

Sy Taffel; Nina Grünberger

Politics, Sustainability and Post-Digitality – The role of political actors for a more sustainable digitality

2023

<https://doi.org/10.25969/mediarep/19978>

Veröffentlichungsversion / published version

Sammelbandbeitrag / collection article

Empfohlene Zitierung / Suggested Citation:

Taffel, Sy; Grünberger, Nina: Politics, Sustainability and Post-Digitality – The role of political actors for a more sustainable digitality. In: Andreas Beinsteiner, Nina Grünberger, Theo Hug u.a. (Hg.): *Ökologische Krisen und Ökologien der Kritik*. Innsbruck: Innsbruck University Press 2023, S. 67–77. DOI: <https://doi.org/10.25969/mediarep/19978>.

Nutzungsbedingungen:

Dieser Text wird unter einer Deposit-Lizenz (Keine Weiterverbreitung - keine Bearbeitung) zur Verfügung gestellt. Gewährt wird ein nicht exklusives, nicht übertragbares, persönliches und beschränktes Recht auf Nutzung dieses Dokuments. Dieses Dokument ist ausschließlich für den persönlichen, nicht-kommerziellen Gebrauch bestimmt. Auf sämtlichen Kopien dieses Dokuments müssen alle Urheberrechtshinweise und sonstigen Hinweise auf gesetzlichen Schutz beibehalten werden. Sie dürfen dieses Dokument nicht in irgendeiner Weise abändern, noch dürfen Sie dieses Dokument für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, aufführen, vertreiben oder anderweitig nutzen.

Mit der Verwendung dieses Dokuments erkennen Sie die Nutzungsbedingungen an.

Terms of use:

This document is made available under a Deposit License (No Redistribution - no modifications). We grant a non-exclusive, non-transferable, individual, and limited right for using this document. This document is solely intended for your personal, non-commercial use. All copies of this documents must retain all copyright information and other information regarding legal protection. You are not allowed to alter this document in any way, to copy it for public or commercial purposes, to exhibit the document in public, to perform, distribute, or otherwise use the document in public.

By using this particular document, you accept the conditions of use stated above.

Politics, Sustainability and Post-Digitality – The role of political actors for a more sustainable digitality

Sy Taffel & Nina Grünberger

Abstract

In the discussion about sustainability and digitality, the question of the responsibility of individuals, IT companies and politics is often raised. This article is dedicated to the question of the role of political institutions, here using the example of the European Union, for a more sustainable development in the context of digitalisation. Below is an interview with Sy Taffel, an experienced researcher who studies the social and environmental effects of digital technologies at Massey University in Aotearoa-New Zealand. The interview was conducted by Nina Grünberger. She teaches media education on the connection between education, digitality and sustainability.

Intro

There is currently a lot of discussion about the design of a more sustainable digital world. The arguments range from scientific research to political statements and rarely to loud shouts that have more the character of “greenwashing”. This interview by Nina Grünberger and Sy Taffel takes a closer look at the relationship between digitality and sustainability. It is preceded by a brief introduction by Sy Taffel to the interconnectedness of digitality and sustainability. It then focuses on the role of political institutions in a transformation towards more sustainable development. In particular, the role of the European Union and its policies are discussed. Links are provided in the footnotes to the interview to support easy retrieval of the material.

Nina Grünberger is a media educator and researches and teaches on the close connection between digitality and sustainability in educational contexts. In her papers and talks she often addresses questions of responsibility and normative settings.

Sy Taffel is an expert in digital media ecologies and has been researching and teaching at Massey University in Aotearoa-New Zealand for many years. One of his latest works is discussing the relationship of Data and Oil¹.

The Conversation

Nina Grünberger: At the conference “Media Knowledge Education 2021” in Innsbruck/Austria, we discussed intensively about digital ecologies and the role of digital technologies for our environment from an interdisciplinary perspective. You have been working on the topic of digital media ecologies and the close interconnection between the development and use of digital technologies and the development or change of certain natural phenomena for a long time. In your scientific contributions, you always argue for more ecologically sustainable action and thus for more environmental and climate protection. But what do you think is urgently needed to be able to implement a more sustainable media practice in dealing with digital technologies?

