





Please cite this paper as:

OECD (2020), Sustainability and Competition, OECD Competition Committee Discussion Paper, http://www.oecd.org/daf/competition/sustainability-and-competition-2020.pdf

This discussion paper should not be reported as representing the official views of the OECD or of its member countries. The opinions expressed and arguments employed are those of the author. This paper describes the results of research by the author and is published to stimulate discussions during OECD Competition Committee meetings.

This document and any map included herein are without prejudice to the status or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city, or area.

© OECD 2020

Foreword

This paper explores the interaction between competition law and policy and sustainability. It first charts the historical development of sustainability and its three components: environmental, economic, and social. The paper then explores the normative questions of whether sustainability should play a role in competition law and policy. The main part of the paper shows how sustainability features within the more technical questions of the substantive application of competition law, highlighting lesser and more contentious areas. It describes how sustainability can be fostered by competition enforcement against practices hindering sustainability and then illustrates the interaction of competition law and business activities where business activity leads to increased sustainability. Finally, the paper charts process-related matters, such as agency objectives, priorities, approval procedures, capacity, fining, and international co-operation. Overall, the paper finds that while there are still debates, many OECD countries already consider, knowingly or unknowingly, sustainability matters within their enforcement practice.

This paper was written by Julian Nowag (Associate Professor at the Faculty of Law of Lund University Sweden and Lecturer in competition law and Associate at the Oxford Centre for Competition Law and Policy) working as a consultant for the OECD Competition Division. It was prepared as a background note for discussions on sustainability and competition at OECD Competition Committee meetings (www.oecd.org/daf/competition/sustainability-and-competition.htm).

The author acknowledges the usefulness of OECD (2018) Competition Law and State-Owned Enterprises and OECD (2010) Horizontal Agreements in the Environmental Context, referencing a number of case examples from these papers. The author would like to thank Okeoghene Odudu, Cristina Volpin, Pedro Caro De Sousa of the OECD Competition Division for discussion and comments on thispaper. He would also like thank Izel Karahan, Zhengmin Li, Fabian Richter, Arletta Gorecka, and Rica Papa for their support as research assistants summarising material from around the world.

Table of contents

Foreword	3
Executive Summary	7
1 Introduction	9
2 What is Sustainability? Developments in International Law	11
3 Normative questions: Should competition law and policy be influenced by sustainability?	15
4 Technical questions	17
5 Process related issues	27
6 Conclusion	31
References	33
Endnotes	43

Executive Summary

Sustainability has been on the agenda of international organisations, states and, increasingly, private businesses for some time. From a competition agency perspective, regulation to achieve sustainability might be the preferred option. Yet, business action might equally affect sustainability and competition and competition laws are crucial considerations for businesses.

Occasionally, the debate is unhelpfully reduced to the question of competition vs sustainability as public policy. Such a simplified view of the debate obscures the matter leading to competition law and competition authorities being seen as obstructive and out of touch with realities. To further a constructive debate, this paper maps out the issue and identifies more and less controversial issues in the concrete application of competition law in a sustainability context.

The paper explores the concept of sustainability and its genesis in the internal arena and explains its three components: the environmental, the economic, and the social. The paper then explores the normative questions of whether competition law should take sustainability into account, exploring, in particular, international law and domestic constitutional requirements.

The more technical part of the paper provides some basic background on the economics of competition and sustainability highlighting how the protection of competition, consumer welfare, and sustainability overlap. It explores in more detail the substantive competition law questions identifying the areas where consensus exists and those that are more contentious. This subdivided section first shows how competition authorities can foster sustainability by targeted enforcement where anticompetitive practices are similarly detrimental from a sustainability perspective as, for example, in cases where cartels prevent consumers from buying sustainable products. Similar active engagement in support of sustainability can be achieved the use of more dynamic theories of harm that protect sustainability innovation. It also shows that the debate arises as to how far dynamic innovation theories might be pushed and whether a focus on exploitative abuses to protect the social dimension of sustainability, namely poverty, can be justified.

In its second part, the paper illustrates the interaction of competition law and business activities where business wants to move into a more sustainable direction. Less conscious areas are different forms of exclusions from the scope of competition or the balancing between sustainability and competition where a jurisdiction's competition law includes a general public interest exception. The area where more debate takes place is balancing within the established economic frameworks of consumer welfare and efficiency. Yet, the paper highlights that sustainability can readily fit within this framework as a quality parameter and that more contentious questions relating to questions of how far the dynamic nature of sustainability can be pushed in particular by taking into account benefits in the future or in other markets.

Finally, the paper emphasises the importance of agency objectives and priority setting and formal and informal guidance. It also touches upon questions of approval procedures, sandboxing, admissible evidence, capacity, fining, and international co-operation.

Overall, the paper shows that many OECD countries are already considering sustainability matters within their enforcement practice, whether they do so knowingly or unknowingly.

1 Introduction

While regulation by States is generally the preferred option to achieve sustainability, private action might equally affect sustainability. Competition and competition law are crucial variables for private action in particular for actions by businesses.

This paper explores the interaction between sustainability and competition1 law and policy. It aims at mapping out the debate surrounding this topical issue. The paper explores overall conceptual issues common to many jurisdictions with competition laws. It highlights specific provisions and cases of different jurisdictions to exemplify relevant points and to show how the interaction between competition law and sustainability can operate in different jurisdictions.

The sustainability-competition debate puts competition agencies in a difficult position. On the one hand, they need to send a clear message that sustainability cannot be an excuse for businesses to cartelize or otherwise engage in anti-competitive conduct, where 'sustainability' is just used as cover (green washing). At the same time co-operation for sustainability might get out of hand. A case in point in the European Union is the Consumer Detergents cartel² where the implementation of an environmental initiative concerning laundry detergents led to a cartel that co-ordinated price increases. On the other hand, agencies want to avoid the impression that their mission is a single-minded one.³ A mission where competition is pursued at all costs and where competition law protects those that impose negative externalities on others while hindering any private activity aimed at /reducing or internalise them.

This paper aims to help in these delicate balancing exercises by laying out the tools that allow competition agencies to actively contribute to sustainability and to decide whether and how private actors should be allowed to foster sustainability.

The first part of the paper is dedicated to the concept of sustainability since any exploration of the relationship of sustainability and competition law and policy requires a basic understanding of the concept of sustainability. In particular, it explains the origins of the term and its three components: the environmental, the economic, and the social. It notes the status of sustainability in international law and investigates in more detail the interaction of businesses and other private actors with some of the key features of sustainability.

The second part of the paper explores normative questions regarding sustainability and competition law and policy. In other words, it answers the question whether sustainability should be taken into account by competition authorities and courts in the context of legal and policy matters. The third and main part of the paper addresses more technical questions. The distinction between normative and more technical questions facilitates analytical clarity. Yet, it should not negate that these two fields interact.

The part on the more technical questions has two objectives: First, to map out the issues and debates. Second, to identify the vast areas where consensus exists and those where the actual debate needs to take place. This part shows the different tools and how they can be used to navigate the sustainability-competition debate. It is subdivided. One section on the economics of competition and sustainability, a section on substantive competition law questions, and a third section on questions related to processes and procedures of and within agencies.

What is Sustainability? Developments in International Law

When aiming to approach the interrelationship between sustainability and competition law a more in depth look at the concept of sustainability is warranted. Today 'sustainability' and 'sustainable development' are often used interchangeably. This paper partly follows this approach. In fact, this paper uses the broad term 'sustainability' to refer to what should properly be termed 'sustainable development'.⁴ This section will provide a short overview about the term and concept of sustainability and its development and highlights some of the key features. Moreover, it explores in more detail the interaction of businesses and private actors with sustainability and in the final paragraph highlights some of the important features relevant to the debated about sustainability and competition law.

The term 'sustainability' is a commonly applied term in science⁵ and refers to a capacity to sustain something (e.g. a person, a system, a habit) for an indefinite period of time. The definition of 'sustainable development' is different yet related.⁶

The most commonly agreed upon definition of sustainable development comes from the Brundtland report of the World Commission on Environment and Development⁷ which defines it as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987, p. 43_[1]). In this sense sustainable development may, then, be understood as a 'universal goal to be achieved' (Soini and Dessein, 2016_[2]) or a 'moral obligation that we are supposed to have for future generations' (Solow, 1991_[3]).

This understanding of sustainable development has an environmental core with the concept of 'eco-development'. This concepts stems from the UN 'Conference on Human-Environment' in Stockholm in 1972 which discussed the impact of human society on the environment and attempts for a reconciliation between economic development and environmental preservation (Purvis, Mao and Robinson, 2018_[4]). In the 1980s, the social dimension was integrated due to the effects that war and poverty have on the environment.⁸

In 1987 the World Commission on Environment and Development itself published the Brundtland Report entitled 'Our Common Future'. The paper acknowledged that issues of economic development, environmental development, and social development all affected one another. It shifts the focus from the environmental problems to the causes of those problems. Thus, highlighting that poverty is both 'a major cause and effect of global environmental problems' (WCED, 1987, p. 8_[1]). It, thus, suggested to focus on:

- Reviving growth
- Changing the quality of this growth
- Meeting essential needs for jobs, food, energy, water, and sanitation
- Ensuring a sustainable population level
- Conserving and enhancing the resource base

- Reorienting technology and managing risk
- Merging environment and economics in decision making; and
- Reorienting international economic relations (WCED, 1987, p. 42[1])

In the 1990s, the focus shifted towards contributions to sustainable development by private actors and of free-trade, in particular in the context of the North-South divide.⁹

Looking more closely at the concept of sustainability, 'three pillars' can be identified: *environment*, *economy*, and *society*. Thus, sustainability is the product of economics, environment, and social equity and can only be achieved through the simultaneous and balanced pursuit of all three components. While there might be trade-offs, the concept does not mean that growth is balanced against environmental sustainability. Instead, the balancing of the three components simply means that economic growth is still possible while preserving the environment, and that growth may actually foster ecological protection and social equity (Portney, 2015, p. 6_[5]).

The most recent framework of international law aims to provide more concrete guidance. ¹² In 2015, the United Nations General Assembly adopted the UN Resolution 70/1, which is titled 'Transforming our world: the 2030 Agenda for Sustainable Development'. The resolution and its content, often referred simply as 2030 Agenda or the UN Sustainable Development Goals (SDGs), is to be a 'plan of action for people, planet, and prosperity' setting out a roadmap to guide all countries' policies towards sustainable development until 2030 (UN, 2015b, p. 1[6]). The Resolution created 17 sustainable development goals with 169 associated targets all grounded in the economic, social, and environmental dimensions of sustainable development. ¹³ The broad sustainability goals set out in the resolution are set out in Table 1 below.

Table 1. Sustainability goals set out by UN Resolution 70/1

Goal 1	End poverty in all forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure availability and sustainable management of water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all
Goal 9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries
Goal 11	Make cities and human settlements inclusive, safe, resilient, and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas, and marine resources for sustainable development
Goal 15	Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective accountable and inclusive institutions at all levels.
Goal 17	Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.

Beyond these goals, the 2030 Agenda contains several targets promote economic growth through increased investments¹⁴, trade reform¹⁵, industrialisation¹⁶, and the promotion of bank financing¹⁷. The Agenda had substantial influence. For example, in 2019, the OECD (OECD, 2019_[7]) reported that over 78% of partner countries in 2018 had included items from the SDG into their country-level strategies and only 4% had yet to refer or allude to the SDGs in their national development plans.

Importantly the 2030 Agenda highlights the need for companies to adopt more sustainable business practices. SDG 12.6 encourage companies, especially large and transnational companies, to adopt sustainable business practices and to integrate sustainability information into their reporting cycle. Private initiatives are seen as crucial in achieving sustainability in three forms (Portney, 2015, pp. 110-117_[5]). First, businesses can be part of the 'green economy'. ¹⁸ Second, businesses not part of the 'green economy' can still try to improve their sustainability. This can either occur by reducing their environmental footprint in their operation or by employing more equitable management systems with regard to the social component. Common examples are adopting eco-friendly packaging or engaging in corporate social responsibility projects. Similarly, companies have started ¹⁹ to employ the 'triple bottom line' approach to annual reports. This account framework measures and reports the social, environmental, and financial bottom line. ²⁰ Third, businesses in co-operation with NGOs create new organisations. ²¹ The organisation contrasts with traditional business lobbying organisation by advocating for sustainable practices in the private sector and government.

Yet, the efforts by the private sector 22 as part of the sustainability agenda have not been without criticism. It often concerns the sincerity of the businesses with accusations that private businesses have co-opted the concept of sustainability simply to improve the public image of their companies, in other words 'greenwashing' (Portney, 2015, p. $117_{[5]}$). Moreover, from the sustainability angle companies have been criticised for a lack for real motivation to contribute to sustainable development. Such companies would be 'using' sustainability as a means of streamlining processes ensuring more cost-effective business strategies and increased profit margins (Portney, 2015, p. $118_{[5]}$).

In conclusion, sustainability as a concept has its roots in environmental protection and marries social development and economic development with it. This basic idea is founded on the suggestion that environmental degradation and depletion of natural resources will reduce economic growth and development. Sustainable developments aim at reviving growth while changing the quality of growth. The concept brings with it an element of forward thinking and of ensuring that the wellbeing of the large and still growing world population are ensured.

The sustainable growth should ensure that the development meets the essential needs for jobs, food, energy, water, and sanitation without compromising the needs of future generations. In decision making, it aims to merger environment and economics so that technology and risk management are in line with achieving sustainable growth. It also involves a reorientation of international economic relations to ensure the benefits of development are more widely shared.

The 2030 Agenda with its 17 sustainable development goals with 169 associated targets further elaborating on these goals provide good guidance. Amongst them, one might for example mention the encouragement of especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle (SDG 12.6) or the push for sustainability in public procurement practices (SDG 12.7).

Overall, a focus on productive and dynamic efficiency as well as equity is required to achieve sustainability. For example, improvements in productions processes that lead to the use of less virgin raw material or improve the efficient usage of recycled material would fall within this category. As such, the concept seems focused on human development in its natural environment and their co-dependence. The preservation of the environment for humans, animals, and plants is the essential core. In turn, this purpose limits the concept, making it more questionable whether matters of e.g. animal welfare can be seen as contributing to sustainable development.²³ The role of equity in the overall concept of sustainability is less clear than for example the role of environmental protection. While it can be seen as integral part of the concept, there is still debate about its inclusion in sustainability from a theoretical perspective. Yet, equity and fairness has certainly made inroads into international efforts concerning sustainability because poverty is a major driver of environmental degradation. Without social and economic development any preservation attempts

are doomed to fail, in particular where humans are dependent on the unsustainable exploitation of natural resources to survive and live a decent life.

