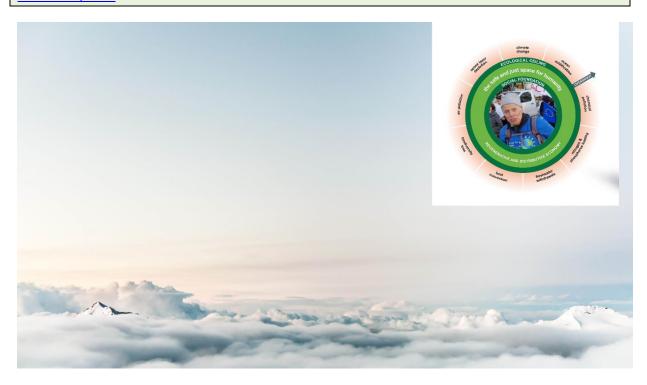


### **EU Doughnut - Taking stock and keeping the momentum**

# Transforming our world in planetary emergency: Farewell to a sustainability activator

### 14 July 2022

The recording of this event and all related materials including this speech are available at the Doughnut for EU page of the Doughnut Economics Action lab (DEAL) site at EU Commission experiments with Doughnut Economics | DEAL



## Farewell speech

# Thomas Arnold, Advisor Sustainable Development Goals, DG Research and Innovation

(Full manuscript with references)



# Sustainability Horizons 2022/01

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Colleagues, friends, partners, guests

I have reached the age limit of 65 yesterday and shall retire from active service of the European Commission at the end of this month.

#### First, thank you

#### Thank you to you, Jean-Eric<sup>1</sup>

Collaborating with you, as Advisor Sustainability Goals, has been a decisive moment of my career. You have given me a space to think the unthinkable, to voice the uncomfortable, to spot the disruptive and see it become the transformative, and sometimes the new mainstream. I hope that I made my modest contribution to your transformative project for DG Research and innovation, making EU policies more responsive to face the multiple intertwined challenges for humanity. You are now leaving to new horizons. We are many to hope that your seeds of sustainability will further grow, flourish and regenerate. Without your support, some of the deeply transformative activities we pursue today would not have happened.

#### Thank you to you, Kate<sup>2</sup>

Cooperating with you and your team over the years has been a great honour, helping to activate ideas and actions towards a more sustainable economic model and wellbeing across the institutions. Let us be 'activators'. Let us further grow the Doughnut4EU<sup>3</sup> and plant new seedlings across even more policies.

#### Thank you to you, Janez<sup>4</sup>

Thank you for being here. Over the years, we have met regularly and exchanged views and insights. This has been truly enriching and I am looking forward for this to continue after my retirement.

#### Thank you all for participating in today's event, and for preparing and running it.

Thank you to all the speakers<sup>5</sup> who have shared their passion and insights on how to keep up the momentum, and how to move beyond. This has been a firework of transformative energy. Thank you Maciek, Joachim, Frank, Nick, Roman, Barbara, Laure, Sasa, Lorenzo, Peter, Jonathan, Sandrine, Karen, Laurent, Nikos, Kerstin, Sébastien, Anna and the EUStaff4Climate crowd, Yamina, Jeroen, Jean-Pascal, Olivier, Humberto and Adelaide. Thank you to Claudia, Tassos, Obhi, Christian and Jerome for running the show.

<sup>&</sup>lt;sup>1</sup> <u>EU research chief reflects on successes and acknowledges 'unfinished business' as he bows out | Science | Business (sciencebusiness.net)</u>

<sup>&</sup>lt;sup>2</sup> About | Kate Raworth

<sup>&</sup>lt;sup>3</sup> EU Commission experiments with Doughnut Economics | DEAL

<sup>&</sup>lt;sup>4</sup> Janez Potočnik | Resource Panel

<sup>&</sup>lt;sup>5</sup> Full names are in the agenda in annex

#### Thank you to all my wonderful colleagues in DG RTD, across the Commission and beyond.

You are too many to name all here without doing injustice to anyone omitted. Throughout my jobs in the Commission, I have been involved in many different work strands. This has allowed to cross-pollinate ideas, to draw the larger picture within its interconnected systems, to leverage multiple wins and co-benefits, but also to highlight blind spots, voice dissonances and, politely put, point to areas of further improvement in our approaches and polices.

#### Thank you to our institution.

I have had the opportunity to have a great career in the European Commission many would have dreamed to have. While aware of this privilege, I think I can say with confidence that I have delivered on advancing sustainability across the institution and raising awareness about our deep transformations ahead. Deeply transformative policies are made of positive solutions built on deep systemic disruption.

#### Thank you to the community of RTD Knowledge for SDG Talks.

From these talks<sup>6</sup>, we all have learned a lot on systemic sustainability challenges: on the thread of Earth system tipping points and the power of positive social tipping points, on inequality and its links to planetary pressure and lifestyles, on the need for transformative economics, on why elsewhere and later count in the sustainability conversation. Global spillovers from our overconsumption and discounting the future are not laws of nature.

#### Then, I am so grateful that I could contribute to build EUStaff4Climate<sup>7</sup>

We have helped our leaders to dare and be more ambitious. We have demonstrated convincingly with a petition signed by more than 11.000 colleagues in early 2019 that there is strong support from inside the institutions to come up with bold policies that are up to the challenges of climate breakdown and the planetary emergency. It has been encouraging to see, only a couple of months later, the adoption of a deeply transformative European Green Deal, which is a big step towards the unprecedented change we need.

Importantly, EU institutions can gain reputational benefit, if they can showcase to the outside that they are not made up of an army of single-minded bureaucrats, but a vibrant community of conversation and engagement, co-creating positive policies for the wellbeing of citizens and the public good. We are more credible, and we are more relevant and stronger, if inside the institutions, we mirror the vision of open, democratic and diverse societies we wish to create.

<sup>&</sup>lt;sup>6</sup> "Knowledge for SDGs talks" now available online | European Commission (europa.eu)

<sup>&</sup>lt;sup>7</sup> <u>EU Staff 4 Climate – a bottom-up initiative led by EU staff in their individual/private capacity that brings together colleagues from across the EU institutions who are deeply concerned about the climate, ecological and social crisis facing our planet</u>



# Hard challenges, uncomfortable messages and unconventional solutions<sup>8</sup>

A rapidly closing window of opportunity in a world where the economic system is at fault and root causes need to be addressed globally

"The scientific evidence is unequivocal: climate change is a threat to human wellbeing and the health of the planet. Any further delay in concerted global action will miss a brief and rapidly closing window to secure a liveable future," is a bold message from the latest IPCC WG 2 report<sup>9</sup> presented a couple of days after the Russian invasion in Ukraine.

"There is a dominant global focus on short-term profits and economic growth, often excluding the consideration of multiple values of nature in policy decisions," finds the Biodiversity and Ecosystems panel IPBES in its "Values Assessment" presented earlier this week. "The causes of the global biodiversity crisis and the opportunities to address them are tightly linked to the ways nature is valued in political and economic decisions at all levels" 11.

"The EGD [European Green Deal] and its initiatives are not tackling the major driver of emissions and environmental degradation—which is overconsumption in high income countries, including in Europe," according to the International System Change Compass<sup>12</sup>.