Sy Taffel: Before addressing the last part of this question, I think that it’s useful to take a step back to consider some of the key issues here. While yes, I do think we need to think about what a sustainable digital ecology looks like, before we get there, we need to address what we mean by sustainability. Basically, when discussing sustainability, we’re talking about systems that are able to endure over long periods of times without becoming systematically degraded. It doesn’t necessarily imply something that is infinitely sustainable, as we know that eventually the sun will run out of hydrogen within its core and become a red giant that will likely envelop this planet and extinguish all life on it. But this isn’t forecast to happen for about five billion years. Whereas when we’re talking about contemporary ecological crises, such as climate change, the sixth mass extinction of life on earth, chemical pollution, disruptions to planetary flows of nitrogen and phosphorus and so on, we are talking about the degradation of the ecological systems upon which life depends happening in the space of a couple of centuries, which geologically speaking is the blink of an eye. So, it isn’t a binary opposition between things that are and are not sustainable, or a choice between stasis and change, but a case of the ecological changes that are occurring as a result of human activity being too fast for ecosystems to be able to adapt to them, and consequently those ecosystems becoming systematically degraded as a result of human actions.

1 Taffel, S. (2021). Data and oil: Metaphor, materiality and metabolic rifts. *New Media & Society*. Abgerufen von <https://doi.org/10.1177/14614448211017887> [Stand 15-07-2022].

However, I think it's important to emphasize that sustainability alone is not enough when thinking about a desirable society. We can look back at all kinds of societies that existed in the past, or which we can imagine existing in the future which are environmentally sustainable but are also deeply unjust and inequitable. This is especially the case looking at possible futures with advanced technologies that can subdue dissenting elements of the populace. So, I think it's important to emphasize that we need technologies, cultures and societies that are explicitly designed to be sustainable and just, and this is of urgent importance because the systems that we have currently are neither of those things.

In terms of outlining some of the problems with digital technology, sustainability, and equity, it's worth emphasizing that there are a range of issues that traverse numerous spatial and temporal scales. These include the overall trajectory of the rapid growth in materials and energy that are needed for digital technologies and the form of ecologically unequal exchange that describes both the flows of raw materials and energy from the global periphery towards the core, and how the core profits from selling technologies, infrastructure and services that use those materials back to the periphery. Equally though, there are a huge number of far more localised harms associated with every stage of digital production, from the extraction industries that remove matter from the earth, through the purification and beneficiation of that matter, the manufacturing of particular components and devices, the transportation and logistical systems that are required for these globalised industries, through to the end-of-life disposal for most digital equipment, most of which is either sent to landfill or shipped for artisanal recycling in regional centres in the global periphery such as Agbogbloshie in Ghana, where local people, workers and environments are poisoned by toxic materials within microelectronics or by particular processes that are used to reclaim materials, such as burning plastic casing of wires.

Some of these processes, practices and materials will continue polluting environments for significant durations, like the 18 million tons of plastics that are used in microelectronics each year which are not biodegradable, they fragment into increasingly small pieces, eventually becoming micro- and nano-plastics which have been found everywhere from the top of Mount Everest to the deepest oceanic trenches, which attract persistent organic pollutants, bioaccumulate throughout the food chain and function as endocrine disrupting chemicals. Whereas this will impact ecosystems for thousands of years, many of our digital technologies are deliberately designed to become obsolete and/or fail within a couple of years, as a way to increase the pace of unsustainable technological consumption. Highlighting this massive temporal discrepancy, between the speeds of digital capitalism and earth's ecosystems is important, because it indicates that these problems are not just specific products or

materials, but that the underlying political economic system of globalised capitalism is itself a key structural problem.