Sustainability in the context of businesses activity can take different forms. It can specifically mean that companies are part of the 'green economy' which provides important contributions to sustainability. More generally, it also means that companies can innovate in ways that contribute to sustainability, and/or ensuring that current business activities are reorganised so that their sustainability level are increased.

Normative questions: Should competition law and policy be influenced by sustainability?

Should competition law take account of sustainability considerations?²⁴ This question is a normative question that involves value judgment and can be distinguished from the more technical question of how it can take those considerations into account.²⁵ In the context of the normative debate, it has been argued that these questions are related to how we define the goals of competition law and that competition law should move away from consumer welfare (Claasen and Gerbrandy, 2016_[8]). On the other side of this debate are those that argue that the value judgments involved in the normative questions should not be made by competition authorities (Peeperkorn, 2020_[9]).

Indeed, it might be problematic if such decisions are made by unelected bureaucrats. Yet, when normative question are encountered in a legal context, the first point of reference is the legal framework within which the question arises (Minkkinen, 2005[10]). ²⁶ Thus, the answer to 'should competition law take account of sustainability considerations' very much depends on the legal framework in which this questions is posed. Each and every jurisdiction has a specific answer to this question based on their legal, and more specifically constitutional setting.

These sets of locally relevant norms that might, or might not, require such interaction. In different jurisdictions, competition law and policy are subject to different legal requirements and constraints (Ezrachi, 2017_[11]). These are contained in the relevant competition law, within relevant other legal frameworks, such as the constitution, or are the result of obligations under international law and their domestic implementation. The debate on the goals of competition law and policy²⁷ may also be relevant. Yet, this debate is only relevant where the answer to the questions of whether sustainability considerations should feature in competition law and policy is though only within competition law. In other words, this debate about the goals is important where other legal requirements regarding sustainability do not exist in a jurisdiction or where a jurisdiction's competition law refers generally to public interests.

Thus, depending on the relevant jurisdiction the answer to the normative question whether competition law and policy should take account of sustainability considerations cannot be found in the abstract and for all jurisdictions. Instead, the answers for a specific jurisdiction can be found by examining the goals of competition law, the constitution and the relevant international law and its status of in the jurisdiction in questions.

A number of countries in the EU²⁸ and beyond have references to environmental protection or sustainable development in their constitutions (Boyd, 2012_[12]; Jeffords and Gellers, 2017_[13]). For example, the Turkish constitution in Article 56 states that '[e]veryone has the right to live in a healthy and balanced environment. It is *the duty of the State* and citizens to improve the natural environment, to protect the environmental health and to prevent environmental pollution'²⁹ Similar provisions can also be found for example in

Switzerland, ³⁰ Russia ³¹ or Mexico. The Mexican constitution for instance declares that: 'Any person has the right to a healthy environment for his/her own development and well-being. The State will guarantee the respect to such right.' Whether and what effects such constitutional provisions have is determined within the relevant jurisdictions. ³³

Supranational law might also be relevant. The EU for example is required by Article 11 of the Treaty on the Function of the European Union (TFEU) and Article 37 of the EU Charter of Fundamental Rights environment to be 'integrated' environmental protection and sustainable development into the policies including competition law (Nowag, 2015_[14]).

Similarly, international law obligations such as the Paris agreement or the 2015 UN Resolution 70/1 '2030 Agenda for Sustainable Development' can be relevant. Depending on whether a country is a monist or a dualist (Charlesworth et al., 2005_[15]; Nijmann and Nollkaemper, 2007_[16]; Crawford, 2019_[17]) such international agreement either need an implementing act or can directly be relied upon in the national courts and may act as a standard of review.³⁴ A recent example is the Dutch Supreme Court, which used the UN Climate Convention and the Dutch State's legal duties to protect the life and well-being under the European Convention for the Protection of Human Rights and Fundamental Freedoms to find that the Netherlands was required to reduce its greenhouse gas emissions by 25% by the end of 2020.³⁵

While such legal requirements might apply to competition law and policy in a particular jurisdiction, it is worth to note two points. First, respecting such legal requirements does not mean that the aims or goals of competition law change (Nowag, 2019_[18]).³⁶ Second, where the concern is whether competition law can remain 'pure', care and deference might be required in order not to second-guess the (occasionally constitutional) legislator who has imposed such requirements regarding sustainability (Nowag, 2019_[18]).

4 Technical questions

The technical questions (that is to say whether and how) concerning economics and issues relating to the application of the relevant competition laws can be distinguished. The technical matters related to the application of competition law can then be further subdivided³⁷ to achieve analytical clarity.

However, the technical questions need to be understood against the background variables that have already been highlighted and are further addressed below. These background variables influence the tools and the debate. On the one hand, there are concerns that relate to the democratic mandate of competition authorities and questions related to the administrability of competition rules and capacity of competition authorities to deal with matters that involve sustainability (Gerbrandy, 2020[19]). On the other hand, there are moral and - depending on the jurisdiction - legal requirements. These might require certain interpretations and the use of unfamiliar methodologies. Yet, these requirements would usually not go so far as to require a *contra legem* balancing between sustainability and competition. Instead, as the following discussion highlights, the competition laws provide sufficient space to use tools that competition authorities are familiar with. No, or only limited, methodological innovation and expansion may be needed, in particular as the concept of sustainable development implies a focus on productive and dynamic efficiency.

A short overview of the economics of sustainability and competition

When exploring the more technical question of the interaction between sustainability and competition law and policy a first point of reference might be provided by economics. As discussed, sustainability highlights resource efficiency, innovation, and the role of the private sector in achieving the sustainability goals set by the UN.

Competition lawyers and economists often seem to express a preference for regulation to achieve sustainability (Schinkel and Spiegel, 2017_[20]). While it might seem ironic that competition lawyers and economists would call for greater regulation, regulation has obvious advantages. Such a route is often able to achieve sustainability concerns more directly, with greater political accountability, and with a more uniform effect on market participants.

Yet, this competition-based view might not be shared by other parts of government who might have different views as to the desirability, effectiveness and efficiency of regulation in a specific situation. In particular, traditional command and control regulation are often considered inefficient (Cole and Grossman, 1999_[21]). Moreover, even where regulation might be efficient, it might not be feasible or effective. Feasibility and effectiveness problems might result from the political compromise required on the national or international plane, or similarly from jurisdictional/geographical limitations of such regulation, from insufficient implementation, or from the administrative burdens involved (Pacheco et al., 2018_[22]).

Thus, in the absence of regulation voluntary measures by the private sector have gained importance and have often been encouraged by States. Hence, private sustainability measures interact more frequently with competition law and policy. This interaction goes beyond the traditional competitive impact assessment of command and control regulation designed to ensure sustainability.³⁸

Economics can be a valuable tool for understanding the market forces at play and thereby in determining whether the dynamics at play are harming or helping in delivering sustainability. Moreover, exploring the economics of competition and sustainability helps in identifying how sustainability can be assessed within the traditional economic framework applied in the competition law. Furthermore, economic insight can assist in exploring whether government action or private sustainability initiatives are more efficient in delivering sustainability.

Foundational in this regard is the work of Elinor Ostrom (Ostrom, $1990_{[23]}$) on the sustainable management of common pool resources, for which she received the 1993 Nobel prize in economics. She showed that in the context of the commons unfettered competition by rational profit maximisers leads to disastrous outcomes and that in reality co-operation can be expected.³⁹

While this foundational work explores a real-life situation of co-operation, sustainability initiative by private parties are not frequently explored by micro-economists. The few micro-economic studies from even fewer authors, published often as working papers use standard assumptions and models regarding competition (Schinkel and Spiegel, 2017_[20]; Treuren and Schinkel, 2018_[24]; Martinez, Onderstal and Schinkel, 2019_[25]; Schinkel and Toth, 2049_[26]). In general, the few existing studies suggest that there are cases where co-operation can lead to positive outcomes but that these situations are rather limited, and that government regulation seems a more efficient. This strand of literature suggests that one of the main reasons for these findings is that firms do not have incentives to invest in sustainability.

However, there might be some limitations that could constrain the usefulness of these theoretical findings in practise. On the one hand, sustainability as a non-price quality element suggests that the unusual findings regarding quality and competition apply (Volpin, $2020_{[27]}$). Often competition would lead to the superior outcomes but occasionally co-operation might yield better result. Similarly, models from innovation seem to suggest that one size might not fit for all practices and situations. The answer to the Schumpeter-Arrow debate over whether competition or monopoly leads to more innovation can be better answered in a concrete situation. ⁴⁰ Similarly, innovation in sustainability needs to be assessed in a concrete situation. Moreover, one wonders whether the debate concerning the pro- and anti-competitive effects of resale price maintenance (OECD, $2008_{[28]}$) might be of relevance in this context of sustainability. The issue of free riding is a problem frequently encountered in the sustainability debate (Delmas and Keller, $2005_{[29]}$).

On the other hand, one might question whether the rational profit maximiser axiom used in these studies does not dictated the outcome. 41 More fundamentally, the usefulness of this axiom in studying this phenomenon might also be questioned. First, a willingness to sacrifice some profits might be inherent in any corporate social responsibly concept (Reinhardt, Stavins and Vietor, 2008[30]; Elhauge, 2005[31]). Second, companies might have to make internal trade-offs between sustainability and profit sacrifice against the backdrop of the public sustainability debate and pressure from investors. 42 Similarly, the models employed by the papers are built on the assumption that consumers welfare is only increased by consumption. Thus, one might wonder whether the outcome might be different where another matrix such as concepts like 'passive use value' would be used. 43 A different matrix might also be more realistic as consumers are not only having financial interests in one relevant market but are active in different spheres and might have conflicting interests (HCC, 2020[32]) (Lianos, 2018[33]).

On the practical side, one competition case concerning animal welfare provides a practical example of the use of economics, which can equally be used in the context of sustainability.⁴⁴ In the Dutch *Chicken of Tomorrow*⁴⁵ case, the ACM, based on consumer surveys, used a cost-benefit⁴⁶ and willingness to pay analysis to compare the increase in price with the consumers valuation of the increase in animal welfare.⁴⁷

Overall, it can be observed that more work in terms of economic theory and models would be useful. The existing papers addressing the issue are using traditional assumptions and tools and tell a cautionary tale. Borrowing models from the competition-innovation and competition-quality debate might be helpful. In

practice, the use of traditional economic tools has been observed in areas that are closely related to sustainability and might provide useful guidance.

Sustainability and competition law

The technical matters, that is to say, how the application of competition law relates to sustainability can be further broken down. He interpretation of the relevant competition provisions can have two different outcomes. On the one hand, it can be asked to what extent can competition provisions be interpreted so that measures harmful from a sustainability point of view are prevented/prohibited. On the other hand, it can be explored to what extent the provisions can possibly be interpreted so that measures that support sustainability are allowed. These situations can be termed preventative and supportive integration and might also be compared to a sword and a shield (Holmes, 2020[34]). In the first case, competition law is use as a sword in the fight for sustainability, for example to *prevent* the degradation of the environment. In the second case, measures are shielded from competition law prohibitions where they *support* sustainability.

Competition law as a sword in the struggle to prevent unsustainable business activity

How can the application of competition law foster sustainability? In other words, to what extent competition law can act as sword in the fight for sustainability? Such a function of competition law can take the shape of applying competition law in a traditional manner or of pushing its boundaries in more or less controversial ways.

First, it is worth highlighting the overlap between sustainability and efficiency (productive and dynamic) and consumer welfare. Sustainability requires productive efficiency and dynamic efficiency to achieve and ensure the optimal level of usage of the natural resources. Moreover, sustainability is a feature that is valued by consumers (Choi and Ng, 2011_[35]). While the value and the willingness to pay for sustainability might differ between consumers (Marketing Charts, 2017_[36]; McKinsey & Company, 2012_[37]), it seems to be a fair assumption that consumers would choose the more sustainable product between two otherwise identical products if offered at the same price. We can therefore see sustainability also as a quality element (Volpin, 2020_[27]).

These observations are important as they mean that in certain cases the traditional application of competition law can lead to increases in sustainability. ⁵⁰ In other words, the increased competition after the antitrust intervention collaterally leads to increased sustainability. This effect can be a more or less accidental spill-over effect or the result of more targeted antitrust action with sustainability in mind. An example of such an intervention with collateral effects⁵¹ on sustainability might be a merger case like *Panasonic/Sanyo* (FTC, 2009_[38]). ⁵² In this case the FTC intervened and imposed conditions for the merger regarding NiMH batteries. Batteries and battery technology are important in the energy transition ⁵³ as they allow for the storage of intermittent renewable energy (Barton and Infield, 2004_[39]; Gallo et al., 2016_[40]). In this case the FTC required divestiture to ensure that competition in this market for 'critical batteries' would be maintained and imposed amongst other remedies a transfer of IP regarding NiMH batteries to Fujitsu.

More target antitrust action with foreseeable effects on sustainability are also possible for example with regard to sustainability as a quality element. For example, the French competition authority fined companies in PVC and linoleum floor covering industry (Autorite de la Concurrence, 2017_[41]). The companies had agreed to withhold environmental performance information in their advertising. This would have restricted competition on these quality parameters.

