOR) Equipment Parts 	<ul style="list-style-type: none"> HDOR Engine HDOR Alternator HDOR Turbocharger 	



EXPAND

include VRPs as gateway activities to recycling.

ESTABLISH & ENFORCE

clear standards, guidelines, and compliance for each class of VRP.

ELIMINATE

regulatory barriers that interfere with movement of cores and finished products.

INVEST

in accelerated VRP adoption via funding to VRP producers for R&D and skilled labor.

Recommended Policy Priorities

LEAD-BY-EXAMPLE

by adopting VRP-friendly public procurement practices and policies.

ENGAGE & EDUCATE

customer markets about VRPs.

IMPLEMENT

accessible and efficient end-of-use product collection systems to support reverse-logistics.

ADOPT, ACCEPT & ALIGN

VRP definitions across different countries and internal agencies.

ADOPT

an expanded systems-perspective that includes design-for-reman.

COORDINATE

with internal company stakeholders to facilitate intra-firm resource and knowledge-sharing.

PARTNER

with other industry members to provide active customer market education and awareness.

MODIFY

design priorities to include essential VRP principles (e.g. design for disassembly).

PROVIDE

transparent and credible information to customers about VRPs and VRP product quality.

Recommended Industry Priorities

EVALUATE

existing product lines to identify new opportunities for VRPs within the product-system.

COLLABORATE

with industry members and policy-makers to identify and communicate about key barriers.

DEVELOP, RATIFY & ENFORCE

VRP standards and practices.



TO CONCLUDE



GLOBAL RESOURCE ASSESMENT 2017



Recommended policy strategies

- 1. Set targets and measure progress*
- 2. Develop a national plan and act on key leverage points across all levels of governance*
- 3. Take advantage of leapfrogging opportunities*
- 4. Implement a policy mix that builds incentives and corrects market failures*
- 5. Promote innovations toward a circular economy*
- 6. Enable people to develop resource efficient solutions*
- 7. Unlock the resistance to change*
- 8. Strengthen cooperation and reach a consensus for coordinated global actions*

RESPONSIBILITIES OF THE BUSINESS SECTOR

Change the risk management to be aligned with the SDGs

From being a pure product or service providers managing the risks of the company through profit maximisation



To socially responsible companies managing also the risks of the society

*CIRCULARITY AND
GLOBAL GOVERNANCE*



*INTRODUCING MORE OF THE SHARING
SOVEREIGNTY INSTEAD OF OWING SOVEREIGNTY*

- If we are to *avoid globally extensive and inter-systemic crisis and frequent conflicts* than let's get serious about implementing what we have agreed in SDGs. Changes are *unavoidable* and humans are supposed to be intelligent. It is high time to prove it.
- Change will not appear by waiting for the leadership of others, *be the leaders* on your level of governance and authority ... in politics, in business, academia, civil society, in making your investment decisions ...

Any global transition is a major new opportunity for the innovation, new development opportunities, new jobs

And alternative ...

I would rather not think and talk about it!

The CE genie is out of the bottle

(Apple, HP, Siemens, Alstom, BMW, Renault, Michelin, Veolia, Dow Chemicals, Walmart, Arup, BSF, CISCO, Caterpillar, Kingfisher, Ikea, Microsoft, Philips, DSM, Solvay, SUES, Steelcase, Unilever, Tetra Pak, Google, Danone ...)

Major economic actors have moved.

CE connects competitiveness and sustainability.

CE is about transition to the SDG compliant economy.

How to overcome short termism inbuilt in our democratic political systems and institutions (public, financial...) which is in fundamental conflict with the system change needed?

Transition to the CE is a truly Herculean Effort

HERCULE POIROT



When asked why he is speaking about himself always in a third person he replied something like that:

If one is such a genius like myself, it is very important to establish a healthy distance to himself

CHRISTIAN LOUBOUTIN

French fashion designer



*If you do what you
love, it is the best
way to relax*



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THANK YOU

For more information

Contact IRP Secretariat at resourcepanel@un.org

Visit our website at <http://resourcepanel.org/>