These findings are clear. 1) We have no time. 2) The economic model, with its underlying assumptions and value systems, is a root cause for our problems. 3) There is no solution without addressing the root causes of the planetary emergency in its global context.

I use the term planetary emergency to express the idea that all our crises - climate breakdown, nature destruction, resource overuse, and others - are interrelated and mutually reinforcing.

These thoughts do not represent official views of the services of the European Commission; they are my personal takeaway on some difficult issues, drawing from my experience as Advisor Sustainable Development Goals, shared here at the occasion of my retirement.

<sup>&</sup>lt;sup>8</sup> This part has been shortened in delivery.

<sup>&</sup>lt;sup>9</sup> Climate change: a threat to human wellbeing and health of the planet. Taking action now can secure our future — IPCC

<sup>&</sup>lt;sup>10</sup> Assessment Report on Diverse Values and Valuation of Nature | UNEP - UN Environment Programme

<sup>&</sup>lt;sup>11</sup> Media Release: IPBES Values Assessment - Decisions Based on Narrow Set of Market Values of Nature Underpin the Global Biodiversity Crisis | IPBES secretariat, Summary for policymakers of the methodological assessment of the diverse values and valuation of nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) | Zenodo

<sup>12</sup> International System Change Compass (systemiq.earth)



#### Systems case rather than business case to frame policies and guide investments

One of the winning proposals for the Doughnut's "8th way to think like a 21st century economist" is shifting from business case to systems case<sup>13</sup>. Many desperately and urgently needed sustainability transformations have a systems case, although they may not yet or will never have a business case. Would our responsibility in public policy not be to pursue the systems case first?

**Powerful vested interests undermine the systems case<sup>14</sup>.** They work for the continuation of the system that leads to climate breakdown and nature destruction with mass extinction. How can governance and underlying power structures be changed to free policies from selfish capture leading to unsustainable results?

The dominant framing of trade-offs works against the systems case. We easily accept that trade-offs, in particular between 'Responsible Consumption and Production' (SDG 12) and the environmental SDGs, e.g. 'Climate Action (SDG 13), 'Life below water' (SDG 14) and 'Life on land' (SDG 15), are framed in the need for economic growth, or even in the sense of Business as Usual<sup>15</sup>. Why do we trade off the environment, what if instead we traded off the economy?

#### Awareness for the depth of change needed may not yet be developed at scale

How bad things are is not in dispute. Climate change denial is the exception in Europe. That climate change is a threat to human civilisation has moved up from doomism into the party line, adopted in Council conclusions. Yet what is not yet omnipresent is the awareness how deep and systemic will have to be the unprecedented change needed for human civilisation to survive and possibly thrive.

Public bodies as well as companies may be prone to carbon tunnel visions focussing only on emissions and pursuing only or mainly climate neutrality targets. A carbon tunnel vision ignores the links between the wide spectrum of important environmental and social impacts<sup>16</sup>. The focus on decarbonizing the energy supply, although very important, may hide other issues such as resource overuse, and overconsumption at large.

Siloed concerns and conversations ignore climate and planetary emergency concerns while these should be central. When talking about stock markets or summer sales, this is usually disconnected from climate, nature or resource use. We talk about summer sales as if we

<sup>&</sup>lt;sup>13</sup> The 8th way to think like a 21st century economist | DEAL (doughnuteconomics.org)

<sup>&</sup>lt;sup>14</sup> 'Science washing' is used as a lobbying strategy. When lobbyists are calling for science based policies, or policies based on good or best science, it may be a way to dress up vested interests, for instance to advocate for fracking (e.g. here <u>Unlock the benefits! Parliamentarians call for fracking review to be based on science - Net Zero Watch</u>). Therefore, it is important to identify if the science sold by lobbyists or interest groups is framed with public interest in mind.

<sup>&</sup>lt;sup>15</sup> See for instance the very sobering conclusions on the political impact of SDGs: <u>Scientific evidence on the political impact</u> of the <u>Sustainable Development Goals | Nature Sustainability</u>

<sup>&</sup>lt;sup>16</sup> Cognizant BrandVoice: What It Takes To Be A Future-Fit Business Today (forbes.com), Moving beyond carbon tunnel vision with a sustainability data strategy - Digitally Cognizant



were not in crisis. At work, siloed brains may wake us up to the emergency today, and let us continue work our files the incumbent way tomorrow.

Climate breakdown and nature destruction are symptoms, but not the disease. The disease is rooted in the way human civilisation is currently organised, with its power relations and money flows, but also its worldviews, its value and belief systems, its strives and aspirations.

As Yamina Saheb has put so eloquently, it is now about metamorphosis, as transformation may no longer be sufficient and go deep enough.

#### 'Technological promise' can fuel climate delay discourse

We are relying very much on technology to allow us to keep society and the economy largely as they are. Of course, we need a lot of, in particular, green and socially inclusive technologies if they have the right directionality and are governed in the interest of society. However, it is problematic when the wishful betting on future technological progress leads to avoiding or postponing the tough but essential work of deep mitigation and system change today. In that case, technological promise becomes part of a climate delay discourse<sup>17</sup>.

#### Compensation and offsetting are increasingly questioned concepts

While the carbon sink potential of well-conceived nature-based solutions is widely acknowledged, we also know that we probably need everything we have, in cumulation, to halt the planetary emergency. This means we need the capacity of nature-based solutions and the self-healing power of nature - *sui generis* - to address climate and ecosystems breakdown. We cannot afford to waste this potential to compensate or offset polluting activities<sup>18</sup> at the scale these are expected to further develop<sup>19</sup>. We should rather "avoid"<sup>20</sup> these polluting activities. My point here is not the intrinsic qualities or shortcomings of individual compensation schemes, but the principle of offsetting or compensation if it becomes a substitute to demand-side mitigation efforts.

<sup>&</sup>lt;sup>17</sup> Discourses of climate delay | Global Sustainability | Cambridge Core

<sup>18</sup> No more excuses: restoring nature is not a silver bullet for global warming, we must cut emissions outright (theconversation.com), Carbon removals from nature restoration are no substitute for steep emission reductions - ScienceDirect, Now we know the flaws of carbon offsets, it's time to get real about climate change (theconversation.com), Carbon offsets used by major airlines based on flawed system, warn experts | Carbon offsetting | The Guardian, The meaning of net zero and how to get it right | Nature Climate Change, Carbon offsets: a licence to pollute or a path to net zero emissions? | Financial Times (ft.com), A dangerous distraction – the offsetting con | Policy and insight (friendsoftheearth.uk), Carbon offsets are a scam - Greenpeace International

<sup>&</sup>lt;sup>19</sup> IATA - Future of Industry, Future of Aviation (icao.int), Green future for air travel | McKinsey, Fuelling sustainable aviation for the long haul | World Economic Forum (weforum.org)

<sup>&</sup>lt;sup>20</sup> "Evidence highlights highly unequal GHG emission in aviation: only 2-4% of global population flew internationally in 2018, with 1% of world population emitting 50% of CO2 from commercial aviation (Gössling and Humpe 2020). Some individuals may add more than 1,600 t CO2 yr- individually by air travel (Gössling 2019)" – "Socio-cultural factors such avoid long-haul flights and shifting to train wherever possible can contribute between 10% and 40% to aviation GHG emissions reduction by 2050 (Figure 5.7)", IPCC AR6 WGIII FinalDraft Chapter05.pdf

While the IPCC and others are explicit that future carbon removals<sup>21</sup> will be necessary to compensate for the remaining emissions, an overreliance on compensations or offsets now might divert focus and ambition from exploring and implementing "Avoid" options. A particularly relevant case is aviation, where it is unlikely that clean alternatives within air transport will be available at scale in the short to medium term<sup>22</sup>.