Target enforcement along the more traditional theories of harm to address anticompetitive activity related to innovation is an important element of fostering sustainability via competition because R&D and eco-

innovation are important for sustainable development. Thus, competition agencies could for example focus on exclusionary behaviour regarding access to technology⁵⁴ or cartels that are also harmful from a sustainability perspective. Another example of the latter is the recent action by the European Commission against *BMW*, *Daimler and VW*. The Commission, after its preliminary investigation, sent a statement of objection (EC, 2019_[42]). The Commission alleged that the companies had restricted competition on innovation for selective catalytic reduction systems of diesel passenger cars⁵⁵ and 'Otto' particle filters of petrol passenger cars. These are two emission-cleaning systems. In restricting such innovation, the Commission finds that the companies denied consumers the opportunity to buy less polluting cars, despite the technology being available to the manufacturers. These are two emissions of the companies of the comp

Thus, suggesting to consider effects on innovation where sustainability innovation is concerned (Lianos, 2018_[33]) seems not far-fetched. While these cases seem to fall rather within the traditional theories of harm, it has also been suggested that the current theories of harm used in competition law can be extended with regard to innovation and its relationship with sustainability, because innovation effects in general can be found for example in US (DOJ & FTC, 2010: 2) and EU merger guidelines (EU Horizontal Merger Guidelines: para 8, 20, 38, 81; EU Non Horizontal Merger Guidelines: paras 10 & 26). For instance, it has been argued that the *Bayer/Monsanto* merger is also negatively effecting sustainability (Lianos and Katalevsky, 2017_[43]). The merger would not only increase industry concentration, entrench market power leading to higher prices for farmers and locking them in, but it would similarly affect the availability of seed diversity and overall could lead to increased use of fossil fuel based herbicides and pesticides thereby negatively affecting sustainability (Lianos and Katalevsky, 2017_[43]). The Commission was able to examine some of these concerns in the context of its assessment of possible innovation harms in particular with regard to innovation efforts and innovation outputs. Yet, it seems possible to extent this theory of innovation harm further, so as to capture not only innovation efforts and outputs but equally innovation diversity thereby capturing even more of such concerns (Makris and Deutscher, forthcoming_[44]).

There are other ways in which the current boundaries of the theories of harms could possibly be further pushed. For example, one might imagine a focus on exploitative practice to address sustainability concerns with regard poverty and prices for farmers (Holmes, 2020_[34]), (Fair Trade Advocacy Office, 2019_[45]), pp. 45, 54; (HCC, 2020_[32]); (Iacovides and Vrettos, 2020_[46]).

There might well be areas where the application of competition law can be expanded, or its boundaries pushed. Yet, there are inherent limitations and dangers in individual cases. First, not all jurisdictions consider exploitative abuses as something that is subject to competition law. Second, in cases of exploitative abuses, known in particular in cases of excessive pricing, ⁶¹ competition authorities are careful not to be conceived as price setting authorities. Third and more generally, competition authorities need to be mindful of not being perceived as standard setting authorities. Neither as price setting authorities nor as setting the relevant sustainability standard. This mindful approach follows from the separation of powers principle and capacity concerns in terms of acting as a regulator setting the relevant sustainability standard (Nowag, 2016, pp. 141-142_[47]). Yet, it is important to highlight that 'being mindful' does not mean it cannot be done as the comparison to excessive pricing cases shows. Just because establishing excessive pricing is difficult, it does not follow that it can never be established as an abuse.

Overall, sustainability can be fostered by means of competition law by using the traditional tools and where appropriate by using these tools in more creative ways. In this regard innovation, quality and where available provisions relating exploitative business practices seem relevant. Moreover, competition policy in general might be instrumental in the broader debate surrounding sustainability. ⁶² For example, in South Africa competition policy was an important element in its reforms after the end of apartheid (Roberts, 2004_[48]). Competition policy was a tool that helped to address the historical structures with a highly concentrated economy by facilitating the increasing participation of black-owned companies in the economy.

Competition law as an obstacle? - Sustainability as a shield against antitrust liability

The enforcement of competition law against actions that do not only harm competition but also harm sustainability is one area where competition law might foster sustainability. Another, and sometimes more topical issue, is the interaction between business actions in support of sustainability and competition law. ⁶³ In other words, and asked from the perspective of sustainability: to what extent does competition law limit the pursuit of sustainability by market participants?

In responding to this question, it is worth highlighting that the answer does not only involved the occasionally contentious issue of how to balance competition law and sustainability. Instead, it needs to be emphasised that many bi- or multilateral businesses activities aimed at improving sustainability are not within the scope of competition law and do not necessarily involve such a balancing exercise.

Scope

The debate around sustainability is too often focused on balancing between competition and sustainability. Yet, sustainability as such is grounded in the view that there is no fundamental conflict between the economy and the environment. In this sense, a vast area is often overlooked: business actions aimed at promoting sustainability which are not subject to the competition law prohibitions (Nowag, 2020[49]). This area encompasses situations related to the definition of commercial activity subject to competition law, State action/compulsion matters, sectoral exemptions, as well as cases where no restrictions of competition in the sense of the competition provisions exists. Prime examples of such activities not restricting competition might be standards that fulfil certain criteria.

Commercial/economic activities covered by competition law

Not every activity contributing to sustainability matters is automatically subject to competition law. Many jurisdictions only subject commercial, ⁶⁴ economic activities, ⁶⁵ or enterprises and trade associations. ⁶⁶ to competition law while other are only applicable to corporations. ⁶⁷

Thus, either certain activities or more broadly certain entities regardless of their activities are not within the scope of competition law. This can also be the case for activities or entities in the context of sustainability. A good example from the EU is the case *Germany v Commission*. ⁶⁸ This case concerned environmental, charitable NGOs, which had been tasked with the management of national environment heritage sites. The question was whether these NGOs could in certain situations (offering of finishing licences and the operation of a camping sights) be considered undertakings and thus within the scope of EU competition law. ⁶⁹ While in some jurisdictions charitable NGOs might *per se* not be subject to the competition provisions, the EU approaches the matter differently. As EU law is not concerned with the legal status but solely explores the activities in question, the case turned on whether the activities in questions were economic in nature. The court found that the activities should not be looked at individually but instead that they were sufficiently closely connected to the main, non-economic and social task of managing the natural heritage. Hence, the court found that the activities are not subject to competition law.

Sectoral exceptions

Some states also exclude certain areas of the economy or sectors from the application of competition law. Thus, activities by companies in these sectors that improve sustainability are generally not subject to competition law.

Another important sector in the context of sustainable development, in terms of all three elements of sustainable development (environmental protection, social and economic development) and in particular food security, is agriculture (Fair Trade Advocacy Office, 2019_[45]). In many jurisdictions, ⁷⁰ agriculture is either exempted or special provisions apply. ⁷¹ For example, in the US the Clayton Act allows for the setting

SUSTAINABILITY AND COMPETITION © OECD 2020

up of co-operatives with the intention of 'mutual help' and the Capper-Vostead Act ensures that this includes collective processing, handling, marketing and preparing products for the market. Yet, these Acts do not provide full antitrust immunity but only partially exempt such activities (Reich, 2007_[50]).

State Action and State compulsion, the right to petition the government

Measures by companies fostering sustainability might equally not be subject to competition law because they are mandated by law or because business acts together with State agencies in specific ways to achieve sustainability aims. For example, the DoJ closed an investigation into an undertaking by car manufacturers to comply with more stringent emission standards which were set by the Californian regulator (Government of California, 2019_[51]). Such behaviour is excluded from the scope of US antitrust law by mean of the State action defence (Petrosyan, 2019_[52]; Hovenkamp, 2019_[53]). The situation is similar in Canada. There the Competition Bureau takes into account numerous facts such as the overall nature of the scheme, the objectives and the involvement of State authorities when examining the so-called 'Regulated Conduct Doctrine' (Competition Bureau Canada, 2010_[54]). Another example more specifically addressing sustainability has been suggested in the Netherlands. This proposal takes account of the EU State action doctrine (Gerard, 2010_[55]). The EU State action doctrine applies only where a certain behaviour is directly mandated and the undertakings do not have any room of autonomous conduct. Thus, under the Dutch proposal a group of companies can make proposals for binding sustainability standards to the minister. After consultation with stakeholders such as market participants, consumer and civil society, the minister can decide to make the proposed arrangement mandatory.

Standards and other cases not restricting competition

Standards are another area that in many jurisdictions allows companies to engage in actions promoting sustainability without being subject to competition law prohibitions. Typically, such standards set technical or quality requirements and are more leniently assessed than other horizontal agreements as they are presumed to play an important role for technical innovation. The example, the US Supreme Court in Allied Tubes & Conduit Corp v. Indian Head, Inc held that safety standards such as those set by the National Fire Protection Association are generally procompetitive as long as the 'private associations promulgate safety standards based on the merits of objective expert judgments and through procedures that prevent the standard-setting process from being biased by members with economic interests in stifling product competition."

Often⁷⁵ standards are outside the scope of competition law if conditions are fulfilled⁷⁶ that ensure that the standards are not used for exclusionary practices.⁷⁷ Such standards are also highly relevant with regard to sustainability and often involve some form of certification. In such cases, the standards reduce information asymmetries. For standards to be outside the scope of competition law many jurisdictions require that the standards are unrestricted in participation, have transparent procedures, no obligation to comply, and adopt FRAND conditions in their operation.⁷⁸

Similarly, patent pools are often not subject to the competition law prohibitions for not restricting competition. For example, the JFTC (2005: Part 3, 2(1)a) in its Guidelines on Standardization and Patent Pool Arrangements (while not addressing patent pools related to sustainability specifically) explains the general principles for such pools and highlights that "competition among the patented technologies is not restricted when only the essential patents are pooled, and licensing conditions are fixed" (JFTC, 2005[56]). If these conditions are fulfilled, this could equally apply to patent pools containing patents relevant for sustainability. An example for such a pool could be The Eco- Patent Commons.⁷⁹ The contributors to this pool grant royalty-free access to the patents with the aims of fostering innovation and faster implementation of industrial processes that are environmentally beneficial.

A final area is also highly relevant in the areas of sustainability is the question whether competition is restricted to such an extent that the relevant prohibitions apply. In other words, *de minimis* considerations. In this context the EU approach to so called 'loose agreements' should be noted. In cases like *ACEA* (EC, 1998_[57]) (EC, 1999_[58]), *JAMA* and *KAMA* (EC, 2000_[59]), the EU Commission found that there was no appreciable effect on competition. In these cases, car manufacturers had agreed to sector wide reductions of emissions. Yet, instead of imposing how the reduction had to be achieved technically, the manufacturers were free to decide how to proceed. Thus, competing technological approaches for the emission reduction could be developed (EC, 2000_[59]). Along these lines the UK competition authority found that a voluntary initiative of packing and yogurt producers for the environmental performance of yogurt pots not to infringe competition law (OECD, 2010_[60]). Furthermore, the Dutch competition authority in its Draft Guidelines explains that agreements that ensure that the parties and their up and downstream counterpart comply with the laws in the countries they are operating does not restrict competition (ACM, 2020_[61]).

Balancing

Looking more closely at the apparently contentious issue of balancing between competition and sustainability a further sub-division of this matter helps in distinguishing the more form the less contentious issues. ⁸⁰ Balancing between competition and sustainability can occur either in an abstract form (see above) or as balancing within the established economic frameworks of competition law (see below).

Abstract balancing

A classic case of abstract balancing are public interest clauses in competition laws or case law that functions in a similar way.⁸¹ Often, such balancing would involve a proportionality assessment, when performed by courts, or is 'outsourced' specifically to political actors such as ministers.

Such a system operates for example South Africa and in Australia. In South Africa, Section 10(3)(b) of the Competition Act 1989 allows for an exemption to promote 'firms controlled or owned by historically disadvantaged persons to become competitive'. In Australia Part VII, 90 of the Competition and Consumer Act 2010 provides for an authorisation if the action provides 'a benefit to the public'. Such authorisations can be granted in the context of sustainability. For example, in 2020, the ACCC (2020[62]) granted such an authorisation to the Battery Stewardship Council (BSC) for the establishment and operation of a nationwide scheme collecting and recycling batteries, of which currently only 3% are recycled. The scheme involved an organisation that charged its members a small levy which would then help financing part of the collection and recycling costs. The ACCC found that the substantial public benefits in terms of significant environmental benefits, public awareness, and support for increased innovation would outweigh the harms resulting from the members' obligation to only deal with members of the scheme. This harm was reduced by the fact that participation was open to every market participant. Moreover, in the UK the minister has the possibility to exempt certain sectors or activities completely from the scope of competition law by means of an order under Schedule 3(7) of the 1998 Competition Act. This power was used with regard to supermarkets in the context of the recent COVID crisis.⁸²

Sustainability concerns also feature in ministerial exemptions from merger prohibitions. In Spain, Article 10(4) of the Competition Act 15/2007 allows the Council of Ministers to clear a prohibited merger for reasons 'of general interest [...such as] protecting the environment.' Similarly, in Germany, the Minster can overrule prohibitions decisions by the Bundeskartellamt based on a general public interest clause. The minister overruled a prohibition decision for example in the case *Miba/Zollern* (Federal Minister of Economy and Energy, 2019_[63]). ⁸³ In this case involving a German medium sized company, the minister justified his decision by references to innovation potential regarding technology relevant to renewable energy technology which in turn would be crucial for the reduction in CO₂ emissions, environmental protection and sustainability (Federal Minister of Economy and Energy, 2019_[63]).

Similarly, some jurisdictions such as the EU have rules that limit the application of competition law in certain situation where a legitimate objective is pursued, and the measures adopted to achieve this object are not disproportional. In such cases sustainability would be balanced against the restriction of competition using proportionality. In the EU context, such balancing can take place as European rule of reason⁸⁴ under Article 101(1) TFEU, or under Article 106(2) TFEU. For example, the *Wouters*⁸⁵ line of case law (Nowag, 2015_[64])⁸⁶ allows the balancing of certain public interest against restrictions of competition by means of proportionality. This line of case law might equally be applicable in the context of sustainability (Monti, 2017_[65]) (De Stefano, 2020_[66]) (Gerbrandy, 2020_[67]) (HCC, 2020_[32]). Article 106(2) TFEU allows for such balancing where a business has been entrusted with a so-called services of general economic interests. From the sustainability point of view the *Sydhavnens Sten & Grus*⁸⁷ case is relevant. There the EU Court of Justice held that waste management as an environmental protection matter is such a service. As a consequence, competition law only applies to the extent that it does not 'obstruct the performance [...] of the particular tasks assigned' by the State to business.

Balancing within economic frameworks of competition law

In the context of balancing within the established frameworks of competition law and consumer welfare, less and more contentious matters can be identified. This distinction helps in focusing the debate on issues deserving debate while at the same time identifying areas where agreement can more easily be reached. Moreover, it is important to keep in mind that the debate about the more contentious areas is only relevant in few, potentially extreme, cases. These are specific individual cases where a difference in the outcome exists and the more traditional theories would lead to a prohibition of the sustainability activities while the more contentious interpretation would lead to the opposite result.