Often when discussing these issues, the initial reaction people have is to ask ‘what can I buy to change this’, which assumes that the most effective way of dealing with these problems is through an ethical form of individualised consumption, which itself indicates a belief that self-regulating markets are an effective way of producing social and environmental justice. Unfortunately, this is often an ineffective way of trying to deal with many of these problems. While there are niche ethical devices available such as the Fairphone², which are designed to be modular, repairable, and longer lasting, where the manufacturers have put in place safeguards to ensure they’re not using conflict minerals and so on, this is a vanishingly small proportion of the overall smartphone market, far less than 1 % globally. Equally, much of the digital infrastructure that smartphones are reliant upon, from the data centres that host digital content, the fibre-optic cables through which data is transmitted, the GPS satellites that are used for locational services and so on is stuff that no consumer is ever going to purchase. While changing cultural expectations about upgrade culture and repairability is useful, individual consumer choices cannot achieve the same scope of action as national and international regulation that is designed to protect people and environments. Ultimately, what we really need are far more robust and enforceable legal frameworks that are designed to make technology sustainable and just, rather than what we have, which is neoliberal, light-touch regulation that has facilitated a technology industry that has been quite open about its ethos of ‘move fast and break things’. Among the things currently being broken by digital capitalism are the ecosystems that life depends upon.

Nina Grünberger: You pointed out that there is a need for a political and legal framework for sustainable development in the context of the usage and further development of digital technologies systems. What would such a framework look like, and does it already exist?

Sy Taffel: In terms of political frameworks around sustainable development more broadly, there is the UN Sustainable Development Goals (SDGs)³ which has 17 aspirational goals and 169 targets that aim to provide a common plan for a sustainable, prosperous, and equitable future. Importantly, these goals go beyond environmental sustainability to think about what a desirable future looks like. While many of the

2 <https://www.fairphone.com/de/> [Stand vom 15-07-2022].

3 United Nations (2015). Sustainable Development Goals. United Nations Sustainable Development. Abgerufen von <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> [Stand: 15-07-2022].

goals, ending poverty, ending hunger, providing clean water and sanitation for all, and taking urgent climate action might not immediately conjure up images of digital technology, others, such as building resilient infrastructure and sustainable industry, sustainable cities and sustainable patterns of production and consumption potentially outline strategies for fundamentally rethinking how digital technologies should function that would be hugely beneficial if they were enacted.

These ambitious goals which were adopted by the UN general assembly in 2015 are supposed to be enacted by 2030, meaning that in 2022 we are around halfway through the timeframe for actioning these goals. The obvious issue when talking about the SDGs though, is that, unfortunately, since 2015 little progress has been made on many of the ambitious targets. Indeed, the Covid 19 pandemic has led to the first rise in what the UN described as extreme poverty in a generation, with somewhere around 120 million people around the world being pushed back into extreme poverty during 2020. Despite Covid 19 causing a 5 % drop in global greenhouse gas emissions in 2020, the rebound during 2021 means that last year's global greenhouse gas emissions were higher than those from 2015, so despite the need for urgent action and a global framework which explicitly recognises this, things have not improved, and in many cases they've actually gotten worse. The problem here is not that the framework itself is unambitious or unachievable, but firstly that it provides a series of aspirational targets that are voluntary, rather than legally binding or enforceable, and secondly the SDGs largely ignore questions around the inequitable power relations and systemic oppression associated with capitalism. In order to address the second issue, it's absolutely vital that the frameworks that are put in place for sustainability (leaving aside the critiques of development as a term which often suggests that the world should aspire towards American or European levels of consumption, which are, of course, deeply unsustainable) are mandatory, enforceable, and that they contain punitive measures which are sufficiently harsh, so that non-compliance is not an attractive or viable option.

Indeed, what we see with the SDG's is similar to the problem that we see with the Paris agreement around climate change⁴. Although nations have signed up to an agreement which describes itself as 'a legally binding international treaty on climate change' that seeks to limit warming to less than 2° and preferably no more than 1.5° C, the mechanism for achieving this is voluntary nationally determined contributions (NDCs), which allows countries to decide for themselves what kinds of greenhouse gas emission reductions they should aim for, and the result has been countries both delaying urgently needed action in favour of doing things in the future (primarily

4 <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [Stand 15-07-2022].

when the current elected governments will no longer be in power) and relying on speculative and unproven future technological innovations, or international carbon trading schemes to provide most of those emission reductions. While the processes around measuring and updating NDC's is legally binding, there is no legal obligation for nations to make particular emissions reductions or to meet their own voluntary targets. Again, we see that voluntarism is ineffective, and there are no shortage of examples to demonstrate this.

Nina Grünberger: In another interview you said that you see the European Union in a pioneering role here. Why?