New governance arrangements may also be needed in the near future to avoid that powerful interests push for large scale geoengineering, not as a last resort to avoid the worst consequences of climate breakdown, but as an opportunity to justify the temporary continuation of a pathway driven by the desire for endless economic growth.

#### Disruptive potential of existing tools is not always exploited at full

We have many tools, but we may not sufficiently exploit them to their full disruptive potential. A case underlining this point is the circular economy, in particular the system change potential of the inner circles<sup>23</sup> of the circular economy<sup>24</sup>: reducing, repairing, reusing and remanufacturing.

This means first reducing and moving away from impulsive consumerism. Then maintaining and repairing, tapping into the potential for massively creating work opportunities. This of course needs a systemic approach, such as shifting taxes from labour to resource use at large scale. Not all of this is EU competence and therefore requires collaboration and coordination.

Then reusing, redistributing, circulating products to others, donating and promoting the gift economy. Do we need to buy new furniture, when we can get from a local 'resourcerie' what we need? Why not preferring second hand clothes, and branding the second-hand look fashionable? Renting devices rather than owning? Do we need to own ski or diving equipment, or drilling tools? Then remanufacturing, refurbishing, possibly upscaling, such as creating new fashionable articles from old jeans.

Only then comes recycling which has a limited revaluing potential, and as we know often means dumping waste to the South or waste accumulating in the ocean.

Beyond waste management, the challenge is to move to zero waste. It is not enough to develop sustainable product footprints for all products we continue to consume as if there was no planetary emergency; we also need to reduce consumerism in the first place. (Perceived) resource scarcity co-exists with overflow of 'stuff' and obesity, in many parts of the world<sup>25</sup>.

<sup>&</sup>lt;sup>21</sup> AR6 Climate Change 2022: Mitigation of Climate Change — IPCC, see explainer here On the IPCC AR6 WGIII Report: Why Carbon Removal is an Essential Part of Meeting Climate Goals - Carbon Direct (carbon-direct.com)

<sup>&</sup>lt;sup>22</sup> The green hydrogen ecosystem for aviation, explained | Airbus

<sup>&</sup>lt;sup>23</sup> Let's not forget about the inner circles of circular economy | Sirris

<sup>&</sup>lt;sup>24</sup> The butterfly diagram: visualising the circular economy (ellenmacarthurfoundation.org)

<sup>&</sup>lt;sup>25</sup> Overconsumption and the environment: should we all stop shopping? | Shops and shopping | The Guardian



#### New rush towards demand-side measures: Is sufficiency our silver bullet?

The latest IPCC WG 3 report on mitigation<sup>26</sup> concludes with high confidence that the indicative potential of demand-side strategies across all sectors to reduce emissions is 40-70% by 2050<sup>27</sup>, through "Avoid, Shift or Improve" options, that reflect opportunities for "socio-cultural, infrastructural, and technological change". "The greatest Avoid potential comes from reducing long-haul aviation and providing short-distance low-carbon urban infrastructures. The greatest Shift potential would come from switching to plant-based diets. The greatest Improve potential comes from within the building sector, and in particular increased use of energy efficient end-use technologies and passive housing".

The IPCC also states that socio-cultural and lifestyle changes can accelerate climate change mitigation while at the same time improve well-being. Among 60 actions, identified by the IPCC, that could change individual consumption, "individual mobility choices have the largest potential to reduce carbon footprints", in particular "car-free mobility by walking and cycling and adoption of electric mobility". Other options with high mitigation potential include reducing air travel, cooling adjustments, reduced appliance use, shifts to public transit, and shifting consumption towards plant-based diets.

Many of these measures highlighted by the IPCC have a sufficiency dimension. The catalogues of measures recently proposed by the International Energy Agency for reducing the use of oil<sup>28</sup> and gas<sup>29</sup> also contain sufficiency measures, including speed limits and carfree Sundays.

If demand-side measures have such a major mitigation potential, what are we waiting for to powerfully embrace them? Some of them, such as the promotion of walking and cycling, are low-tech silver bullets and have co-benefits in other societal areas such as physical and mental health. Many say there is no business case for sufficiency, although humanity would need it. However, there is a systems case for sufficiency.

Focus on technology and supply-side solutions blinds the necessary focus on sufficiency. Hot or Cool Institute highlights that "Efficiency is blind to the upper limits of consumption and emissions, and so we can keep improving our efficiency even as we transgress the planetary boundaries. [...] Efficiency focuses on the symptoms, not the causes of the sustainability issue"<sup>30</sup>.

A key question in the conversation on sufficiency is how to positively frame sufficiency together with well-being, fulfilment<sup>31</sup> and life satisfaction. How to promote happy

<sup>&</sup>lt;sup>26</sup> https://report.ipcc.ch/ar6wg3/pdf/IPCC\_AR6\_WGIII\_FinalDraft\_FullReport.pdf

<sup>&</sup>lt;sup>27</sup> IPCC AR6 WGIII FinalDraft Chapter05.pdf

<sup>&</sup>lt;sup>28</sup> A 10-Point Plan to Cut Oil Use – Analysis - IEA

<sup>&</sup>lt;sup>29</sup> A 10-Point Plan to Reduce the European Union's Reliance on Russian Natural Gas — Analysis - IEA

<sup>30</sup> The (technology) efficiency paradox | Hot or Cool

<sup>&</sup>lt;sup>31</sup> Finding flow: exploring the potential for sustainable fulfilment - ScienceDirect

sufficiency experienced as contributing to a purposeful life, and avoid unhappy sufficiency, felt as deprivation or as renunciation? Renouncing needs to be re-framed. We are renouncing all the time. We are ready to renounce to 60% of our biodiversity lost up to now, which will no longer be available to future generations.

To reduce resource overuse, we are lacking attention where it could make a difference. The current use of passenger cars in urban mobility is a good example: a resource-intensive engine with 1 or 2 tons of metal and other raw materials, mined and transformed with high energy input, idle 90% of its time, moving around a single person in urban environments, producing microplastics from tire abrasion<sup>32</sup>. Even if electrically powered and zero emissions while driving, a privately owned passenger car can be considered a design error for sustainable urban mobility in the Anthropocene, when light electric vehicles are becoming increasingly available as a shared mobility solution or when cycling or walking have become more convenient, and the focus should be on developing of public transport.

#### Individual behaviour change and public action for system change go hand in hand

Policies cannot stay away from enabling individual behaviour change through infrastructure, incentives, promoting new visions of sustainable lifestyles and driving system change. Previous thinking in behavioural science, that "many of society's most pressing problems can be addressed cheaply and effectively at the level of the individual, without modifying the system in which individuals operate," is increasingly challenged<sup>33</sup>. Public action is therefore critical to enable behaviour change. Bicycle paths needed to facilitate the mobility shift for families and schoolchildren are good examples. Particular courage is required from policy makers to address unsustainable behaviours of what is referred to as the "polluter elite"<sup>34</sup>.