In the past, a distinction was occasionally drawn between non-economic and economic benefits of agreements, ⁸⁸ or between competition and public policy or non-competition concerns (Dunne, 2020_[68]; Wardhaugh, 2014_[69]). While this distinction is often used and has some attractiveness at an abstract level, ⁸⁹ the distinction seems often not straightforward in concrete cases. In practice, public policy or non-economic concerns can often be 'translated' into the traditional language of efficiencies used in competition law and economics. ⁹⁰ For example, reductions in CO₂ can be measured and expressed in monetary terms. Similarly, consumers of a product might value improvements of the products sustainability as quality improvements.

Quality: Such quality improvements seem a rather uncontentious option⁹¹ of incorporating sustainability into the competition analysis (Volpin, 2020_[27]). Such an approach has for example been taken by the Dutch ACM in a case concerning animal welfare⁹² but⁹³ could equally be applied in a sustainability context.⁹⁴ While quality as a parameter in the competition analysis is uncontentious there are debates about how to assess and measure quality in a competition law analysis (OECD, 2013_[70]). Similarly, where sustainability is an aspect of product quality, tools used in the context of assessing the interaction between competition, co-operation, and innovation are relevant (Shapiro, 2002_[71]).

Using tools commonly known in the innovation debate leads to questions that seem slightly more contentious and which only need to be answered where a case would not pass the 'traditional' quality assessment. These debates concern questions about the extent to which *future benefit* and benefits occurring in *other markets* should be considered.

Future benefit: For cases involving sustainability benefits (just as in the case of innovation) it might make sense to include future benefits. Thus, one would consider not only benefits that occur to the present users or consumers of the product in questions but benefits to future consumers, although discount rate would possibly be applied. 95 Such considerations of future benefits can for example be seen in the context of conserving fishing stocks. The DoJ in 2000 issued a positive business review letter to the *Akutan Catcher Vessel Association* (DoJ - Antitrust Division, 2000_[72]). The association had planned to replace the old

system where every member was incentives to harvest as fast as possible until the government set an annual quota for the collective was reached. The new system would consist of a suballocation of the quota and would ensure and increased value of the caught pollock while reducing the amount of incidental by-catch. In a similar case the Dutch ACM provided informal guidance in *MSC Shrimp Fishery* ⁹⁶ highlighting that a system to limit overfishing could be justified, in so far as it could be shown to be necessary to meet sustainability concerns identified by scientific studies. The recent ACM Draft Guidelines on 'Sustainability Agreements' make clear that the ACM plans to use the standard social-cost-benefit tool used by the Dutch government authorities to evaluate such future benefits. Within this analysis sustainability benefits in terms of avoided environmental damage are monetised by means of so called environmental or 'shadow' prices. ⁹⁸

One practical question concerns the time frame within which such benefits should materialise for them to be considered. This question is not too different from parallel questions in the innovation context (HCC, $2020_{[32]}$). ⁹⁹ Thus, this question might similarly be considered a matter of proof rather than one of policy (Coates and Middelschulte, 2019, p. $321_{[73]}$). Yet, any discounting in the context of (future) sustainability benefits needs to take place in a mindful way. Sustainability benefits should not simply be 'discounted away' in particular because future costs might be grossly underappreciated as the example of climate change shows (HCC, $2020_{[32]}$). ¹⁰⁰

Benefits in other markets: A related issue is whether the benefits stemming from measures creating sustainability benefits must occur within the same market or whether benefits in other markets can also be taken into account. In the US and the EU the case law suggests that this is the case for *closely related* markets. ¹⁰¹ In this US, the Supreme Court in *Amex* held for sided markets that the cost in one market can be compensated by benefits in the other side of the market. ¹⁰² In the EU, the Court of Justice came to a similar conclusion in *Master Card*, ¹⁰³ *Compagnie Générale Maritime* ¹⁰⁴ and held in *ASNEF- EQUIFAX* held that 'under Article [101(3) TFEU] ... the beneficial nature of the effect on *all consumers* in the relevant *markets* [are] taken into consideration, not the effect on each member of that category of consumers'. ¹⁰⁵ Such an approach also seems sensible give the difficulties in defining markets (Townley, 2011_[74]) (Odudu, 2001_[75]).

A more controversial question is the extent to which competition law should be focused on the effects outside national markets, or more precisely whether beneficial effects in markets abroad can be taken into account. This question is particularly relevant with regard sustainability and its focus on economic development and poverty in developing countries. So far, there seems no clear universal answers to this question, although it has been suggested that the extra-territorial application of competition law would justify such an approach. ¹⁰⁶ The recent Draft Guidelines by the Dutch ACM suggest that it would distinguish environmental-damage agreements from other sustainability agreements. ¹⁰⁷ Only the environmental benefits would be taken into account but not the social benefits occurring abroad into account because consumer, producers and Dutch citizens could reap the environmental benefits. ¹⁰⁸

Future benefits in other markets: Moreover, it can be asked to what extent the two issues raised above can be combined, in other words to what extent can future benefits in other markets be considered. In this regard, the answers seem rather closely connected to the answers above. A comparison to the assessment of innovation is again helpful. Thus, similarly, to the concept of innovation markets and innovation spaces it might be possible to consider sustainability markets with a focus on tomorrow's products and future consumers and the ability for new innovative sustainability products. The balancing in innovation cases takes for granted that current consumers are willing to pay a higher price so that future consumer can benefit from either improved compounds in this relevant market or from completely new products (i.e. different markets) (HCC, 2020_[32]), thereby aggregating across generations (Townley, 2011_[74]).

Broader efficiency measurements: The possibly most contentious issue relates to the standard of efficiency and consumer welfare that is applied. This issue is particularly virulent where the abstract balancing as described above is not available in the specific jurisdiction or in the specific case. Any form of expanding the standard of efficiency and consumer welfare used narrows the difference between abstract public interest balancing and balancing within economic frameworks; even where such expansion just means to examine also innovation benefits or cost benefits that will occur in the future. One extension to efficiency and consumer welfare relevant in the sustainability debate is the suggestion to include the overall economic benefits to society. It has been suggested that such an approach is legally required (Holmes, 2020_[34]; Kingston, 2019_[76]; Lianos, 2018_[33]) in jurisdictions where the law require the integration of sustainability into all areas of law, including competition law. The example, it has been suggested to use the price of CO₂ to establish the benefits of agreements aimed at reducing CO₂ emissions. More generally such a balancing approach would use revealed preferences to the contingent valuation the angle of the properties of a perform a cost-benefit analysis. The standard of the suggested to the price of CO₂ to establish the benefits of agreements aimed at reducing CO₂ emissions. The suggested to the price of CO₂ to establish the benefits of agreements aimed at reducing CO₂ emissions. The suggested to the price of CO₂ to establish the benefits of agreements aimed at reducing CO₂ emissions. The suggested to the price of CO₂ to establish the benefits of agreements aimed at reducing CO₂ emissions. The suggested the price of CO₂ to establish the benefits of agreements aimed at reducing CO₃ emissions. The suggested the price of CO₃ emissions. The process of the price of CO₃ emissions and the price of CO₃ emissions are price of CO₃ emissions. The price of

While these proposals might be controversial and might raise questions with regard to the legitimacy¹¹⁸ and the capability to competition authorities to makes such assessments, there seems options for mitigation. For example, it seems possible to calculate the overall benefit to society¹¹⁹ and then divide it and thereby calculate the individual benefit. An example of such an approach can be found in the Dutch coal power case.¹²⁰ In this case, an agreement to close coal fired power stations was at issue. In the opinion given by the agency, it used avoided cost measurement and examined the price increase in relation to health benefits and increased life expectancy expressed in monetary terms. This approach can now also be found in the new draft guidelines.¹²¹

Where such a calculation takes places any calculated benefit for the individual would then have to be add to any benefits for the individual consumer of the product in terms of more traditional measurements (e.g. quality improvements). In this way the overall benefit for the consumer would be calculated.

Regarding the capability to competition authorities of making such assessments the jurisdiction's rules on the burden of proof are particularly important. Any concerns about the capability to competition authorities to calculate the benefits are in the EU for example mitigated by the fact that it is for the defendant, rather than the competition authority, to provide the valuations and related evidence. 122

5 Process-related issues

This section explores a number of tools that are relevant in process-related matters ¹²³ involving sustainability at competition agencies. These process-related matters can help authorities aiming to make sustainability relevant in their practices. These include in particular the objectives of the agency and priority setting, guidance, approval procedures, sandboxing, matters of relevant evidence, capacity, fines, and international co-operation. For analytical clarity, it helps to distinguish again between cases where competition law is used as sword to achieve sustainability and cases where businesses aim to promote sustainability. ¹²⁴

Agency objectives and priorities: In terms of competition law as a sword for sustainability, objectives and priorities of the agency matter. And sustainability might feature amongst the set objectives of an agency. For example, the UK's CMA for 2020/21 the authority highlighted, in the immediate term [...] we propose in 2020/21 to exercise our functions with particular regard to these strategic objectives: [...] Climate change - supporting the transition to a low carbon economy: We will develop our understanding of how climate affects markets and consider how, when exercising our functions, we can act in a way that supports the transition to a low carbon economy. We will also consider using our enforcement powers to correct false or misleading statements that affect consumers, for example in the use of "green" claims'. Similarly, the French Competition Authority has declared sustainable development to be 'a core' of its priorities for 2020. As a result, a competition authority might prioritise cases with competitive harms in areas that are relevant for sustainability like the transition to a low carbon economy.

Such objectives, in addition to priority setting, might be particularly helpful with regard to targeting enforcement efforts. Thus, it might encourage closer examination of the existence of anticompetitive activities hampering sustainable development, for example by exploring whether anticompetitive behaviour exists in green-growth or inclusive-growth industries. Similarly, priority areas might be influenced by the effect of poverty. Thus, cases would be prioritised where anticompetitive practices have particular negative effects on the poor.

Guidance, **priorities and openness:** In particular, in cases where businesses aim to promote sustainability, guidance is relevant. Formal and informal guidance by the authorities need to be specifically highlighted, as stakeholders expressed concern that businesses shy away from sustainability activities due to fear of competition law implications, ¹²⁹ in other words not over-enforcement but over-deterrence might exist. In this regard openness of the agency to such informal guidance and official statements by the authorities the ACM (ACM, 2020_[61]) to approach them where questions arise might go a long way.

Netherlands, Japan, Germany, and the United States provide examples of how formal and informal and priority setting guidance can work in the context of sustainability. The Netherlands' ACM has now only published draft guidelines on sustainability agreements (ACM, 2020_[61]) which build upon its earlier 2016 basic principles ¹³⁰ on how it would conduct oversight of sustainability arrangements and its 2014 vision document. ¹³¹

Other jurisdictions use formal and more informal routes where informal guidance and priority-setting happen not in the general but in individual cases. In Japan, the JFTC has establish specific guidelines for joint recycling activities ¹³² but also operates a general consultation service. In this context, the authority provided guidance to an initiative let by a city involving all retailers as well as consumers. ¹³³ This initiative

wanted to reduce the use of plastic shopping bags by introducing a small charge for consumers. It was advised by the JFTC that it could go ahead as the restriction was only ancillary and proportionate to the aim of reducing plastic waste.

Similarly, in a number of cases the German BKart has decided to engage informally with the parties and not to intervene, using its priority setting authority. ¹³⁴ These cases concern for example the Fairtrade label. The authority decided not to take up the case as there was a great likelihood that the arrangement would not fall under Article 101 (1) TFEU ¹³⁵ or at least be exempted under Article 101 (3) TFEU. Another case from the area of animal welfare provides further interesting insights. This case involved a premium which retailers would pay per kilo of pork and chicken and that would go to a central fund. The proceeds would then be used to increase the welfare of pigs and chickens for the participating farms. The authority decided not to intervene twice: first, from 2014-2018 and after engaging with the companies and agreeing alteration again from 2018-2020. ¹³⁶

In a similar situation concerning the Fair Factories Clearinghouse Information Sharing Programs, the DoJ sent a business review letter. ¹³⁷ The case concerned the supply chain for apparel and footwear. A central body collected and shared information on child and forced labour, health, safety, and workers' rights. This information even included factories' wage and hour information. The DoJ indicated that it did not see mayor antitrust concerns as the programme was compliant with safe harbour rules on standards, concerned only a *de minimis* ¹³⁸ matters and an antitrust compliance programme existed.

Informal guidance might be one way to achieve clarity. However, in jurisdictions where private enforcement exists, legal certainty issues remain as courts are not necessarily bound by such action by the authorities. ¹³⁹ Thus, more formal guidance for example in form of guidelines might also be called for ¹⁴⁰ although the binding force of such guidance by authorities might also be an issue. In the end, soft measures like priority setting, informal guidance and more formal guidelines might all leave open questions concerning legal certainty, and from the perspective of legal certainty legislative action might be called for.

Approval/Exemption procedure: One way to ensure legal certainty is by a system that allows for a binding *ex ante* approval procedure. Such a system was in place in the EU before Regulation 1/2003¹⁴¹ decentralised its application. The Australian authorisation system allows sustainability initiatives the relevant certainty as highlighted by the ACCCs *Battery Stewardship Council* authorisation. ¹⁴²

Sandboxing: A relatively new suggestion (HCC, 2020_[32]) but related areas is the use of regulatory sand boxes, where companies can experiment under the supervision of the competition authority and would not be punished for things that might otherwise be violations of the law.

Evidence: One important question in the context of supporting sustainability activities by businesses can be rules on what kind of evidence is accepted in the legal system. The ACM draft guidelines highlight that both qualitative and quantitative evidence is permissible because for some sustainability no quantitative but only qualitative evidence might be available (ACM, 2020_[61]). Thus, rules that prohibit or limit the use of qualitative evidence and require a specific quantification of the benefits can hinder pro-competitive sustainability activities.

