

Article

The 2019 ‘Fitness Check’ of State Aid Modernisation Reform of 2012—an Opportunity to Redefine and Reintroduce Sustainability into the EU/EEA State Aid Rules? The Example of the Transport Sector

Małgorzata Agnieszka Cyndecka

Faculty of Law, University of Bergen, 5020 Bergen, Norway; Malgorzata.Cyndecka@jur.uib.no;
Tel.: +47-91-10-10-24

Received: 3 October 2019; Accepted: 5 November 2019; Published: 11 November 2019



Abstract: This article intends to launch a discussion on the possibilities of introducing more sustainability into the rules on granting State aid. State aid law constitutes a crucial part of the internal market regulation. In principle, granting public support to companies is prohibited in the European Union (EU) as such state intervention distorts competition. In some cases, however, aid may be allowed if it pursues a legitimate public policy objective such as research, regional development, transport or environmental protection. In 2017, the EU Member States spent EUR 116.2 billion, i.e., 0.76% of GDP, on State aid at the EU level. While aid to the environment and energy saving promotes sustainability, the question is whether other types of aid also do so. This article provides a brief explanation of the rationale behind State aid control, explains how ‘good aid’ may be approved by the European Commission or EFTA Surveillance Authority (ESA) before it is granted by the Member States and proposes taking a closer look at the current guidelines for granting aid in the transport sector. This sector has a serious impact on the environment and human well-being, while it is heavily subsidised by the state.

Keywords: EU/EEA State aid law; State aid modernisation EU reform (SAM); internal market; competition distortions; sustainable growth; transport sector

1. Introduction

In 2019, it is hardly necessary to argue that economic growth must be sustainable. In this respect, sustainability is understood as securing the social foundation for people everywhere both now and in the future, while staying within planetary boundaries [1]. As there exist numerous barriers, gaps, and incoherencies that prevent market actors from contributing to sustainability, the necessary transition towards sustainable growth requires an immense and coordinated effort from both the international institutions, national authorities, companies, and consumers [2]. In this respect, the EU is in a unique position due to its impact on both the Member States and companies through the legal framework of the internal market. Currently, in addition to 28 Member States of the EU, the internal market includes 3 Member States of the European Free Trade Association (EFTA), that is Norway, Iceland, and Liechtenstein. While those states are not Members of the EU, they are well integrated into the EU’s internal market through the Agreement on the European Economic Area of 1992 [3]. The EEA Agreement is based on the Treaty of Rome that established the European Economic Community, the EU’s predecessor [4]. At present, there are nearly 520 million people living in the EEA, which makes it the world’s largest single market [5].

Given that one must act swiftly and efficiently to respond to the global risks caused by human activity such as the climate change, the impact and potential of the EU/EEA law should be used to the

fullest. Being aware of its leading role in responding to sustainability challenges, the EU has recognised the necessity of achieving sustainability within the limits of our planet [6] and is committed to the UN Sustainable Development Goals (SDGs) [7]. In this regard, one should mention a number of legislative instruments such as the Public Procurement Reform of 2014 [8], the Circular Economy package [9], and the Sustainable Finance Initiative of 2018 [10] that aim to open up for more sustainability into the businesses [11].

As one may note, however, a prominent part of the internal market regulation—State aid law—seems to present an unrealized potential in regard to promoting sustainability. The EU/EEA rules on granting aid are currently under review, which take the form of a ‘fitness check’. In light of the urgent need to further action towards sustainability, this article proposes to use that ongoing review to launch a discussion on the possibilities to promote more sustainability when granting public support to companies. In particular, the present article focuses on granting aid in the transport sector. This is because transport has a considerable and negative impact on the environment and human well-being while it is heavily dependent on public financing due to amongst others high costs of infrastructure. Moreover, some of the rules on granting aid in the transport sector seem to be outdated or even counterproductive when examined in the context of sustainability. Therefore, the time appears to be ripe for their reconsideration.