#### On a finite planet, the social dimension involves re-distribution and consumption corridors

The richest 1% have consumption-based emissions that are twice as high as the poorest half of humanity. The upper 10% percent are responsible for half of all consumption-based emissions; the other 90% of humanity share the other half<sup>35</sup>. If we visualized our emissions with an income percentile pyramid, rather than a pie chart by sector of activity, our focus in climate ambition might be different. These figures raise the moral question of carbon supremacy and inequality in planetary destruction potential. This also includes the colonial and post-colonial question of historic emissions.

<sup>&</sup>lt;sup>32</sup> Car tyres are major source of ocean microplastics – study | Plastics | The Guardian, Atmospheric transport is a major pathway of microplastics to remote regions | Nature Communications

<sup>&</sup>lt;sup>33</sup> The i-Frame and the s-Frame: How Focusing on Individual-Level Solutions Has Led Behavioral Public Policy Astray by Nick Chater, George Loewenstein :: SSRN, What nudge theory got wrong | Financial Times (ft.com),

<sup>&</sup>lt;sup>34</sup> <u>Cambridge-Sustainability-Commission-on-Scaling-behaviour-change-report.pdf</u> (rapidtransition.org), <u>Cambridge Sustainability Commission report on Scaling Behaviour Change</u> | Rapid Transition Alliance

<sup>&</sup>lt;sup>35</sup> Carbon emissions of richest 1 percent more than double the emissions of the poorest half of humanity | Oxfam International, Carbon inequality in 2030 | Oxfam International, Carbon inequality in 2030: Per capita consumption emissions and the 1.5C goal (ieep.eu)

Assuming an equal carbon budget for all, the upper 1% percent income percentile would need to reduce their carbon footprint by 97%, the upper 10% by 90%, while the lower half of humanity could triple their emissions<sup>36</sup>. Distribution questions within and between countries may become more important for climate and environmental policies than hitherto. Are climate justice and shared prosperity possible without de-growth in the North<sup>37</sup>, while fully addressing the social dimension within Northern societies? Restraint and sufficiency in high-income countries, without redesigning distribution, will be a difficult sell for policies when erosion of purchasing power is hitting the streets.

How could a doughnut approach, scaled down to the individual or household level, look like? Could it be a consumption corridor<sup>38</sup> between a floor defined by need and dignity, and a ceiling defined by overshoot and excess? A consumption corridor for sustainable life may require a shift to consumption based accounting and personal resource budgets.

Private households are usually privileged in the current energy shortage debate. However, not all private households are alike. A fresh approach could be to combine per capita/household energy ceilings at decent levels, while at the same time supporting poor households that cannot pay themselves for their per capita/household energy floor. 'Regressive freezing', and 'regressive immobility', while yachts and private jets continue to operate or massive profits of energy companies are not fairly taxed, may make policies lose credibility and trust.

Beyond possible per capita/household energy budgets to respond to wartime shortages, should a more generalized approach of per capita resource and emission budgets be considered as a response to the planetary emergency? Together with other tools such as choice editing, this could also contribute to a fairer consumption space<sup>39</sup>. Lessons that leaders may learn during the next winter could be valuable for dealing with the distributional challenges of the planetary emergency. How much of everything do we need globally? Decent energy and resource budgets could be based, not on how much we can afford, but on how much we need. As regards rationing, the question may be no longer if, but when and how. As a special wartime effort or the new normal? How to do it in fairness?

With energy vouchers and other ad hoc measures, we hopefully come through the next winter. However, the real question behind that is what new social contract<sup>40</sup> we need on a shared planet with limited resources.

<sup>&</sup>lt;sup>36</sup> EGR20ch6.pdf (unep.org), World Inequality Report 2022 - WID - World Inequality Database, Confronting carbon inequality | Oxfam International

<sup>&</sup>lt;sup>37</sup> Degrowth Is About Global Justice (greeneuropeanjournal.eu)

<sup>&</sup>lt;sup>38</sup> Full article: Advancing the concept of consumption corridors and exploring its implications (tandfonline.com), Consumption Corridors | Living a Good Life within Sustainable Limits | (taylorfrancis.com), Consumption Corridors (oapen.org), Consumption Corridors (uni-muenster.de)

<sup>&</sup>lt;sup>39</sup> <u>1.5-Degree Lifestyles Report | Hot or Cool</u>

<sup>&</sup>lt;sup>40</sup> A New Social Contract for a New Era - United Nations Sustainable Development, <u>Is the moment for a new social</u> contract... | Green Economy Coalition, Renewed Social Contract - Friends of Europe, Why we need a new social contract for

#### Polarisation in society around green transformation may increase and lead to social unrest

What form of governance and democracy are needed to face the planetary emergency? Can transformation be peaceful and within the realm of democracy?

Resistance against the green transformation will organize, and be captured and promoted by vested interests<sup>41</sup>. We are now experiencing how corporate capture of food security and energy poverty are used to water down climate and environmental ambition. Food security and energy poverty need to be addressed systemically.

With the pandemic and the war, the world may appear even messier than before. This is one more reason highlighting a new compass is needed. While we need to work that our democracies survive the next winter, the challenge is to ensure that short-term measures go in the right direction of travel for the long-term transformation, conciliating social peace during next winter with the life and prosperity opportunities for youth and future generations. Returning now to the 'coal bridge' on the way to climate neutrality demonstrates that we have not done our homework of reducing our energy dependence from possible volatile imports, cutting out fossil energies and reducing polluting activities.

Current globally converging lifestyle aspirations may not be compatible with the survival of human civilisation

The current dominant western lifestyle attracts a global convergence. There is high overconsumption of the global wealthy and middle classes in the emerging economy countries are driven into consumerism.

However, the "American dream" - car-dependent lifestyles, frequent flights to remote holiday destinations or business travel, meatlover diets, shopping without limits - for all 9-10 billion people is unlikely to be compatible with the survival of human civilisation. It is unlikely the whole world could consume as the higher income percentiles are doing<sup>42</sup>, even with a full global roll-out of all clean technologies on the supply side. It is unlikely that 10 billion people will drive a privately owned Tesla. It is unlikely we shall be rolling out thousands of loading stations in social housing areas without private parking spaces when the space is also needed for cycling paths, children's playgrounds or trees.

the 21st century | World Economic Forum (weforum.org), A New Social Contract – IMF Finance & Development Magazine | December 2018, New Social Contract: Five workers' demands for recovery and resilience - International Trade Union Confederation (ituc-csi.org), Capitalism needs a new social contract | Oxford Review of Economic Policy | Oxford Academic (oup.com), The Pandemic and Our Broken Social Contracts by Minouche Shafik - Project Syndicate (project-syndicate.org), The social contract in the 21st century | McKinsey,

<sup>&</sup>lt;sup>41</sup> Rising Social Unrest Over Energy, Food Shortages Threatens Global Stability (forbes.com)

<sup>&</sup>lt;sup>42</sup> That seems a quite straightforward conclusion that can be extrapolated from UNEP figures, but it be worth to do some modelling on this crucial question rarely asked, see here for data by income percentiles <u>EGR20ch6.pdf</u> (<u>unep.org</u>)

This means that low-income nations in the South and the global poor can develop and grow, but not up to the American dream or any of its global variants. High-income nations in the North and the global wealthy may need to come down and land in another dream, fit for humanity as a whole and co-created globally.