Capacity: The questions regarding admissible evidence are related to matters of capacity. Competition authorities might need to strengthen and broaden their capacities, given that sustainability is a broad maybe all encompassing- field covering matters of environmental protection, economics, and the social dimension. Thus, co-operation with other regulators, relevant stakeholder, and civil society seems crucial. It might even be sensible to setup up joint units with other specialised parts of government (HCC, 2020_[32]) (Kingston, 2012_[77]) to ensure better understanding of sustainability matters. The French competition authority has for example set up a working group with different French sector regulators. ¹⁴³

Fining: The approach to sustainability can also have an influence on fining decisions. Where the authority aims to be supportive sustainability initiatives over-enforcement and over-deterrence are concerns. Thus,

the ACM would not impose fines where the following cumulative conditions have been met have: the parties followed the ACM's Guidelines or informal guidance in good faith; published the details of the agreement openly; and adjusts the arrangement after ACM notified them of the objection. ¹⁴⁴ The situation is different where an authority aims to use its power to tackle unsustainable business practices. In this context, it might be worth exploring whether it is possible to increase fines where anticompetitive behaviour had particular bad effects for sustainability. For example, it has been suggested that such effects could serve as an aggregating factor in the fine setting process, in particular where the harmful collusion occurred as a result of an initiative, such as a standard setting initiative, that was designed to increase sustainability. ¹⁴⁵

International co-operation: Finally, international co-operation and exchange in fora such as the OECD or ICN are important. If private sustainability activities are not subject to competition law prohibition in one jurisdiction they might still be in others. For example, Indonesia's KPPU faced pressure to prohibit a private standard for palm oil that reduced deforestation. It was subsequently abandoned. Similarly, there has reportedly been pressure on CADE to investigate a similar standard aimed at reducing deforestation in Brazil as landowners in the Amazon region are entitled to deforest up to 20% of the land for agricultural activities. Where such private standards are abandoned States might step in. For example, there are debates in the EU to prohibit all soy and beef imports from the Amazon region of Brazil even though only 17% of exports to the EU are linked to deforestation with only 2% of farms causing 62% of the illegal deforestation. Similarly, the US has recently prohibited the import of certain palm oil for reasons of forced labour concerns. Overall, comity is advisable and in the end it might not make too much of a difference whether a measures passes the muster of competition by means of the State action doctrine or because it is considered not to restrict competition.

6 Conclusion

Often the debate over sustainability and competition law and policy has been reduced to public policy versus competition and whether regulation is a more appropriate tool to achieve sustainability. Yet, such a simplified debate is unhelpful as it obscures more than it facilitates progress on the matter. Regulation has an important role to play but framing the debate as either/or leads to competition law and competition authorities being seen as out of touch with realities and obstructive. At the same time, it deters even perfectly innocuous and legal sustainability activities. To further a constructive debate, this paper maps the issue and identifies more and less controversial issues in the concrete application of competition law in a sustainability context.

It explores the concept of sustainability and its relationship to actions by market actors, the normative question whether competition law and policy should be influenced by sustainability concerns, briefly surveys the economics behind the interaction between competition law and sustainability, and, then, focuses on technical questions in the practical application of competition law.

In the first part of the section on technical questions, the paper highlights how the protection of competition, consumer welfare and sustainability overlap. As a result, competition authorities can foster sustainability by targeted enforcement where anticompetitive practices are similarly detrimental from a sustainability perspective. For example, where cartels lead to consumers not being able to buy more sustainable products. Similarly, the use of more dynamic theories of harm that protect innovation which leads to more sustainability also seem within the realm of the less controversial actions a competition authority can take to foster sustainability. More questions can be asked as to how far dynamic innovation theories might be pushed and whether a focus on exploitative abuses to protect the social dimension of sustainability, namely poverty, can be justified.

The second part looks at cases where business wants to move into a more sustainable direction but might feel hamstrung by competition law. The paper first explores areas which are less contentious in their concrete application. For example, different forms of exclusions from the scope of competition or the balancing between sustainability and competition where a jurisdiction's competition law includes a general public interest exception. It, then, explores balancing within the established economic frameworks based on consumer welfare and efficiency. The paper highlights that sustainability can readily fit within this framework as a quality parameter. Subsequently, more contentious questions are examined relating to the dynamic nature of sustainability and whether benefits in the future or other markets can be considered.

The final section of the report investigates process-related questions. It emphasises the importance of agency objectives and priority setting and how this might lead to targeting restrictive practices that prevent more sustainable activities or consumption. The importance of formal and informal guidance is underscored. It also touches upon questions of approval procedures, sandboxing, admissible evidence, capacity, fining, and international co-operation.

The paper shows that the debate concerning sustainability and competition law has already moved forward and that agencies in OECD many countries are already considering sustainability matters in their enforcement practices, whether they do so knowingly or unknowingly.

References

ACM (2020), <i>Draft guidelines 'Sustainability Agreements'</i> , https://www.acm.nl/sites/default/files/documents/2020-07/sustainability-agreements%5B1%5D.pdf .	[61]
ACM (2016), ACM sets basic principles for oversight of sustainability arrangements, https://www.acm.nl/en/publications/publication/16726/ACM-sets-basic-principles-for- oversight-of-sustainability-arrangements (accessed on 5 October 2020).	[124]
ACM (2014), ACM's analysis of the sustainability arrangements concerning the 'Chicken of Tomorrow', https://www.acm.nl/sites/default/files/old_publication/publicaties/13789_analysis-chicken-of-tomorrow-acm-2015-01-26.pdf.pdf (accessed on 2020).	[110]
ACM (2014), Vision document on Competition and Sustainability, https://www.acm.nl/en/publications/publication/13077/Vision-document-on-Competition-and-Sustainability .	[125]
ACM (2013), Notitie ACM over sluiting 5 kolencentrales in SER Energieakkoord.	[119]
ACM (2013), Position Paper Competition and Sustainability, https://www.acm.nl/sites/default/files/old-publication/publicaties/11733-acm-position-paper-competition-and-sustainability.pdf (accessed on 5 October 2020).	[112]
Andriychuk, O. (2019), The Normative Foundations of European Competition Law: Assessing the Goals of Antitrust through the Lens of Legal Philosophy, Edward Elgar.	[86]
Autorite de la Concurrence (2017), Décision 17-D-20 relative à des pratiques mises en œuvre dans le secteur des revêtements de sols résilients, https://www.autoritedelaconcurrence.fr/fr/decision/relative-des-pratiques-mises-en-oeuvre-dans-le-secteur-des-revetements-de-sols-resilients (accessed on 5 October 2020).	[41]
Autorité de la Concurrence (2020), <i>L'Autorité de la concurrence annonce ses priorités pour l'année 2020</i> , https://www.autoritedelaconcurrence.fr/fr/communiques-de-presse/lautorite-de-la-concurrence-annonce-ses-priorites-pour-lannee-2020 (accessed on 5 October 2020).	[121]

Barton, J. and D. Infield (2004), "Energy storage and its use with intermittent renewable energy", <i>IEEE Transactions on Energy Conversion</i> , Vol. 19/2, pp. 441-448, http://dx.doi.org/10.1109/TEC.2003.822305 .	[39]
Boyd, D. (2012), <i>The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment</i> , University of British Columbia Press.	[12]
Brook, O. (2019), "Struggling with Article 101(3) TFEU: Diverging Approaches of the Commission, EU Courts and Five Competition Authorities", <i>Common Market Law Review</i> .	[109]
Capobianco, A. and A. Nagy (2016), "Public Interest Clauses in Developing Countries", <i>Journal of European Competition Law & Practice</i> , Vol. 7/1, pp. 46-51, https://doi.org/10.1093/jeclap/lpv076 .	[133]
Carrier, M. (2011), "An Antitrust Framework for Climate Change", <i>Northwestern Journal of Technology and Intellectual Property</i> , Vol. 9/8, pp. 513-532, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1925020 .	[95]
Carrier, M. (2008), "Two Puzzles Resolved: Of the Schumpeter–Arrow Stalemate and Pharmaceutical Innovation Markets", <i>Iowa Law Review</i> 393.	[90]
Carson, R. (2012), "Contingent Valuation: A Practical Alternative When Prices Aren't Available", <i>Journal of Economic Perspectives</i> , Vol. 26/4, pp. 27-42.	[91]
Carson, R. (2011), "Contingent Valuation: Controversies and Evidence", <i>Environmental and Resource Economics</i> , Vol. 19, pp. 173-210.	[92]
Charlesworth, H. et al. (eds.) (2005), <i>The Fluid State: International Law and National Legal Systems</i> , Federation Press.	[15]
Choi, S. and A. Ng (2011), "Environmental and Economic Dimensions of Sustainability and Price Effects on Consumer Responses", <i>Journal of Business Ethics</i> , Vol. 104/2, pp. 269-282, http://dx.doi.org/10.1007/s10551-011-0908-8 .	[35]
Claasen, R. and A. Gerbrandy (2016), "Rethinking European Competition Law: From a Consumer Welfare to a Capability Approach", <i>Utrecht Law Review</i> , Vol. 12/1, pp. 1-15, http://dx.doi.org/10.18352/ulr.321 .	[8]
CMA (2020), Corporate report Annual Plan 2020 to 2021, https://www.gov.uk/government/publications/competition-and-markets-authority-annual-plan-2020-to-2021/annual-plan-2020-to-2021.	[120]
Coates, K. and D. Middelschulte (2019), "Getting Consumer Welfare Right: the competition law implications of market-driven sustainability initiatives", <i>European Competition Journal</i> , Vol. 15/2-3, pp. 318-326, http://dx.doi.org/10.1080/17441056.2019.1665940 .	[73]
Cole, D. and P. Grossman (1999), "When is Command-and-Control Efficient? Institutions, Technology, and the Comparative Efficiency of Alternative Regulatory Regimes for Environmental Protection", <i>Wisconsin Law Review</i> , Vol. 1999, pp. 887-938, https://ssrn.com/abstract=217211.	[21]

Committee, O. (ed.) (2008), Resale Price Maintenance, OECD Publishing, https://www.oecd.org/daf/competition/43835526.pdf .	[28]
Competition Bureau Canada (2010), <i>Technical Bulletin on 'Regulated' Conduct</i> , https://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/RegulatedConduct-sept-2010-e.pdf (accessed on 5 October 2020).	[54]
Council, B. (ed.) (2020), Determination Application for authorisation AA1000476 lodged by Battery Stewardship Council in respect of the Battery Stewardship Scheme Authorisation number: AA1000476, https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/battery-stewardship-council (accessed on 5 October 2020).	[62]
Crawford, J. (2019), <i>Brownlie's Principles of Public International Law</i> , Oxford University Press, https://global.oup.com/ukhe/product/brownlies-principles-of-public-international-law-9780198737445?cc=ph⟨=en& .	[17]
Cseres, K. (2020), ""Acceptable" Cartels at the Crossroads of EU Competition Law and the Common Agricultural Policy: A Legal Inquiry into the Political, Economic, and Social Dimensions of (Strengthening Farmers') Bargaining Power", <i>The Antitrust Bulletin</i> 401.	[102]
De Stefano, G. (2020), "EU Competition Law & The Green Deal: The Consistency Road", CPI Antitrust Chronicle, https://www.competitionpolicyinternational.com/eu-competition-law-the-green-deal-the-consistency-road .	[66]
Delmas, M. and A. Keller (2005), "Free riding in voluntary environmental programs: The case of the U.S. EPA WasteWise program", <i>Policy Sciences</i> , Vol. 38, pp. 91-106, http://dx.doi.org/10.1007/s11077-005-6592-8 .	[29]
Dunne, N. (2020), "Public Interest and EU Competition Law", <i>The Antitrust Bulletin</i> , Vol. 65/2, pp. 256-281, https://doi.org/10.1177/0003603X20912883 .	[68]
EC (2019), Case AT.40178 – Car Emissions.	[42]
EC (2000), XXIXth Report on Competition Policy 1999, https://ec.europa.eu/competition/publications/annual_report/1999/en.pdf .	[59]
EC (1999), XXVIIIth Report on Competition Policy 1998, https://ec.europa.eu/competition/publications/annual_report/1998/en.pdf .	[58]
EC (1998), Commitment by European Car Manufacturers to reduce CO2 emissions from passenger cars complies with EU Competition rules, https://ec.europa.eu/commission/presscorner/detail/en/IP 98 865 .	[57]
Elhauge, E. (2005), "Sacrificing Corporate Profits In The Public Interest", <i>New York University Law Review</i> , Vol. 80/3, pp. 733-869.	[31]
Elkington, J. (1997), Cannibals with Forks: the Triple Bottom Line of 21st Century Business, New Society Publishers.	[82]

Ellison, J. (2020), A Fair Share: Time for the Carbon Defence?, http://dx.doi.org/10.2139/ssrn.3542186 .	[127]
Engelsing F., J. (2019), "Nachhaltigkeit und Wettbewerb", WUW, pp. 16-22.	[132]
EU (2008), Guidelines on the assessment of non-horizontal mergers, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008XC1018(03)&from=EN .	[99]
EU (2004), Guidelines on the application of Article 81(3) of the Treaty.	[111]
EU (2004), Guidelines on the assessment of horizontal mergers under the Council Regulation on the control, https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52004XC0205(02)&from=EN .	[98]
Ezrachi, A. (2017), "Sponge", Journal of Antitrust Enforcement, Vol. 5/1, pp. 49-75.	[11]
Fair Trade Advocacy Office (2019), EU Competition Law and Sustainability in Food Systems: Addressing the Broken Links, http://www.responsibleglobalvaluechains.org/images/PDF/FTAO - https://www.responsibleglobalvaluechains.org/images/PDF/FTAO - https://www.responsibleglobalvaluechains.org/images/PDF/FTAO<!--</td--><td>[45]</td>	[45]
Federal Minister of Economy and Energy (2019), <i>I B 2 – 20302/14–02</i> , https://www.bmwi.de/Redaktion/DE/Downloads/V/verfuegung-verwaltungsverfahren-miba-zollern.pdf? blob=publicationFile&v=4 (accessed on 17 September 2020).	[63]
FTC (2009), FTC Order Sets Conditions for Panasonic's Acquisition of Sanyo, https://www.ftc.gov/news-events/press-releases/2009/11/ftc-order-sets-conditions-panasonics-acquisition-sanyo (accessed on 5 October 2020).	[38]
Gallo, A. et al. (2016), "Energy storage in the energy transition context: A technology review", <i>Renewable and Sustainable Energy Reviews</i> , Vol. 65/C, pp. 800-822, http://dx.doi.org/10.1016/j.rser.2016.07.028 .	[40]
Gerard, D. (2010), <i>Article Navigation</i> , pp. 202-210, http://dx.doi.org/10.1093/jeclap/lpq019.	[55]
Gerbrandy, A. (2020), "The Difficulty of Conversations About Sustainability and European Competition Law", <i>CPI Antitrust Chronicle</i> , Vol. 1/2, p. 65, https://www.competitionpolicyinternational.com/the-difficulty-of-conversations-about-sustainability-and-european-competition-law/ .	[19]
Gerbrandy, A. (2020), "The Difficulty of Conversations About Sustainability and European Competition Law", <i>CPI Antitrust Chronicle</i> , Vol. 1/2, p. 65, https://www.competitionpolicyinternational.com/the-difficulty-of-conversations-about-sustainability-and-eu .	[67]
Government of California (2019), California and Major Automakers Reach Groundbreaking Framework Agreement on Clean Emission Standards, https://www.gov.ca.gov/2019/07/25/california-and-major-automakers-reach-groundbreaking-framework-agreement-on-clean-emission-standards/ .	[51]