In order to demonstrate why and how one could incorporate more sustainability into State aid law, it is necessary to explain the reasoning behind State aid control that is exercised by the Commission and EFTA Surveillance Authority (ESA) as regards the EU Member States and Norway, Iceland and Liechtenstein, respectively. As a rule, the Commission or ESA must approve aid before it is granted by the Member States. This process is, however, governed by different procedures depending on the type of public support and its impact on the internal market. The present article draws thus attention to both substantial and procedural provisions in the current regulations. When arguing in favour of promoting more sustainability, references are made not only to relevant law and EU policy documents, but also to scientific studies and literature that provide data on the environmental impact of transport.

1.1. State Aid Control as a Crucial Part of the Internal Market Regulation

EU/EEA State aid law is a European peculiarity that regulates granting public support in the form of subsidies and other types of state measures that benefit companies such as tax exemptions, state guarantees or loans on preferential terms. As a rule, granting State aid is prohibited, as such financial support distorts competition by selectively favouring some companies. Likewise, the principles of non-discrimination and undistorted competition are indispensable to the proper functioning of the internal market. The reasoning behind introducing State aid control into the EU law was to prevent detrimental subsidy races between the Member States and to safeguard a ‘level playing field’ for all companies operating in the internal market.

In some situations, however, state interventions are necessary for a well-functioning and equitable economy. The prohibition of granting aid is thus by no means absolute and, under certain conditions, the Commission or ESA may approve aid that is compatible with the internal market. Importantly, aid may be considered compatible only if its positive effects such as stimulating regional development, research, development and innovation or providing local transport services in remote areas outweigh the negative effects of aid, which are distortions of competition and trade between the Member States.

The Member States may thus be allowed to grant aid to correct ‘market failures’ and pursue legitimate public policy goals. ‘Market failures’ amount to situations where the market fails to provide the optimal level of a good or service because the assumptions that allow markets to provide optimal outcomes do not hold. Typical examples of situations where market failures often occur include those activities which have negative environmental impacts, because property rights associated with damage to the environment often do not exist or are not enforceable, and the activities of small and medium enterprises (SMEs), which suffer from various market failures including those caused by capital market imperfections. Another example is research and development (R&D), where the spill overs created by

R&D efforts lead to benefits (positive externalities) which cannot be captured by the firm carrying out the research [12].

1.2. State Aid Law and Sustainability—Where Do We Stand?

The importance of State aid law and policy may be demonstrated by the size of public support that qualifies as ‘aid’ under the Treaty on the Functioning of the European Union (TFEU) and by referring to public policy goals that are pursued by granting aid [13]. In this respect, the relevant data may be found in State Aid Scoreboards that are issued on a yearly basis by the Commission [14]. They comprise State aid expenditure made by the EU Member States and are based on information provided by the national authorities. According to the 2018 State Aid Scoreboard, in 2017, the EU Member States spent EUR 116.2 billion, i.e., 0.76% of GDP, on State aid at the EU level. It is an increase of about 0.04 p.p. of GDP compared to 2016.

Most interestingly, about 53% of total spending, excluding agricultural aid, was attributed to State aid to environmental and energy savings. In 2017, environmental protection and energy savings was the prime reported policy objective, that is for which Member States spent the most for Germany, Romania, Bulgaria, Austria, Sweden, Finland, Denmark, Estonia, the Czech Republic, Ireland, the Netherlands, Cyprus, Slovenia, Luxembourg, the United Kingdom, and France [15]. Importantly, spending on environmental and energy saving aid has increased [16]. In most cases public authorities must financially support companies willing to invest in environmental protection and energy saving. Therefore, this is a very positive development [17]. The data to be found in the State Aid Scoreboard for Norway, Iceland and Liechtenstein show the same trend. Aid measures with environmental protection and energy saving as their main objective received the largest proportion of aid in those states in 2017, accounting for around 38% of all expenditure [18].

The current guidelines for granting energy and environmental aid undeniably help Member States to design State aid measures that contribute to reaching their 2020 climate targets and to provide sustainable and secure energy [19]. Still, in light of the urgent need to intensify efforts to achieve more sustainability, one should ask to which extent granting other types of aid promotes sustainability and if more could be achieved in this regard. Moreover, given that some sectors largely depend on public support, the question is whether the granted aid may undermine the transition to sustainable growth. In a global perspective, the policy of subsidizing fossil fuel consumption causes severe economic distortions that compromise countries’ prospects of achieving equitable and sustainable development [20]. Interestingly, research shows that this also concerns European countries [21]. In the EU/EEA perspective, one should particularly mention the transport sector that due to its importance to the economy and the costs of infrastructure necessarily requires considerable amounts of public financing. Moreover, certain aid measures do not necessarily promote sustainability. For example, the current guidelines for aviation open for granting investment aid to airport infrastructure and start-up aid to airlines for operating new routes. At the same time, aviation is one of the fastest-growing sources of greenhouse gas emissions [22].