Human strive is solidly anchored in our societies and education systems. Learn, work harder, to get a better paid job, to afford a better life with a bigger car and regular flights to far-away destinations? Are these elements of our human strive now being questioned in the Anthropocene as they contribute to planetary destruction, if in excess? How can we find together new "visions of a good life" 43?

#### Unprecedented change includes re-fitting worldviews and belief systems

Unprecedented change is more than technologies, it goes deeper, certainly as deep as how our economies and societies are set up with its power structures and lifestyles, but possibly even deeper into our values, worldviews and belief systems. Policy needs to find a role in this unchartered territory, a task for governance innovation.

It has become essential and urgent to bring our worldviews, values and belief systems in line with our planet<sup>44</sup>. In the Anthropocene, this may require moving from anthropocentric worldviews considering Man above and against nature - such as in a lot of Western philosophy and religion (see Genesis 1:24-30<sup>45</sup>) - to bio-holistic worldviews with humans as part of the web of life. Our philosophical groundings, our worldviews and values influence the way we frame our issues, how we define progress and success, and the assumptions on which we build indicators.

There are also different traditions in European thinking and scholarship which may be worth bringing to the fore. Alexander von Humboldt considered humans as part of a "web of life"<sup>46</sup>. His legacy is even more relevant in today's planetary emergency. Next to the European Green Deal and the European Bauhaus, the 'Life-web' could maybe become the third pillar in the EU trilogy of flagships. While the Bauhaus has introduced beauty to the Green Deal, the 'Life-web' would allow re-connecting these cultural and civilisational issues with nature. The concept of a Green civilisation may aggregate these cultural shifts.

<sup>&</sup>lt;sup>43</sup> Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat

<sup>&</sup>lt;sup>44</sup> See for instance Emerging New Civilisations - Club of Rome or Come On! - Club of Rome,

<sup>&</sup>lt;sup>45</sup> Genesis 1 NIV - The Beginning - In the beginning God - Bible Gateway;, « La religion la plus anthropocentrique » : les racines chrétiennes de la crise écologique (lemonde.fr), The Historical Roots of Our Ecologic Crisis (science.org) or http://www.geo.hunter.cuny.edu/courses/geog347/articles/historical\_crisis.pdf, Laudato si' (24 May 2015) | Francis (vatican.va), François Euvé : « L'anthropocentrisme moderne a contaminé le christianisme » (lemonde.fr), Anthropocentrism: More than Just a Misunderstood Problem | SpringerLink, ANTHROPOCENTRISM AND THE ENVIRONMENTAL CRISIS on JSTOR,

<sup>&</sup>lt;sup>46</sup> The Legacy of the Man Who Changed Our View of Nature - Yale E360, Humboldt's legacy | Nature Ecology & Evolution



# Freedom and responsibility in the Anthropocene may need to be rebalanced and new right holders integrated

This may invite us to rethink traditional concepts of freedom and liberty, including in the individualistic Western societies, putting more focus on solidarity, on the wellbeing of people and the planet, and make the right to free enterprise<sup>47</sup> responsible. It is, however, an opportunity<sup>48</sup> to bring in other value systems, such as from indigenous communities, and to integrate new right holders<sup>49</sup>, such as animals, rivers, forests, ecosystems.

Business can no longer be grounded on the notion of unconstrained freedom of enterprise and fast unsustainable profits. Business heavily contributes to feed the planetary emergency, yet business depends very much on nature. A first step could be not only discuss about toxic subsidies, but also cut them down or at least phase them out<sup>50</sup>.

A new positive vision of freedom could open for citizens. Instead of atomisation as isolated and selfish individuals, locked into commercially pushed convenience as consumers<sup>51</sup>, living constrained lives with unsatisfactory jobs, too long working hours and burnouts, caught by immobility in congested cities, there could be an opportunity to regain more autonomy as free and responsible persons with more engagement in community.

#### Policies may have to move into unchartered territory

Policies may have to move into the unchartered space of setting sustainable lifestyle principles. Dealing with behaviours, and even more with lifestyles, worldviews and belief systems is usually not considered as part of the policy space in democratic societies. However, excluding these issues from the policy space is not an option as they are so closely linked to the root causes of the planetary emergency. Meat-free Mondays may still be present in memories of policy makers as an example of policy failure sanctioned by voters, and social profiling is not considered part of the European way. New tools of deliberative democracy may be needed to dare uncomfortable conversations with citizens on an equal footing. This may become a major policy challenge.

Unchartered policy domains require new governance. Convening power becomes increasingly important in addition to regulation, as the EU and other government actors may have to move into uncharted and possibly uncomfortable policy domains.

'Telling the truth' is not only about how bad it is, but also about how deep the change needs to be. In our honest endeavours to address the emergency and save the world, we focus on specific things, rather than on complex systems. This leads us to overrate the contribution of

<sup>&</sup>lt;sup>47</sup> Free Enterprise - Bill of Rights Institute, Obligations in the Anthropocene | SpringerLink

<sup>&</sup>lt;sup>48</sup> Re-storying Laws for the Anthropocene: Rights, Obligations and an Ethics of Encounter | SpringerLink

<sup>&</sup>lt;sup>49</sup> Rights of Nature, Rights of Animals - Harvard Law Review, The Rights of Nature — Can an Ecosystem Bear Legal Rights? (columbia.edu)

<sup>&</sup>lt;sup>50</sup> Why fossil fuel subsidies are so hard to kill (nature.com)

<sup>51</sup> Willing consumers—or locked-in? Policies for a sustainable consumption - ScienceDirect

technologies to deliver solutions, and overlook the importance of deep inner and outer systemic change.

In communication, outreach and engaging efforts, policies need to find the best way to navigate the doom and the bloom. This means being honest about the desperate state of affairs and a difficult journey ahead, but providing positive visions and citizen-centred solutions. "A positive journey beyond the comfort zone" is the subtitle of the EUStaff4Climate (2019) discussion paper "Unprecedented Change Now "52, reflecting these two facets.

#### EU as a convening power house for deep sustainability

For many deep sustainability issues, such as radically overhauling the tax system, the EU may not have the regulatory competence, and even less so on private issues such as lifestyles. However, the EU can function as the guardian of the systems case, and use its convening power to promote or defend it. This could be relevant both internally and in a global context.

The EU as a global convening powerhouse for sustainable lifestyle standard setting? The EU could upscale its global convening power to co-create new "visions of a good life" <sup>53</sup>. The EU has been successful in global standard setting. Maybe now is the time to build on this experience to co-create new sustainable lifestyle principles.

If innovation is a wide concept including social, lifestyle, governance and institutional innovation, then innovation diplomacy might also encompass convening a conversation globally about new visions of wellbeing and good life, about happiness, about a Dream 2.0, incorporating worldviews from other cultures and belief systems, as well as indigenous perspectives. Promoting an alternative pathway, based on inclusive use of our best technologies, co-leapfrogging world-wide towards shared prosperity compatible with the planet, should be at the centre of EU's sustainability leadership, and a core task of EU innovation diplomacy, building alliances with whoever is willing or needed to contribute.