Gutiérrez Rodríguez, J. (2010), "Agricultural Exceptions to Competition Law", <i>Rev. Derecho Competencia</i> , pp. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2613822., https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2613822.	[103]
HCC (2020), Staff Discussion Paper on Sustainability Issues and Competition Law, https://www.epant.gr/en/enimerosi/competition-law-sustainability/item/download/1896 9b05dc293adbae88a7bb6cce37d1ea60.html.	[32]
HCC (2020), Staff Discussion Paper on Sustainability Issues and Competition Law, https://www.epant.gr/en/enimerosi/competition-law-sustainability/item/download/1896 9b05dc293adbae88a7bb6cce37d1ea60.html.	[78]
Holden, E. (2017), "The Imperatives of Sustainable Development", <i>Sustainable Development</i> , http://dx.doi.org/10.1002/sd.1647 .	[81]
Holmes, S. (2020), "Climate Change, sustainability, and competition law", <i>Journal Antirust Enforcement</i> , Vol. 8/2, pp. 354-405, https://doi.org/10.1093/jaenfo/jnaa006 .	[34]
Hovenkamp, H. (2019), <i>Are Regulatory Agreements to Address Climate Change Anticompetitive?</i> , https://www.theregreview.org/2019/09/11/hovenkamp-are-regulatory-agreements-to-address-climate-change-anticompetitive/ .	[53]
Hussen, A. (2018), <i>Principles of Environmental Economics and Sustainability</i> , Taylor & Francis.	[115]
lacovides, M. and C. Vrettos (2020), Falling Through the Cracks no More? Article 102 TFEU and Sustainability I – the Nexus Between Dominance, Environmental Degradation, and Social Injustice.	[46]
Jeffords, C. and J. Gellers (2017), "Constitutionalizing Environmental Rights: A Practical Guide", <i>Journal of Human Rights Practice</i> , pp. 136–145.	[13]
JFTC (2005), Guidelines on Standardisation and Patent Pool Arrangements, https://www.jftc.go.jp/en/legislation_gls/monopoly_guidelines_files/Patent_Pool.pdf (accessed on October 2020).	[56]
JFTC (2001), Guidelines Concerning Joint Activities for Recycling under the Antimonopoly Act, https://www.jftc.go.jp/en/legislation_gls/imonopoly_guidelines_files/recycle.pdf (accessed on 5 October 2020).	[126]
Kingston, S. (2019), "Competition Law in an Environmental Crisis", <i>Journal of European Competition Law & Practice</i> , Vol. 10/9, https://doi.org/10.1093/jeclap/lpz076 .	[76]
Kingston, S. (2012), <i>Greening EU Competition Law and Policy</i> , Cambridge University Press.	[77]
Kingston, S. (2010), "Integrating Environmental Protection and EU Competition Law: Why Competition Isn't Special", <i>European Law Journal</i> , pp. 801-804.	[117]

Klein, J. (ed.) (2000), Bussiness Review Letter by Assistant Attorney General Joel I. Klein, https://www.justice.gov/atr/response-akutan-catcher-vessel-associations-request-business-review-letter (accessed on 5 October 2020).	[72]
Lianos, I. (2019), <i>Hunger Games: Connecting the Right to Food and Competition Law available at SSRN:</i> , https://ssrn.com/abstract=3414032 .	[113]
Lianos, I. (2018), "Polycentric Competition Law", <i>Current Legal Problems</i> , Vol. 71/1, pp. 161–213, https://doi.org/10.1093/clp/cuy008 .	[33]
Lianos, I. (2013), "Some Reflections on the Question of the Goals of EU Competition Law", CLES Working Paper Series 3.	[85]
Lianos, I. and D. Katalevsky (2017), "Merger Activity in the Factors of Production Segments of the Food Value Chain: A Critical Assessment of the Bayer/Monsanto merger", Centre for Law, Economics and Society Policy Paper Series 2017/1, https://www.ucl.ac.uk/cles/sites/cles/files/cles-policy-paper-1-2017.pdf .	[43]
Loozen, E. (2019), "Strict competition enforcement and welfare: A constitutional perspective based on Article 101 TFEU and sustainability", <i>Common Market Law Review</i> .	[83]
Lübbig, T. (2013), "Sustainable Development and Competition Policy", <i>Journal of European Competition Law & Practice</i> , Vol. 4/1, pp. 1-2, https://doi.org/10.1093/jeclap/lps073 .	[122]
Makris, S. and E. Deutscher (forthcoming), What is the role of EU merger control in ensuring sustainability? Innovation output, innovation diversity and the Commission's innovation theory of harm in agrochemical mergers.	[44]
Marketing Charts (2017), "Consumer Willingness to Pay A Premium for "Green" Products Climbs, Albeit Slowly", <i>Marketing Charts</i> , Marketing Charts.com, https://www.marketingcharts.com/industries/cpg-and-fmcg-76738 (accessed on 5 October 2020).	[36]
Martinez, F., S. Onderstal and M. Schinkel (2019), Can Collusion Promote Corporate Social Responsibility? Evidence from the Lab, https://www.econstor.eu/bitstream/10419/205324/1/19034.pdf .	[25]
Maximillian, K. (2019), <i>Ministerial Approval Miba/Zollern: A Green Industrial Policy for Medium-Sized Companies</i> , https://www.d-kart.de/en/blog/2019/08/20/ministererlaubnis-miba-zollern-gruene-industriepolitik-fuer-den-mittelstand/ (accessed on 19 January 2020).	[106]
McKinsey & Company (2012), <i>How much will consumers pay to go green?</i> , McKinsey & Company, https://www.mckinsey.com/business-functions/sustainability/our-insights/how-much-will-consumers-pay-to-go-green (accessed on 5 October 2020).	[37]
Minkkinen, P. (2005), "Why is Law a Normative Discipline? on Hans Kelsen's 'Normology", <i>Res Publica</i> , Vol. 11, pp. 235-249.	[10]
Monti, G. (2020), "Four Options for a Greener Competition Law", <i>Journal of European Competition Law & Practice</i> , pp. 124-132	[116]

Monti, G. (2017), "Escaping the Clutches of EU Competition Law Pathways to Assess Private Sustainability Initiatives", <i>European Law Review</i> , Vol. 42/5, pp. 635-656.	[65]
Nijmann, J. and A. Nollkaemper (eds.) (2007), New Perspectives on the Divide between National and International Law, Oxford University Press.	[16]
North, D. and J. Alt (eds.) (1990), <i>Governing the Commons: The Evolution of Institutions for Collective Action</i> , Cambridge University Press, https://wtf.tw/ref/ostrom 1990.pdf.	[23]
Nowag, J. (2020), Beyond Balancing: Sustainability and Competition Law.	[49]
Nowag, J. (2020), The Antitrust Car Emissions Investigation in the U.S. – Some Thoughts From the Other Side of the Pond, pp. 55-61.	[129]
Nowag, J. (2019), Competition Law's Sustainability Gap? Tools for an Examination and a Brief Overview, http://dx.doi.org/10.2139/ssrn.3484964 .	[18]
Nowag, J. (2017), <i>Environmental Integration in Competition and Free-Movement Laws (2017) 215-224</i> , Oxford University Press.	[107]
Nowag, J. (2016), <i>Environmental Integration in Competition and Free-Movement Laws</i> , Oxford University Press, http://dx.doi.org/10.1093/acprof:oso/9780198753803.001.0001 .	[47]
Nowag, J. (2015), "Wouters, when the condemned live longer: A comment on OTOC and CNG", <i>European Competition Law Review</i> , Vol. 36/1, pp. 39-44.	[64]
Odudu, O. (2020), "Feeding the nation in times of crisis: the relaxation of competition law in the United Kingdom", <i>Competition Law Journal</i> , pp. 68-78, https://doi.org/10.4337/clj.2020.02.02 .	[105]
Odudu, O. (2001), "Interpreting Article 81(1): Demonstrating Restrictive Effect", <i>ELRev</i> 26(3), pp. 273-274.	[75]
OECD (2019), Sustainable Results in Development: Using the SDGs for Shared Results and Impact, OECD Publishing, https://doi.org/10.1787/368cf8b4-en .	[7]
OECD (2018), Competition Policy and Gender, https://one.oecd.org/document/DAF/COMP/GF(2018)4/en/pdf.	[118]
OECD (2018), Excessive Prices in Pharmaceutical Markets - Background Note by the Secretariat, https://one.oecd.org/document/DAF/COMP(2018)12/en/pdf .	[100]
OECD (2013), Competition and Poverty Reduction, http://www.oecd.org/daf/competition/competition-and-poverty-reduction2013.pdf .	[101]
OECD (2013), <i>The Role and Measurement of Quality in Competition Analysis</i> , OECD, https://www.oecd.org/competition/Quality-in-competition-analysis-2013.pdf .	[70]
OECD (2011), Sustainability in Impact Assessments, A Review of Impact Assessment Systems in selected OECD countries and the European Commission, https://one.oecd.org/document/SG/SD(2011)6/FINAL/en/pdf .	[88]

OECD (2010), <i>Electricity: Renewables and Smart Grids</i> , https://www.oecd.org/daf/competition/sectors/46586020.pdf .	[96]
OECD (2010), Horizontal Agreements in the Environmental Context, https://www.oecd.org/competition/cartels/49139867.pdf .	[60]
OECD (2003), <i>The objectives of Competition Law and Policy - Note by the Secretariat</i> , https://one.oecd.org/document/CCNM/GF/COMP(2003)3/en/pdf .	[87]
OFT (2010), https://webarchive.nationalarchives.gov.uk/, https://webarchive.nationalarchives.gov.uk/20140402172423/http://oft.gov.uk/shared_oft/events/Article101(3)-summary.pdf (accessed on 5 October 2020).	[108]
Outhuijse, A. (2019), "Environment and Competition Policy: Trends in European and National Cases", <i>Concurrences</i> , Art No 88830.	[94]
Pacheco, P. et al. (2018), "Governing sustainable palm oil supply: Disconnects, complementarities, and antagonisms between state regulations and private standards", <i>Regulation & Governance</i> , Vol. 14/3, pp. 568-598, https://doi.org/10.1111/rego.12220 .	[22]
Paul, B. (2008), A History of the Concept of Sustainable Development: Literature Review, pp. 576-580, https://www.researchgate.net/publication/242219096 A history of the concept of sustainable development Literature review.	[79]
Peeperkorn, L. (2020), "Competition and sustainability: What can competition policy do", <i>Concurrences</i> 4.	[9]
Petrosyan, G. (2019), DOJ's Probe into Four Automakers: Impartial Investigation or Politicization of Antitrust?, https://www.competitionpolicyinternational.com/dojs-probe-into-four-automakers-impartial-investigation-or-politicization-of-antitrust/ .	[52]
Piscitelli, G. (2018/19), "The Sustainability Dilemma in Competition Law", Vol. 8/1, https://ecdpm.org/great-insights/civil-society-business-same-direction/sustainability-dilemma-competition-law/ .	[131]
Portney, K. (2015), Sustainability, MIT Press.	[5]
Purvis, B., Y. Mao and D. Robinson (2018), "Three pillars of sustainability: in search of conceptual origins", <i>Sustainability Science</i> , Vol. 14, pp. 681-695, http://dx.doi.org/10.1007/s11625-018-0627-5 .	[4]
Rajão, R. (2020), The rotten apples of Brazil's agribusiness, pp. 246-248.	[128]
Reich, A. (2007), "The Agricultural Exemption in Antitrust Law: A Comparative Look at the Political Economy of Market Regulation", <i>Texas International Law Journal</i> , Vol. 42/843, https://ssrn.com/abstract=944389 .	[50]
Reinhardt, F., R. Stavins and R. Vietor (2008), "Corporate Social Responsibility Through an Economic Lens", <i>Review of Environmental Economics and Policy</i> , Vol. 2/2, pp. 219-239.	[30]

Roberts, S. (2004), "The role for competition policy in economic development: the South African experience", <i>Development Southern Africa</i> , Vol. 21/1, pp. 227-243, http://dx.doi.org/10.1080/0376835042000181499 .	[48]
Sachs, J. (2012), "From Millennium Development Goals to Sustainable Development Goals", <i>The Lancet</i> 379, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2812%2960685-0/fulltext .	[80]
Sanden, M. (2019), "Competition law and sustainability initiatives: Dutch bill provides more leeway", <i>Kluwer competition Law Blog</i> , http://competitionlawblog.kluwercompetitionlaw.com/2019/09/23/competition-law-and-sustainability-initiatives-dutch-bill-provides-more-leeway/ (accessed on 5 October 2020).	[130]
Schinkel, M. and Y. Spiegel (2017), "Can collusion promote sustainable consumption and production?", <i>International Journal of Industrial Organization</i> , Vol. 53, pp. 371-398, http://dx.doi.org/10.2139/ssrn.2704259 .	[20]
Schinkel, M. and L. Toth (2049), Compensatory Public Good Provision by a Private Cartel, https://ideas.repec.org/p/tin/wpaper/20190086.html .	[26]
Scott, I. (2016), "Antitrust and Socially Responsible Collaboration: A Chilling Combination?", <i>American Business Law Journal</i> , Vol. 53/1, https://ssrn.com/abstract=2851226 .	[123]
Shapiro, C. (2002), <i>Competition Policy and Innovation</i> , OECD Publishing, https://faculty.haas.berkeley.edu/shapiro/oecd.pdf .	[71]
Sjåfjell, B. and A. Wiesbrock (eds.) (2015), <i>The Sky Is the Limit: On the Drafting of Article 11 TFEU's Integration Obligation and its Intended Reach</i> , Routledge, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2535273 .	[14]
Soini, K. and J. Dessein (2016), "Culture-Sustainability Relation: Towards a Conceptual Framework", <i>Sustainability</i> , Vol. 8/167, https://www.mdpi.com/2071-1050/8/2/167/pdf-vor .	[2]
Stavins, R. (ed.) (1991), Sustainability: an economist's perspective, http://cda.morris.umn.edu/~kildegac/Courses/Enviro/3008/Readings/Solow.pdf.	[3]
Stucke, M. (2020), Competition Overdose: How Free Market Mythology Transformed Us from Citizen Kings to Market Servants, Harper Business, http://www.harperbusiness.com/book/9780062892836/Competition-Overdose-Maurice-EStucke-and-Ariel-Ezrachi/ .	[89]
Townley, C. (2011), "Inter-generational Impacts in Competition Analysis: Remembering Those Not Yet Born", <i>European Competition Law Review</i> 11, pp. 580-590, http://dx.doi.org/10.2139/ssrn.1894816 .	[74]
Townley, C. (2009), <i>Article 81 EC and Public Policy</i> , Hart Publishing, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1358651 .	[104]