Sy Taffel: There are a few reasons why the EU is a key actor when it comes to regulation and digital technology. Part of this relates to questions around power and money, as a block of high-income nations that are home to around 450 million people the EU has enough political-economic influence to meaningfully affect the actions of global corporations. Compare this with where I'm based now, in Aotearoa New Zealand, where there are only 5 million of us. If our government were to unilaterally produce legislation designed to significantly alter the way that corporations produce digital devices, those corporations would just not sell things here because it's such a tiny market. Consequently, if we want to affect those kinds of changes, we have to look towards international agreements, which are often much harder to put in place. Of the other markets that are large and wealthy enough to meaningfully regulate the big digital technology corporations, the US for the most part doesn't seem that interested because they're mainly American corporations, although there are some signs this might be changing in certain ways, such as with the Federal Trade Commission's anti-trust case against Meta/Facebook. China is another potential actor in this space, but while some of their recent actions such as banning bitcoin mining suggest they may be beginning moving in a different direction, for the most part their interest has been in building and promoting Chinese alternatives to American digital platforms rather than fundamentally reorientating the ways that platforms should operate. Consequently, in the past the EU has consistently taken the lead in trying to produce legislation to curb the worst harms associated with digital technologies. A good example of this when we're talking about sustainability is RoHS⁵, the restriction of hazardous substances in electrical and electronic equipment directive, which was adopted in 2003 and has since been updated in 2011 and 2015. This directive effectively bans the use of many of the most toxic and harmful substances that were

5 Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, (2021). Abgerufen von: <http://data.europa.eu/eli/dir/2011/65/2021-11-01/eng> [Stand: 15-07-2022]

previously ubiquitously used within information and communication technologies, including lead, mercury, cadmium, hexavalent chromium, Polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE). The 2015 amendment banned four additional materials, all of which are phthalates that are primarily used as plasticisers, substances that are added to synthetic polymers (plastics) to increase particular properties such as flexibility, durability or transparency. This has been a really effective piece of legislation which means that today many of substances that used to be found in most digital technologies have been removed and it's something that we should celebrate as a major success in terms of reducing harm. RoHS has been successful in changing the behaviour of technology corporations, in part, because it addresses toxicity at the design and production stages, rather than allowing toxic products to be produced and then hoping that they will be responsibly treated at the end of their lives.

It's worth noting that when this directive was being proposed and discussed there was significant criticism and pushback from industry, which argued that doing things like removing lead from solder and mercury from the lamps which backlight LCD screens would have adverse effects on the quality and longevity digital devices, and that consequently this would significantly increase the manufacturers' costs, with those increases then being passed on to consumers, with the likely effect that this would widen digital inequalities. Of course, none of this actually came to pass, but it is revealing to contrast these corporations' rhetoric around innovation and sustainability with their behaviour here, which demonstrated a real resistance to change and innovation when it came to preventing their products from poisoning people.

Nina Grünberger: Which of the European Union's political and legal directives or programmes do you think are particularly important for a more sustainable system of digital technologies and why?

Sy Taffel: Alongside existing directives such as RoHS⁶ and GDPR⁷ (the latter of which was primarily designed to address social rather than environmental harm, but was significant in terms of being the first piece of legislation to try and to meaningfully protect citizens data and privacy through implementing privacy by design - despite criticisms that this was quite an individual focused, neoliberal piece of legislation

6 Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, (2021). Abgerufen von: <http://data.europa.eu/eli/dir/2011/65/2021-11-01/eng> [Stand: 15-07-2022]

7 General Data Protection Regulation, (2016). Abgerufen von: <http://data.europa.eu/eli/reg/2016/679/2016-05-04/eng> [Stand: 15-07-2022].

and that most technology corporations simply transgressed the rules that were put in place, the fact remains that again it was the EU that took the lead in trying to regulate harm resulting from digital technologies), the suite of initiatives and legislation that are currently being enacted which has the potential to significantly improve the sustainability of digital technologies is the European Green Deal⁸. This is an enormously broad ranging set of proposals, many of which don't directly relate to digital technology, but do things like set out EU wide reductions in greenhouse gas emissions (50 % of 1990 emissions by 2030 and net zero emissions by 2050), aiming to end deforestation and promote the restoration of soil health.