Would the EU's global convening power be credible? Maybe, if deployed as an honest broker of global public interest, reflecting the needs of the 99%, and promoting a new globalisation for Good. With modesty and determination, Europe could appear as a convenor and a learner, rather than as a colonial or post-colonial master or imposer.

If not the EU, who else could convene the world for these uncomfortable conversations that People, Planet, Prosperity and Peace would urgently need. Here is a role for true sustainability leadership. This, however, may be challenging if the rest of the world is drifting into a different direction prioritizing competitiveness and economic growth.

<sup>52</sup> https://www.graspe.eu/document/grasp36.pdf

<sup>&</sup>lt;sup>53</sup> In the IPBES Global assessment, "embracing diverse visions of a good life" is considered one of the key leverage points for transformative action, Global Assessment Report on Biodiversity and Ecosystem Services | IPBES secretariat

#### Redefining peace in the Anthropocene may be Europe's new peace project

Peace is at the essence of the European project. Promotion of peace is the first aim of the Union (Art. 3.1<sup>54</sup>). We need a vision for peace beyond the short-term horizon of the current war imposed on Ukraine. While the temptation might be there, it would be too narrow to only focus on geopolitics. All dimensions of sustainability belong together and interact: planet, people, prosperity and peace.

UN Secretary General António Guterres has reminded the urgency to make peace with nature<sup>55</sup>. Peace also means preserving our ecosystems and preserving a space for humanity where it can thrive. Beyond making peace with nature, we need to make peace with people. This includes decent work, life in dignity, voice, all the social foundations in short. We are not there yet, neither at home, nor regarding the impact of our actions elsewhere and later, on vulnerable people in the rest of the world, and on future generations.

#### The sprint and the marathon need to run in parallel now as there is no time

Postponing the long-term transformation, using the excuse that we need to focus, streamline and set priorities, is not an option.

Sprint means the quick actions, the low hanging fruits, while the marathon refers to the more long-term generational regime shifts. We tend to focus on the first, prepare action plans with bullet points, and postpone the complex and long breath system changes to later when we have time. The problem is we do not have time. Ideally, we would have reached the finish line of the marathon yesterday, but we have not started yet. Therefore, our challenge is to start everything now at the same time. This is not a lack of focus; this is a necessity for survival.

#### Research and Innovation missions are 'Earthshots' rather than Moonshots

Our 'woman' on the Moon moment is called Earth. The biggest challenge for research and innovation in the 21st century is <u>how</u> to survive and hopefully thrive as human civilisation down here, with shared prosperity within the limits of the planet. This is about complex wicked problems<sup>56</sup>, navigating disagreement and framing questions in the interest of the commons. This needs inter- and transdisciplinary science, experimentation and citizen engagement. R&I has a major opportunity to enable deeply transformative policies and make the world a better place.

<sup>54</sup> EUR-Lex - 12008M003 - EN (europa.eu)

<sup>55</sup> Making Peace With Nature | UNEP - UN Environment Programme

<sup>56</sup> GSDR 2019 ... Sustainable Development Knowledge Platform (un.org)

Prioritisation of the systems case would be essential for research and innovation policy, and for setting research and innovation agendas in particular – and for future Commission priorities more widely. How much is the science framed in a systemic perspective with the long-term public interest in mind, or in a more narrow value chain or product perspective with financial or economic growth interests in mind?

To avoid polarisation in society, we need to take account of the needs of those citizens that are the most vulnerable, low skilled or low revenue, and with low socio-economic status. They are often excluded from political discourse except for their voting rights. Their problems deserve a central place in research and innovation agendas even if their needs are not voiced as professionally as those of more influential stakeholders.

Quantification bias and value-based assumptions deserve attention. There is a risk of excluding or underrating the importance of unmeasurable issues. We need stories as much as statistics; the full picture must combine both. Quantifications, in particular in economics, are often grounded on value-based assumptions. The discount rate for future generations<sup>57</sup> is a value judgement on what counts, it is a trade-off between the powerful making profits today and the interests of our children.

To what extent economic growth or green growth is feasible or how far the systemic transformation of the economic model has to go are important issues of scientific controversy<sup>58</sup>. In our enquiry, we need to be wide in scope. It would be unwise to limit de definition and development of solutions to only a limited set of assumptions.

<sup>&</sup>lt;sup>57</sup> The role of the discount rate for emission pathways and negative emissions - IOPscience

<sup>&</sup>lt;sup>58</sup> many sources, see a very small number here: <u>Creating a resilient economy within environmental limits — European Environment Agency (europa.eu, Growth without economic growth — European Environment Agency (europa.eu), Growth for Good — Alessio Terzi | Harvard University Press, <u>Can climate change be tackled without ditching economic growth?</u>
(bruegel.org), <u>Full article: Is Green Growth Possible? (tandfonline.com)</u>. The Knowledge for SDGs Talk on 8 February 2022 has addressed this questions from a variety of perspectives, <u>Knowledge for SDGs (Part 4): Economic Sustainability for the 21st Century - Streaming Service of the European Commission (europa.eu)</u>.</u>

#### Concluding remarks

#### Is there reason for hope?

My personal view is yes, if we got real about what are the symptoms and where the disease is, if we tackled the root causes of the planetary emergency without complacency and being trapped by vested interests. Yes, there is hope if we actually acted as if there were a crisis, collectively and beyond self-interest - or at least in the understanding that cooperating may be the best possible self-interest. If we do not get it right collectively as homo sapiens, there may be terrible suffering in an uncomfortable world. We still have a choice to prevent the worst<sup>59</sup>.

#### From competitiveness to 'cooperativeness'

We have to enter the age of cooperation. With competitiveness, extractivism and exploitation, we have run into a planetary emergency. With cooperation, regeneration and inclusion, we will, hopefully, get out again and strive collectively beyond. Shared prosperity within the limits of the planet may be our best lifeline.

We need to unlearn the story of survival of the fittest, the story of lone success through individual human strive. In times of adversity, cooperation and solidarity are even more crucial for the success of species. Cooperation and solidarity are part of our hope, and of our margin of manoeuvre for agency.

We need a new story. Let us be at least as confident in our creativity to change the system as we are in our ingenuity to invent new technologies. The biggest 'utopia' is Business as Usual, Economy as Usual, Society as Usual, Lifestyle as Usual. It will not work, and we know or we intuitively guess it. And yet, we are sticking to it as if we were addicted. This needs to change now.

#### What next?

I shall leave you with these insights and ideas, maybe to inspire current or future EU policies or the legacy for the next Commission. I shall remain committed to the sustainability cause and continue following sustainability issues from wherever. I shall still be around in DG RTD as an Active Senior. If you are interested in these issues let us stay in touch.

And, if you wish, let us gather informally for a drink tonight in 'Parc du Cinquantenaire'.

<sup>&</sup>lt;sup>59</sup> "We have a choice. Collective action or collective suicide." <u>Secretary-General's video message to the Petersberg Dialogue</u> <u>United Nations Secretary-General</u>

#### Annex

# EU Doughnut: Taking stock and keeping the momentum Transforming our world in planetary emergency: Farewell to a sustainability activator

14 July 12.00 -13.30 CET, Online via Zoom (event will be recorded)

You are invited to an informal virtual EU doughnut and friends gathering, Thursday 14 July 2022. Thomas Arnold, Advisor Sustainable Development Goals is leaving the active service of the European Commission on 1 August 2022.