Treuren, L. and M. Schinkel (2018), "Can Collusion Promote Sustainable Consumption and Production? Not Beneficially Beyond Duopoly", <i>Amsterdam Law School Research Paper No. 2018-02</i> , Amsterdam Center for Law and Economics, https://ssrn.com/abstract=3132323 .	[24]
UN (2015b), Transforming our world: the 2030 Agenda for Sustainable Development, https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf .	[6]
US DoJ, F. (2010), <i>Horizontal Merger Guidelines</i> , https://www.justice.gov/sites/default/files/atr/legacy/2010/08/19/hmg-2010.pdf .	[97]
Volpin, C. (2020), "Sustainability as a Quality Dimension of Competition: Protecting Our Future (Selves)", <i>CPI Antitrust Chronicle</i> , pp. 9-18.	[27]
Waldman, C. (2010), "Antitrust Issues in Clean Technology", <i>The Antitrust Source</i> April 2010.	[93]
Wardhaugh, B. (2014), "Crisis Cartels: Non-economic Values, the Public Interest and Institutional Considerations", <i>European Competition Journal</i> , Vol. 10/2, pp. 311-340, https://doi.org/10.5235/17441056.10.2.311 .	[69]
WCED (1987), Our Common Future: Report of the World Commission on Environment and Development, Oxford University Press, https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf .	[1]
Wiesbrock, B. (ed.) (2015), <i>The Sky Is the Limit: On the Drafting of Article 11 TFEU's Integration Obligation and its Intended Reach</i> , Routledge, https://ssrn.com/abstract=2535273 .	[114]
Zimmer, D. (ed.) (2012), The Goals of Competition Law, Edward Elgar.	[84]

Endnotes

- ¹ In this paper, the term competition law is used interchangeably with antitrust and refers to prohibitions of anticompetitive collusive and unilateral conduct as well as to anticompetitive mergers.
- ² EU Commission decision of 13 April 2011, case 39579 Consumer detergents.
- ³ Or might even actively aim to have an integration of sustainability in their competitive assessment, see e.g. (HCC, 2020_[32]) or (ACM, 2020_[61]).
- ⁴ For a similar use see e.g. the seminal work of (Portney, 2015_[5]). Yet, it is acknowledged that this synonymous use may not be very helpful in narrowing down the conceptual definitions of either terms. Occasionally, it is even argued that the synonymous use can hamper the creation of theoretical frameworks or even the operationalisation of these concepts, see (Soini and Dessein, 2016_[2]). Yet, while possible confusing at first, this paper follows the current use of the term sustainability.
- ⁵ In particular, it is known from the thermodynamic equilibrium, and relates to a permanent equilibrium.
- ⁶ The foundational principles for sustainable development are based on natural science, in particular studies of the economics, ecology and conservation science. The earlies ideas of this concept seem to appear in 1798. Then, the economist Thomas Malthus first theorized that the unabated growth of the human population would quickly deplete all the earth's resources necessary for human life, see (Paul, 2008_[79]) (Portney, 2015_[5]) (Purvis, Mao and Robinson, 2018_[4]).
- ⁷ United Nations' general assembly organized the World Commission on Environment and Development (WCED) in 1987 to propose "a global agenda for change" that can deal with issues of economic, environmental, and social development. The WCED then published 'Our Common Future', also known as the Brundtland Report, named after the head of the Commission.
- ⁸ For example, war and poverty can have disastrous consequences on the citizens, which in turn has different negative effects on their natural environment and the social institutions.
- ⁹ See the 1992 United Nations Conference on Environment and Development, the so-called Rio Summit, which adopted the 'Agenda 21', https://www.un.org/esa/dsd/agenda21/Agenda%2021.pdf.
- ¹⁰ Occasionally, culture is seen as a fourth component of sustainability. Creating a new framework that includes culture allows augment the existing three-pillar sustainability framework. (Soini and Dessein, 2016_[2])argue that cultures helps 1. by defining goals of preserving cultural capital (e.g. art, heritage, knowledge, diversity), 2. by mediating between initiatives of economic, social, and ecological sustainability while protecting material and immaterial culture, 3. and by defining development as a cultural process, where all the pillars are shaped by the culture wherein they manifest.
- ¹¹ The system effectively creates a 'balance of trade-offs' between economic growth, environmental protection, and social equity (Purvis, Mao and Robinson, 2018_[4]).
- ¹² Prior to the Agenda 2030, all UN member states committed to the implementation of the so-called Millennium Development Goals (MDGs). While the MDGs seem to have promoted significant progress, it has been argued that the MDGs focused primarily on social improvements for developing countries and thus limiting the participation of richer countries to financial and technological assistance (Sachs, 2012[80]).

- ¹³ As such the SDGs have not been without critique. For example is has been argued that the SDGs did not assign enough importance to the social equity dimension of sustainability and failed to address the urgent needs of the most marginalised and that these goals inadequately reflect the need to observe the limits of the environment and the drawbacks of economic growth, see (Holden, 2017_[81]).
- ¹⁴ SDG 2.a Increase investment, including through enhanced international co-operation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries
- ¹⁵ SDG 2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.
- ¹⁶ SDG 9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.
- ¹⁷ SDG 8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.
- ¹⁸ In other words, businesses and industries that provide services that improve the environment and the jobs that support those businesses.
- ¹⁹ Also with increased pressure from investors.
- ²⁰ For the tripe bottom line see in particular (Elkington, 1997_[82]).
- ²¹ For The World Economic Forum (WEF), the World Business Council for Sustainable Development, or Ceres.
- ²² In particular the second and third.
- ²³ This could be the case where the animal welfare measures leads to a reduction in environmental degradation or contributes to economic development in relation to the poor and marginalised.
- ²⁴ Critical for example, (Loozen, 2019_[83]).
- ²⁵ On this see below section 4.
- ²⁶ For an analysis of law as a normative discipline see, e.g. (Minkkinen, 2005_[10]).
- ²⁷ On this debate see e.g. (OECD, 2003_[87]), (Zimmer, 2012_[84]), (Lianos, 2013_[85]), (Andriychuk, 2019_[86]).
- ²⁸ For example, Belgium, Finland, France, Greece, Germany, Hungary, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden.
- ²⁹ Emphasis added.
- ³⁰ Article 73 of the Swiss Constitution: 'The Confederation and the Cantons shall endeavour to achieve a balanced and sustainable relationship between nature and its capacity to renew itself and the demands placed on it by the population.' see also, Art. 74, 89, 104, https://www.admin.ch/opc/en/classified-compilation/19995395/index.html.
- ³¹ Article 58 of the Russian Constitution: 'Everyone shall have a duty to preserve nature and the environment and to treat natural resources with care.' See also Article 36 and 72, http://www.constitution.ru/en/10003000-01.htm.

- ³² Article 4, see also Article 2, 25 and 73 of the Constitution. https://www2.juridicas.unam.mx/constitucion-reordenada-consolidada/en/vigente.
- ³³ For example, Turkey has this reference in its constitution but at the same time did not ratify the Paris agreement.
- ³⁴ On the monist/dualist distinction and its effects see in national legal regimes see e.g. (Charlesworth et al., 2005_[15]); (Nijmann and Nollkaemper, 2007_[16]) and (Crawford, 2019_[17]).
- ³⁵ Decision by the Dutch Supreme Courts of 20 December 2019 in case *De Staat Der Nederlanden v. Stichting Urgenda* ECLI:NL:HR:2019:2006 (in English:ECLI:NL:HR:2019:2007)
- ³⁶ In the same as the requirements to ensure due process or to respect the separation of powers does not mean that these become aims of competition law.
- ³⁷ See Sustainability and competition law under Section 4 Technical questions.
- ³⁸ See in this regard in particular (OECD, 2011_[88])
- ³⁹ Picking up on theme of competition leading to suboptimal outcomes, see (Stucke, 2020_[89]).
- ⁴⁰ For a good overview of the Schumpeter-Arrow debate and questions regarding specific market conditions in Pharma, see (Carrier, 2008_[90]) 'Two Puzzles Resolved'.
- ⁴¹ In other words, it would seem surprising to find that rational profit maximisers would have an incentive to foster sustainability where it does not benefit them directly.
- ⁴² See for example the letter by *BlackRock* chief *Larry Fink*, *'A Fundamental Reshaping of Finance'* (2018) available at https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter
- ⁴³ See for example (Carson, 2012_[91]) and (Carson, 2011_[92]).
- ⁴⁴ Animal welfare which the case focused on is not amongst traditional concerns of sustainability. As explained above, sustainability focuses rather on environmental protection, social and economic development.
- ⁴⁵ See ACM 'ACM's analysis of the sustainability arrangements concerning the 'Chicken of Tomorrow' (2014) ACM/DM/2014/206028, https://www.acm.nl/sites/default/files/old_publication/publicaties/13789_a nalysis-chicken-of-tomorrow-acm-2015-01-26.pdf
- ⁴⁶ For a description in Dutch see Machiel Mulder, Sigourney Zomer, Tim Benning and Jorna Leenheer, 'Economische effecten van "Kip van Morgen" (2014) available at https://www.acm.nl/nl/publicaties/publicatie/13759/Onderzoek-ACM-naar-de-economische-effecten-van-de-Kip-van-Morgen accessed 05 Oct 2020. For a summary in English, see Jan Peter van der Veer, Blogpost (Feb, 18, 2015), https://competitionlawblog.kluwercompetitionlaw.com/2015/02/18/valuing-sustainability-the-acms-analysis-of-chicken-for-tomorrow-under-art-1013/ accessed 05 Oct 2020
- ⁴⁷ For a critique of this methodology see e.g. (Monti, 2017_[65]); and with regard to using the theory of revealed preferences, see (Lianos, 2018_[33]).
- ⁴⁸ This distinction is developed in (Nowag, 2016_[47]).
- ⁴⁹ This description is close but not fully congruent. The difference is that one focuses on the outcome while the other one on the means. For example, the metaphor of the shied does not work for the important field of cases where a sustainability measures is not subject to the competition law provision (for such cases see blow under section 4.2.2.1.
- ⁵⁰ With regard to competition law interventions in the clean tech area, see e.g. (Waldman, 2010_[93]).

- ⁵¹ For other examples see (Outhuijse, 2019_[94])
- ⁵² For a more detailed analysis see e.g. (Carrier, 2011_[95]).
- ⁵³ For the relevance and importance of competition policy in the energy transition and renewable energy sector in general see (OECD, 2010[96]).
- ⁵⁴ See for example with regard to patents concerning climate change technology, see (Carrier, 2011_[95]), for further examples see (Kingston, 2012_[77]).
- ⁵⁵ These reduce harmful nitrogen oxides (NOx) emissions by injecting urea (called "AdBlue") into the exhaust gas stream.
- ⁵⁶ These reduce harmful particle emissions from the exhaust gases.
- ⁵⁷ More precisely the Commission finds that they coordinated AdBlue dosing strategies, tank size and refill ranges with the objective of limiting AdBlue-consumption and exhaust gas cleaning effectiveness. Regarding Otto filters the Commission finds that the companies coordinated to prevent or delay the introduction of this technology and thereby to remove uncertainty about future market development.
- ⁵⁸ US DOJ & FTC, Horizontal Merger Guidelines (US DoJ, 2010_[97]) (2010), p. 2; EU Horizontal Merger Guidelines (EU, 2004_[98]), OJ C31/5, para 8 (hereinafter EU HMG), paras 8, 20, 38 & 81; EU Non Horizontal Merger Guidelines (EU, 2008_[99]) OJ C 265/7, paras 10 & 26.
- ⁵⁹ Case M.8084 *Bayer/Monsanto* C/2018/1709 [2018] OJ C 459/10.
- 60 See Case M.8084 Bayer/Monsanto C/2018/1709 [2018] OJ C 459/10 para
- ⁶¹ See for example OECD *Excessive Prices in Pharmaceutical Markets Background Note by the Secretariat*, (OECD, 2018_[100]).
- ⁶² See in particular the OECD report on poverty and competition, (OECD, 2013_[101]).
- ⁶³ See for example the OECD report on horizonal agreements and the environment, (OECD, 2010_[60])
- ⁶⁴ See for example Article 2 of the Japanese competition act: 'The term "enterprise" as used in this Act means a person who operates a commercial, industrial, financial or other business. Any officer, employee, agent or other person who acts for the benefit of any enterprise is deemed to be an enterprise'. Available at https://www.jftc.go.jp/en/legislation_gls/amended_ama09/amended_ama15_01.html.
- ⁶⁵ For example the EU defines an undertaking as an entity engaged in economic activity, see Case C-41/90 *Höfner and Elser v Macrotron* EU:C:1991:161 para 21; Case C-280/06 *ETI and Others* EU:C:2007:775 para 38; Case C-350/07 *Kattner Stahlbau* EU:C:2009:127 para 34.
- ⁶⁶ See eg Article 2(1),(2) of the Japanese Act on Prohibition of Private Monopolization and Maintenance of Fair Trade or, https://www.jftc.go.jp/en/legislation_gls/amended_ama09/amended_ama15_01.html.
- ⁶⁷ As in the case of the Australian Competition and Consumer Act 2010 which is due to constitutional reasons limited in such a way, https://www.legislation.gov.au/Details/C2017C00369.
- 68 Case T- 347/ 09 Germany v Commission EU:T:2013:418.
- ⁶⁹ In this case the competition provision relating to State aid/subsidies.
- ⁷⁰ For an overview of the EU situation see (Cseres, 2020_[102]).
- ⁷¹ For a comparative view of the EU, US, UK and Israel, see (Reich, 2007_[50]) and for an even broader comparison also covering Canada, Argentina, Brazil Colombia and Mexico, see (Gutiérrez Rodríguez, 2010_[103]).