One of the key pieces of legislation with regards to digital technology within the European Green Deal is the Circular Economy Action Plan⁹, which lists electronics and ICT as a key area, and which will be the focus of a circular electronics initiative designed to promote longer product lifetimes by introducing regulatory measures around energy efficiency, durability, maintenance, reuse and recycling. This includes making digital technology a priority sector for implementing right to repair legislation, will include the right to update obsolete software, which is one of the ways that technology corporations currently seek to persuade consumers to upgrade functional devices by rendering them unupgradable and obsolete. More broadly, the circular economy action plan will aim to reduce greenwashing and planned obsolescence in electronics and electrical equipment. The plan also outlines regulation for the introduction of common charging cables and standards to prevent manufacturers from using their own proprietary connections, such as Apple's Lightning connector, which encourages a totally unnecessary and wasteful proliferation of accessories such as chargers and cables. The proposals also speak to trying to improve the treatment of waste electrical and electronic equipment, while the Basel Convention¹⁰ outlaws the exportation of toxic waste (including electronics equipment) from high income nations (like the EU) to less affluent nations this is recognised as not being well enforced at present.

-
- 8 European Commission. (2019). The European Green Deal. European Commission. Abgerufen von https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf [Stand: 15-07-2022]
 - 9 A new Circular Economy Action Plan For a cleaner and more competitive Europe, (2020) (testimony of European Commission). Abgerufen von: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN> [Stand: 15-07-2022].
 - 10 Europäische Gemeinschaft. (1993). Basler Übereinkommen über die Kontrolle der grenzüberschreitenden Verbringung gefährlicher Abfälle und ihrer Entsorgung. Abgerufen von: <https://eur-lex.europa.eu/DE/legal-content/summary/basel-convention-on-the-control-of-transboundary-movements-of-hazardous-wastes-and-their-disposal.html> [Stand 15-07-2022].

Nina Grünberger: In media education, the debate about structures of digital capitalism and its implications for educational contexts is becoming increasingly intense. Do you see political actors as having a responsibility here, and if so, in what respect? And what role do educational institutions and educational science play?

Sy Taffel: The first part of this question is quite complicated. On the one hand politicians are elected to serve their electorates, to do what is morally and ethically right, to act as leaders who take difficult decisions that are designed to protect their citizens and the environment. On the other hand though, those politicians are elected through a democratic process where they outline a series of positions on important issues and the demos then vote for those politicians whose electoral platforms most closely resonate with their own views. One of the key problems with contemporary democracy is that most of those politicians standing for election simply are not honest when laying out what they intend to do. If that was the case, we would have politicians routinely campaigning on a platform that said *'we don't care about the future, we don't care about the environment and we intend to continue with a suicidal model of business-as-normal that puts short-term economic profits which will overwhelmingly accumulate with the ultra-rich ahead of long-term sustainability or social justice despite all the available evidence indicating that this will lead to ecological catastrophe and immense suffering.'* Of course, if they did this, they wouldn't get elected, so basically, they lie. This poses a real problem for any notion of a rational, representative democracy and public sphere because it's impossible to meaningfully debate the differences in political platforms when everyone says *'of course we're in favour of sustainability and equity and of course we will make life better for everyone if you elect us'* especially when those candidates' actions clearly contradict their words.

In this respect the actions of groups like Friday for Future and Extinction Rebellion are immensely important in highlighting the totally hypocritical and vacuous statements made by politicians and business leaders whereby today, just about everyone, including fossil fuel corporations, are claiming to be in favour of sustainability. Part of this has also been a renewed focus on capitalism, digital or not, as being part of the problem rather than being the solution to contemporary ecological crises. The fact that, as people like David Harvey have demonstrated, capitalism requires year-on-year compound economic growth in order to function, means that in the long term it almost certainly incompatible with sustainability. But when normalised political discourse promises everything to everyone, there is little prospect of success in campaigning on the basis that numerous thresholds around planetary boundaries for a sustainable future have already been breached, and that wealthy nations who have contributed the vast majority of environmental harm should take the largest steps to redressing those ecological harms while also compensating those in the global

periphery, who often experience those harms most acutely while contributing little to their existence, and so those of us living in high-income nations need to learn to redistribute wealth more equitably and do more with less.