This is an opportunity for taking stock and looking ahead on doughnut economics and EU doughnut, to keep and give new momentum to initiatives like the Joint Initiative on Transformative Economics, the beyond GDP discussions in the European Commission and the beyond growth conference in 2023, and to share visions about sustainability transformations in a planetary emergency.

This is also the moment of farewell to a sustainability activator engaged in the strive to deeply transform our world driven into a planetary emergency.

#### Zoom link:

https://us02web.zoom.us/j/83918600931?pwd=W-Um-m23mQrZ04GK7ESloOm1apN2IZ.1

Meeting ID: 839 1860 0931

Passcode: 152453

The recording of this event and all related materials are available at the Doughnut for EU page of the Doughnut Economics Action lab (DEAL) site at EU Commission experiments with Doughnut Economics | DEAL

#### **Programme of event**

#### Video

25% revolution (Trailer, <u>The 25% Revolution - Trailer - YouTube</u>)

#### Opening (3 minutes each)

- Jean-Eric Paquet (Director General RTD) (confirmed)
- Kate Raworth (Oxford University &, Doughnut Economics Action Lab) (confirmed)
- Janez Potocnik (Co-Chair International Resource Panel, Systemiq, Club of Rome) (confirmed)

#### Keeping the momentum

Follow-up opportunities and commitments on Doughnut, Transformative economics, Beyond GDP (confirmed speakers) (2 minutes each)

- Doughnut4EU Activators: Maciek Jastrzebiec-Pyszynski (JRC) (confirmed), Joachim
   D'Eugenio (ENV) (confirmed); Frank Siebern-Thomas (EMPL) (confirmed)
- Nick Meynen (EEB) (confirmed), Joining voices NGOs and policymakers

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- Roman Arjona (GROW, Chief Economist) (confirmed), Doughnut and industrial policy
- Barbara Trachte (Brussels Region State Secretary for Research and Economic Transition) (confirmed, by video message), Brussels Doughnut
- Laure Ledoux (HR, Head of Unit Greening, Safety and Buildings) (confirmed), Institutional doughnut
- Alexandr Hobdza (RTD, Chief Economist) (confirmed), Transformative R&I policy
- Lorenzo Benini (EEA) (confirmed), Joint initiative on transformative Economics
- Peter Benczur (JRC) (confirmed), Integrated wellbeing framework, Beyond GDP process
- Jonathan Barth (ZOE) (confirmed), Beyond GDP conference + EU Wellbeing Economy Coalition, 1,5°/Beyond GDP lifestyles
- Sandrine Dixson-Decleve (Co-president Club of Rome, ESIR Chair) (confirmed)

#### **Looking beyond**

Visions and testimonials on deep sustainability transformation in planetary emergency (confirmed speakers) (2 minutes each)

- Karen Fabbri (RTD, Healthy Planet, Deputy Head of Unit Bioeconomy & Food Systems)
   (confirmed)
- Laurent Bontoux (JRC, Senior Expert Foresight) (confirmed), Nikos Kastrinos (RTD, Team leader Foresight) (confirmed)
- Kerstin Cuhls (Fraunhofer ISI) (confirmed)
- Sébastien Treyer (Executive Director IDDRI) (confirmed)
- Anna Smedeby (EPSO) (confirmed), on behalf of EUStaff4Climate
- Yamina Saheb (OpenEXP, IPCC Lead author) (confirmed)
- Jeroen Janss (Awaris, Director EU Projects & Co-Founder Inner Green Deal) (confirmed, by video message)
- Jean-Pascal van Ypersele (UCL, Former IPCC Vice-Chair) (confirmed)
- Olivier De Schutter (UN Special Rapporteur on extreme poverty and human rights, co-chair IPES Food) (confirmed, by video message)
- Humberto Delgado (ENV, Director Biodiversity) (confirmed)
- Adélaïde Charlier (co-coordinator Youth4Climate Belgium) (confirmed)

#### Farewell speech

• Thomas Arnold (RTD, Advisor Sustainable Development Goals)

#### Co-moderation

- Anastastasios Kentarchos (RTD)
- Christoph Gran (ZOE)
- Obhi Chatterjee (HR)

#### Support

- Claudia de Sessa (RTD)
- Jérôme Spaans (RTD)



**Kudoboard** 

#### https://www.kudoboard.com/boards/ByCu07CW.

You may already put in testimonials before the event if you wish so. It would be great to upload a picture, link a video that fits to the relationship with Thomas.

#### No presents

Any donations to **EU Staff Fund for a Fair and Sustainable Future** (Make a gift (kbs-frb.be). This is the new name and new focus of the EU Staff COVID-19 Solidarity Response Fund, set up in 2020 by <u>EU Staff 4 Climate</u> in cooperation with <u>King Baudouin Foundation</u>.

#### Informal drink

In case you are in Brussels 14 July, you may wish to join for an informal drink. Happy to meet as of 19.00 in <u>Guinguette Maurice | Good Food</u>, in the Cinquantenaire park, next to the Commission's BREYDEL building.



#### Follow up opportunities with dates/contact points and links to further information

#### 1. Doughnut4EU Activators:

- Contacts: EC DOUGHNUT4EU <u>EC-DOUGHNUT4EU@ec.europa.eu</u>, JASTRZEBIEC-PYSZYNSKI Maciek (JRC) <u>Maciek.JASTRZEBIEC-PYSZYNSKI@ec.europa.eu</u>, D'EUGENIO Joachim (ENV) <Joachim.D'Eugenio@ec.europa.eu>, SIEBERN-THOMAS Frank (EMPL) <u>Frank.SIEBERN@ec.europa.eu</u>, DOHRING Bjorn (ECFIN) <u>Bjoern.DOEHRING@ec.europa.eu</u>, ARNOLD Thomas (RTD) <u>Thomas.Arnold@ec.europa.eu</u> (until 31/07/2022), <u>thomas.arnold@ext.ec.europa.eu</u> (as of 01/08/2022)
- Links: EU Commission experiments with Doughnut Economics | DEAL
- 2. 2023 European Parliament Beyond GDP/Post-growth conference/EU Wellbeing Economy Coalition:
  - *Contacts:* jonathan.barth@zoe-institut.de
  - Links: Beyond GDP measures for a successful recovery and a sustainable and resilient EU economy (Own-initiative opinion) | European Economic and Social Committee (europa.eu); Conference in the European Parliament 2018; Wellbeing Economy Policy Design Guide

#### 3. **ZOE 2030 Compass:**

- Contacts: Jonathan Barth jonathan.barth@zoe-institut.de
- **Links:** A compass towards 2030: Navigating the EU's economy beyond GDP by applying the Doughnut Economics framework

#### 4. 1,5°degree/Beyond GDP lifestyles

- Contacts: Christoph Gran Christoph.gran@zoe-institut.de, Lewis Akenji (Hot or Cool) director@hotorcool.org
- Links: Policy Pathways towards 1.5-Degree Lifestyles; 1.5-Degree Lifestyles: Towards a
   <u>Fair Consumption Space for All; Reducing Emissions through Equitable 1.5 Degree</u>
   <u>Lifestyles</u>

#### 5. Integrated wellbeing framework

- Contacts: BENCZUR Peter (JRC-ISPRA) Peter.BENCZUR@ec.europa.eu
- Links: European Commission Environment (europa.eu)