- ⁷² The Dutch legislative proposal to foster collaboration between firms towards sustainability goals removing them from the scope of competition is available at https://zoek.officielebekendmakingen.nl/dossier/35247 (accessed 05 Oct 2020). For an overview see (Sanden, 2019_[130])
- ⁷³ See for example EU Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011] OJ C11/01 para 257, 263.
- ⁷⁴ Allied Tube & Conduit Corp. v. Indian Head, Inc. 108 S. Ct. 1931, 1934 (1988), page 486 U.S. 501, see also American Soc'y of Mech. Eng'rs v. Hydrolevel, 456 U.S. 556 (1982) at 456 U.S. 570-573.
- ⁷⁵ Note however the US approach which employs a rule of reason approach to standards, see ibid. However, even there were certain conditions are fulfilled the standard is extremely unlikely to be challenged or found to be anticompetitive.
- ⁷⁶ For an overview of the EU conditions see (Nowag, 2020_[49]), para 15-25.
- ⁷⁷ With regard to such benefits and risks see e.g. the Joined Report from the Nordic Competition Authorities, Competition Policy and Green Growth Interactions and challenges (No 1/2010) available at https://en.samkeppni.is/media/skyrslur-2010/competition-policy-and-green-growth-final-version.pdf, pp. 58-62.
- ⁷⁸ See eg, EU Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements [2011], OJ C11/01 para 280.
- ⁷⁹ Launched in January 2008 by the World Business Council for Sustainable Development with a number of companies such as IBM, Nokia, Pitney Bowes, and Sony.
- 80 See also (Townley, $2009_{[104]}$) who distinguishes between 'mere balancing' and 'market balancing'. The UK's OFT also suggested distinguishing between economic and non-economic concerns, and then further between direct and indirect economic benefits, see OFT's contribution to the 2010 OECD Report on environment and competition; see (OECD, $2010_{[60]}$).
- ⁸¹ For a good overview on such clauses in developing countries see (Capobianco and Nagy, 2016_[133]),
- 82 For a discussion see (Odudu, $2020_{[105]}$), 'Feeding the nation in times of crisis: the relaxation of competition law in the United Kingdom'
- ⁸³ For a discussion in English, see (Maximillian, 2019_[106]), "Ministerial Approval Miba/Zollern: A Green Industrial Policy For Medium-Sized Companies".
- ⁸⁴ More on this concept and the difference to a rule of reason analysis, see (Nowag, 2017_[107]).
- 85 Case C-309/99 Wouters and Others EU:C:2002:98.
- 86 For an overview see (Nowag, 2015[64]).
- 87 Case C- 209/ 98 Sydhavnens Sten & Grus EU:C:2000:279.
- ⁸⁸ And then further between direct (cost and qualitative efficiencies enjoyed by the users of the product in question) and indirect economic benefits (cost and qualitative efficiencies in other markets), see (OFT, 2010_[108]), 'Article 101(3) A Discussion of Narrow versus Broad Definition of Benefits'.
- 89 See for example also (Brook, 2019[109]): 121; (Piscitelli, 2018/19[131]).
- ⁹⁰ Critical of this distinction (Holmes, 2020_[34]):371-383.

- ⁹¹ Nota bene, uncontentious in this context does not mean that the outcome of the analysis or the concrete methodology is uncontentious. But rather that it is uncontentious to assess quality improvements as part of a traditional competition law analysis. See for example (Monti, 2017_[65]) for a critique of the methodology with regard to the Dutch ACM's quality assessment in the Chicken of Tomorrow case.
- 92 Chicken of Tomorrow case, see (ACM, 2014[110]).
- ⁹³ Under the most commonly accepted definition of sustainability animal welfare would not be part of the sustainability, although environmental effects that might follow from e.g. reduced mass production of animals might well be.
- ⁹⁴ On the level of the consumers' willingness to pay for sustainability see e.g. the studies by GFK, 'Consumer Willingness to Pay A Premium for "Green" Products Climbs, Albeit Slowly' (24 April 2017) available at https://www.marketingcharts.com/industries/cpg-and-fmcg-76738 (accessed 05 Oct 2020) and McKinsey and company, 'How much will consumers pay to go green?' (1 Oct 2012) available at https://www.mckinsey.com/business-functions/sustainability/our-insights/how-much-will-consumers-pay-to-go-green (accessed 05 Oct 2020).
- ⁹⁵ See e.g. (EU, 2004_[111]) Guidelines on the application of Article 81(3) of the Treaty [2004] OJ C 101/97 para 87; (ACM, 2013_[112]) 'ACM Position Paper Competition & Sustainability'.
- ⁹⁶ Informele zienswijze Managementplan MSC Garnalenvisserij [2011] 7011/23.B27 (MSC Shrimp fisheries).
- 97 See (ACM, 2020[61]).
- 98 Ibid para 50.
- 99 (HCC, 2020_[32]), para 25.
- ¹⁰⁰ (HCC, 2020_[32]), para 111.
- ¹⁰¹ More details on the EU case law in this regard see e.g., (Nowag, 2017_[107]), 234-236.
- ¹⁰² Ohio v. American Express Co. 138 S. Ct. 2274; 201 L. Ed. 2d 678
- ¹⁰³ Case C-382/12 P MasterCard and Others v Commission EU:C:2014:2201 para 240.
- 104 Case T- 86/95 Compagnie Générale Maritime EU:T:2002:50 para 343.
- ¹⁰⁵ Case C- 238/ 05 ASNEF- EQUIFAX EU:C:2006:734 para 70, emphasis added.
- 106 (Lianos, 2019_[113]).
- ¹⁰⁷ (ACM, 2020_[61]), para 39-44.
- ¹⁰⁸ Ibid para 40-41.
- ¹⁰⁹ In any case the distinction between sustainability benefit and innovation benefit seems sometimes also rather difficult as for example in the case of green innovation shows.
- ¹¹⁰ In this direction also (Lianos, 2018_[33]); (HCC, 2020_[32]), para 75.
- ¹¹¹ This standard might be different even though the same legal framework is applies as eg witnessed with regard to the application of Article 101 (3) TFEU by national competition authorities in the EU, see (Brook, 2019_[109]).
- ¹¹² It is important to highlight here that such an approach suggests the use economic methods which distinguishes it from the abstract balancing approach explore above (paras 67-71).

- ¹¹³ For the EU's obligation to integrate under Article 11 TFEU and its drafting and development, see (Nowag, 2015_[114]), 'The Sky Is the Limit'.
- ¹¹⁴ See (Ellison, 2020_[127]): in particular 8-9.
- ¹¹⁵ Using existing data about individual choices.
- ¹¹⁶ In such an approach wild animals and unused objects can be valued by 1) an existence value -an inherent value of a species or nature reserve- 2) an option value -a value based on the fact that we might be of use later- 3) a bequest value -a value for preserving it for others-. These values can be measured by contingent valuation (that is to say by examining how much people are willing to pay for these there values) or by conjoint analysis (where people are asked to rank desirable alternatives), for details see (Hussen, 2018_[115]), chs. 7 and 8.
- ¹¹⁷ See (Monti, 2020_[116]) 'Four Options for a Greener Competition Law'; (Kingston, 2010_[117]).
- ¹¹⁸ These normative questions need to be seen and answered in the specific legal context and cannot be answered in the abstract, see above section 3.
- ¹¹⁹ The European Commission in its CECED decision (CECED (IV.F.1/ 36.718) Commission Decision 2000/ 475/ EC [2000] OJ L187/ 47) called them 'collective environmental benefits' and calculated them in economic terms by placing a monetary value upon the saved CO₂, sulphur dioxide and nitrous oxide.
- ¹²⁰ See (ACM, 2013_[119]), 'Notitie ACM over sluiting 5 kolencentrales in SER Energieakkoord' (26-09-2013) available at https://www.acm.nl/nl/publicaties/publicatie/12033/Notitie-ACM-over-sluiting-5-kolencentrales-in-SER-Energieakkoord (accessed 05 Oct 2020).
- ¹²¹ See (ACM, 2020_[61]), para 50ff.
- ¹²² See (Monti, 2020_[116]) 'Four Options for a Greener Competition Law' and (Nowag, 2017_[107]): 236-238.
- ¹²³ Here the term process related matters is used rather than procedural rules. What is consider procedural and what is substantive depends on the rules of the jurisdiction in question.
- ¹²⁴ See Sustainability and competition law under Section 4 Technical questions.
- ¹²⁵ See for example with regard gender inequality (OECD, 2018_[118]) "Competition Policy and Gender" (accessed 05 Oct 2020). The report highlights the critical role that priority setting has and how competition authorities can contribute to the fight against gender inequality when focusing on markets that particularly critical for women. Similarly, such a prioritisation might help in fighting poverty, on this see (OECD, 2013_[101]) "Competition and Poverty Reduction" (accessed 05 Oct 2020).
- ¹²⁶ (CMA, 2020_[120]) 'Corporate Report Annual Plan 2020 to 2021' (19 March 2020) available at (accessed 05 Oct 2020).
- ¹²⁷ See (Autorité de la Concurrence, 2020[121]) (accessed 05 Oct 2020).
- ¹²⁸ See (OECD, 2013_[101]) "Competition and Poverty Reduction".
- ¹²⁹ (Fair Trade Advocacy Office, 2019_[45]), 'EU Competition Law and Sustainability in Food Systems: Addressing the Broken Links', p. 32; (Lübbig, 2013_[122]), 'Sustainable Development and Competition Policy', (Scott, 2016_[123]), 'Antitrust and Socially Responsible Collaboration: A Chilling Combination?'
- ¹³⁰ (ACM, 2016_[124]) 'ACM sets basic principles for oversight of sustainability arrangements' (accessed 05 Oct 2020).
- 131 (ACM, 2014[125]) 'Vision document on Competition and Sustainability' (accessed 05 Oct 2020).

- ¹³² (JFTC, 2001_[126]) 'Guidelines Concerning Joint Activities for Recycling under the Antimonopoly Act' (26 Jun 2001, and last amended on 1 January 2010, accessed 05 Oct 2020).
- ¹³³ As reported in (OECD, 2010_[60]) 'Horizontal Agreements in the Environmental Context' (accessed 05 Oct 2020) p 70-72.
- ¹³⁴ See (Engelsing F., 2019, pp. 16-22_[132])
- ¹³⁵ Because it complied with the safe harbour rules for standards, see "Competition law as an obstacle? Sustainability as a shield against antitrust liability" under section 4.
- ¹³⁶ The authority examined how the market had developed and it was clear that non-discriminatory access and participation was possible and that no exchange of sensitive information would take place.
- ¹³⁷ Letter from Joel I. Klein, Assistant Attorney General, U.S. Dep't of Justice, Antitrust Div., to Kenneth A. Letzler & Richard M. Lucas (Apr. 7, 2000) available at http://www.justice.gov/atr/public/busreview/4513.pdf
- ¹³⁸ Up to 0.5% of the final retail price for foreign produced footwear and apparel and up to 3% for US produced goods.
- 139 (Monti, 2020[116]) 'Four Options for a Greener Competition Law' 131.
- ¹⁴⁰ See e.g. (Ellison, 2020_[127]).
- ¹⁴¹ EU Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty OJ [2003] OJ L 1/1.
- ¹⁴² See (ACCC, 2020_[62]) Determination Application for authorisation AA1000476 lodged by Battery Stewardship Council in respect of the Battery Stewardship Scheme Authorisation number: AA1000476 (05 Oct 2020) available at https://www.accc.gov.au/public-registers/authorisations-and-notifications-registers/authorisations-register/battery-stewardship-council (accessed 05 Oct 2020)
- ¹⁴³ With AMF, CSA, ARCEP, CNIL, Hadopi, ART, CRE and Arjel, see press release (19 Dec 2019) 'Independent public and administrative authorities develop their collaboration on the challenges of climate warming' available at https://www.autoritedelaconcurrence.fr/en/press-release/independent-public-and-administrative-authorities-develop-their-collaboration (accessed 05 Oct 2020).
- ¹⁴⁴ (ACM, 2020_[61]): para 61.
- ¹⁴⁵ (Monti, 2020_[116]) 'Four Options for a Greener Competition Law'.
- ¹⁴⁶ The Indonesian competition authority KPPU threatened to fine palm-oil traders who had decided not to buy palm oil from farmers that engaged in illegal deforestation, giving in to political pressure after initially endorsing the initiative See https://www.straitstimes.com/world/jakarta-wants-oil-majors-to-ditch-zero-deforestation-pact.
- ¹⁴⁷ Reuters, Europe says Brazil's move to end soy moratorium threatens \$5-billion market (25 Nov 2019) https://www.reuters.com/article/us-brazil-soybeans-environment/europe-says-brazils-move-to-end-soy-moratorium-threatens-5-billion-market-idUSKBN1XZ1CV (accessed 05 Oct 2020).
- ¹⁴⁸ EU Observer (23 Aug 2019) EU to discuss Brazil beef ban over Amazon fires, available at https://euobserver.com/environment/145723 (accessed 05 Oct 2020).
- ¹⁴⁹ (Rajão, 2020_[128]).
- ¹⁵⁰ BBC, 'US bans Malaysian palm oil producer over forced labour' (1 Oct 2020) https://www.bbc.co.uk/news/business-54366607 (accessed 05 Oct 2020).
- ¹⁵¹ With regard to car manufactures pledging to go beyond the legally mandated emissions standards in the US and the EU, see (Nowag, 2020_[129]), 'The antitrust car Emissions investigation in the U.S. Some thoughts from the other side of the pond', (Hovenkamp, 2019_[53]) "Are agreements to Address Climate Change Anticompetitive. Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3451931 (accessed 05 Oct 2020).

www.oecd.org/competition