Part of the issue, then, is what is often referred to as post truth politics. However, I don't think it's helpful to separate politics or public sphere debate from the wider cultural and economic context that this occurs within, which is one where advertising is ubiquitous. While some of the literature around surveillance capitalism usefully outlines some of the problematic new tactics that are used by Google and Facebook for digital marketing and advertising, from my perspective the problem is less the specific digital tactics, so much as the ubiquitous scale at which advertising occurs today. Some industry estimates suggest that people living in cities in OECD nations see somewhere between 6000-10,000 adverts every day. The overall effect of this is not that those people believe everything they encounter in the daily onslaught of messages contained in those advertisements, in fact, quite the opposite happens, we become conditioned to expect communications not to be truthful, for them to grossly distort any underlying reality, and this parallels what we see with political communication. Alongside this though, the scale of contemporary consumerism and commodification within wealthy nations, which is totally unsustainable, becomes normalised through this daily bombardment of advertisements. So, when we ask what needs to be done to address this situation, part of the discussion ought to be contemplating how we can massively constrain and limit the scale of the advertising industry.

Unfortunately, a lot of what we see in many places around the world is that this highly commodified digital culture is something that is increasingly also present within schools and education. Whether it's teachers wanting to use engaging educational video content that is hosted on YouTube, so their students end up watching advertisements in class, or schools using tools like Google Workspace for Education, which is a way of trying to get children hooked into the Google 'ecosystem', what we increasingly find is that digital platforms and the profit driven commercial culture they are part of, being normalised, engaged with and taught within formal educational contexts. If we want education to be able to meaningfully critique digital capitalism, it seems important that this is something that educational institutions and educators need to find ways of challenging. At the very least this should include introducing students to Linux, Firefox, Libre Office and other free and open source alternatives to corporate computing tools and demonstrating that there are commons-based, cooperative ways of using computational technologies as well as corporate tools.

Nina Grünberger: If you had the chance to further develop the above-mentioned framework conditions and political guidelines together with political actors, such as the European Union, what new emphases would you set? Where should the journey go?

Sy Taffel: While the EU Circular Economy Action Plan¹¹ is potentially a really useful way of challenging present harms that arise from things like planned obsolescence and international waste flows, the way it frames digital technologies is still hugely problematic. The plan's introduction argues that: *'Digital technologies, such as the internet of things, big data, blockchain and artificial intelligence, will not only accelerate circularity but also the dematerialisation of our economy and make Europe less dependent on primary materials'*. Now for anyone familiar with the literature exploring the materiality of digital technology, these claims are patently nonsensical. While there is a popular discourse that equates digital technology with dematerialisation, in actuality, digital technologies require enormous quantities of diverse materials, many of which are not located in significant quantities within Europe. Far from evidencing dematerialisation, since 1990, when digital technologies have exploded in popularity, the global material footprint of society has grown faster than economy. Rather than dematerialisation, we see the opposite, society uses more matter per dollar (or euro) of GDP (Gross Domestic Production) than thirty years ago. While some European countries have reduced their domestic material footprint during this period, this is not evidence of dematerialisation, but of the globalisation and off-shoring of heavy industry alongside processes of ecologically unequal exchange.

Furthermore, while a circular economy can absolutely help to reduce waste and all the social and environmental harms that this produces, within a capitalist economy which requires year-on-year growth, it is very hard to see how circularity can resolve the problem of always needing more materials. It might reduce the need for 'virgin' materials, but economic growth has so far always correlated with material usage, so long as that correlation holds, economic growth will always require more materials in total. As a result, if we are interested in a sustainable society, one that is equitable and which doesn't degrade the capacity for life in the future, we not only need to engage with the materiality of digital technologies, but we need to seriously question the growthist model that underpins capitalism. If we don't, we are effectively deciding to continue sacrificing the future to fuel the inequality and inequity of the present.

11 A new Circular Economy Action Plan For a cleaner and more competitive Europe, (2020) (testimony of European Commission). Abgerufen von: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN> [Stand: 15-07-2022].