#### 6. Joint initiative transformative economics EEA/Club of Rome/RTD/JRC

- Contacts: ASQUITH Alistair (EEA) mike.Asquith@eea.europa.eu, Till Kellerhoff
  tkellerhoff@clubofrome.org, HOBZA Alexandr (RTD) Alexandr.HOBZA@ec.europa.eu,
  KENTARCHOS Anastasios (RTD) Anastasios.KENTARCHOS@ec.europa.eu, BENCZUR
  Peter (JRC-ISPRA) Peter.BENCZUR@ec.europa.eu, ARNOLD Thomas (RTD)
  Thomas.Arnold@ec.europa.eu (until 31/07/2022), thomas.arnold@ext.ec.europa.eu (as of 01/08/2022)
- Links: Exploring post-growth futures in the EU | DEAL (doughnuteconomics.org);
  Reflecting on green growth European Environment Agency (europa.eu), Earth4All

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#### 7. Brussels Capital Region doughnut

- *Contacts*: info.trachte@gov.brussels, slepczynski@gov.brussels, lisnard@gov.brussels
- Links: Projet BrusselsDonut

#### 8. Institutional doughnut for Greening Commission

- Contacts: KOVACS Viktoria (SG) Viktoria.KOVACS@ec.europa.eu, LEDOUX Laure (HR)
  Laure.LEDOUX@ec.europa.eu, BELBEOCH Gwenn (HR)
  Gwenn.BELBEOCH@ec.europa.eu, CHATTERJEE Obhi (HR)
  Obhi.Chatterjee@ec.europa.eu
- Links: People first Greening the European Commission | European Commission (europa.eu)

#### 9. NGO-perspectives

- Contacts: Nick Meynen nick.meynen@eeb.org
- Links: Doughnut economics: how to bake a better future META (eeb.org), "Doughnut (economics) for all": NGOs and policy makers join voices for a more well-rounded EU economy (eeb.org), Doughnuts (economics) for all (eeb.org)



#### **Useful references**

- Kate Raworth (University of Oxford, DEAL), <u>Kate Raworth Wikipedia</u>, <u>About Doughnut Economics | DEAL</u>, <u>DEAL</u> (doughnuteconomics.org), <u>Doughnut | Kate Raworth</u>, <u>A COMPASS FOR THE 21ST CENTURY WHY THE DOUGHNUT IS IMPORTANT FOR TRANSFORMATIVE R&I POLICY Streaming Service of the European Commission (europa.eu)
  </u>
- Johan Rockström (PIK Potsdam), Rockström Potsdam Institute for Climate Impact Research (pik-potsdam.de), Johan Rockström on 'Breaking Boundaries' and the Climate Crisis YouTube, 10 years to transform the future of humanity -- or destabilize the planet | Johan Rockström YouTube, Trajectories of the Earth System in the Anthropocene | PNAS
- Janez Potočnik (Systemiq, Club of Rome, SystemiQ), <u>Janez Potočnik | Resource Panel International System Change Compass Open Society Foundations</u>, <u>Upcoming Work | Resource Panel</u>
- Doughnut4EU Activators, <u>EU Commission experiments with Doughnut Economics | DEAL, ZOE organised workshop about "Doughnut4EU" ZOE Institute for Future-fit Economies (zoe-institut.de), The Club of Rome EU CHAPTER
  </u>
- Nick Meynen (EEB), Doughnut (Economics) for all YouTube, EN | The 25% Revolution, a
   Documentary on Systemic Change (the25percentrevolution.com), Doughnut economics: how to bake
   a better future META (eeb.org), "Doughnut (economics) for all": NGOs and policy makers join voices
   for a more well-rounded EU economy (eeb.org)
- Barbara Trachte (Brussels Region State Secretary for Research and Economic Transition) <u>Home</u>-BrusselsDonut
- Jonathan Barth (ZOE), A Compass towards 2030 ZOE Institute for Future-fit Economies (zoe-institut.de); Making the great turnaround work | Heinrich Böll Stiftung | Brussels office European Union (boell.org); Reducing Emissions through Equitable 1.5 Degree Lifestyles; Wellbeing Economy Policy Design Guide
- Lewis Akenji (Hot or Cool), <u>1.5-Degree Lifestyles Report | Hot or Cool</u>
- Lorenzo Benini (EEA), <u>Growth without economic growth European Environment Agency</u> (europa.eu)
- EU holistic approach to sustainable development | European Commission (europa.eu)
- EU Mission: Climate-Neutral and Smart Cities | European Commission (europa.eu)
- Sandrine Dixson-Decleve (Co-president Club of Rome, ESIR Chair), <u>Sandrine Dixson-Declève</u> <u>Wikipedia Homepage</u> <u>Club of Rome</u>, <u>The Limits to Growth+50 Club of Rome</u>, <u>Earth4All</u>
- **Kerstin Cuhls** (Fraunhofer ISI), <u>Democratic directionality for transformative food systems research | Nature Food, <u>Multiple Futures for Society, Research, and Innovation in the European Union: Jumping</u> to 2038 by Stephanie Daimer, Attila Havas, Kerstin Cuhls, Merve Yorulmaz, Petar Vrgovic :: SSRN,</u>
- Sébastien Treyer (IDDRI), <u>Sébastien Treyer | IDDRI</u>, <u>Stockholm+50: from regenerative economy to sufficiency</u>, the emergence of new doctrines | IDDRI, <u>Strengthening the European Green Deal at midterm: rebalancing policies</u>, increasing implementation | IDDRI
- EUStaff4Climate, EU Staff 4 Climate a bottom-up initiative led by EU staff in their individual/private
  capacity that brings together colleagues from across the EU institutions who are deeply concerned
  about the climate, ecological and social crisis facing our planet,
  https://www.graspe.eu/document/grasp36.pdf
- Yamina Saheb (OpenEXP), <u>Demand-side solutions to climate change mitigation consistent with high levels of well-being | Nature Climate Change, From efficiency to sufficiency FORESIGHT (foresightdk.com)</u>
- **Jeroen Janss** (Awaris), <u>Inner Green Deal Awaris</u>, <u>EU officials being trained to meditate to help fight</u> climate crisis | European Union | The Guardian

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- Jean-Pascal van Ypersele (UCL), <u>Jean-Pascal van Ypersele Wikipedia L'invité de Matin Première : Le dernier rapport du GIEC sur Auvio (rtbf.be)</u>, <u>Home Panel Climat (klimaatpanel.be)</u>
- Olivier De Schutter (UN Special Rapporteur on extreme poverty and human rights, co-chair IPES Food)
   IPES food | Experts panel > Olivier De Schutter (ipes-food.org), IPES food | SPECIAL REPORT | FOOD
   PRICE CRISIS (ipes-food.org)
- Adélaïde Charlier (Youth4Climate Belgium), <u>Adélaïde Charlier Wikipédia (wikipedia.org)</u>, <u>Adélaïde Charlier</u>, la meuf du climat : 03 Adélaïde Charlier, la meuf du climat sur Auvio (rtbf.be), <u>Adélaïde Charlier</u>, la meuf du climat en streaming gratuit | TV5MONDEplus, <u>L'urgence climatique avec Adélaïde Charlier</u> Alors on change YouTube