At the same time, however, in 2010, the EU adopted the Europe 2020 strategy that focuses on creating the conditions for smart, sustainable, and inclusive growth [23]. This strategy is referred to in the Commission and ESA’s guidelines on granting aid to Important Projects of Common European Interests (IPCEI) [24] regional aid for 2014–2020 [25] research, development and innovation (R&D&I) [26] promoting risk finance investments [27], broadband infrastructure [28], as well as airports and airlines [29]. Importantly, most of the guidelines that are in force have been revised as a result of an ambitious State aid modernisation reform (SAM) that the Commission implemented in 2012–2016 [30]. SAM was based on three main objectives: (a) fostering sustainable, smart, and inclusive growth in a competitive internal market; (b) focusing the Commission’s ex ante scrutiny on cases with the biggest impact on the internal market, while strengthening the cooperation with Member States in State aid enforcement; and (c) streamlining the rules to ensure faster decision-making [31].

In this respect, however, a mere reference to sustainable growth as one of the EU's objectives does not necessarily result in incorporating sustainability defined as 'securing the social foundation for people everywhere both now and in the future, while staying within planetary boundaries' into the relevant provisions and taking it into account when approving aid. For example, in the guidelines promoting risk finance investments, which aim to help SMEs obtain the necessary funding, the notions of sustainability and sustainable development concern those enterprises and their ability to survive without further public support [32]. Likewise, when the Commission argues that the data concerning aid granted by the Member States in 2017 indicate that State aid control fosters sustainable, smart and inclusive growth, it simply refers to a progressive shift from sector-specific aid to tackling horizontal objectives of common interest, including cohesion. As the Commission points out, while about 50% of total State aid was still allocated to supporting sectoral development, rescue and restructuring in the early nineties, it currently only represents a very small proportion of aid disbursed. In 2017, about 94% of total State aid spending was allocated to horizontal objectives of common interest ('good aid'), an increase of about 2 p.p. and 11 p.p., respectively, compared to 2015 and 2010. On the contrary, State aid spending for rescuing and restructuring companies in difficulty decreased significantly over the last 5 years, by about 15% annually, highlighting the fact that if aid to companies in difficulty is still permitted, stricter conditions apply to ensure that the most appropriate and transparent restructuring will restore and sustain the company's long-term viability [33].

Sustainability understood as 'securing the social foundation for people everywhere both now and in the future while staying within planetary boundaries' is included in the provisions of the General Block Exemption Regulation (GBER) that concern urban development aid. One of the conditions for granting such aid is that a given project supports the implementation of an 'integrated sustainable urban development strategy' [34].

In light of the provided observations, a discussion on promoting more sustainability by granting aid should no longer be limited to environmental and energy aid. This part of the relevant legal framework has been subject of an extensive analysis of its efficiency or lack thereof, in particular, with respect to environmental and energy taxation [35]. For this reason, this article will not delve into this type of aid.

1.3. Why Launching a Discussion on More Sustainability in State Aid Law Now?

There are two reasons why opening a discussion on including more sustainability in State aid law is recommended at this very moment. First, on 7 January 2019, the Commission launched in line with the Commission's Better Regulation Guidelines, the evaluation of the rules on granting aid that were adopted as part of the above-mentioned reform State aid Modernisation (SAM). They said 'fitness check' aims to provide a basis for decisions, to be taken by the Commission in the future, about whether to further prolong or possibly update the rules. As the Commission explained, the 'fitness check' will involve internal analyses by the Commission and public consultations as well as, in some cases, studies prepared by external consultants or targeted consultations of specific stakeholders. In the author's view, this evaluation gives an opportunity to engage the national authorities, companies and other stakeholders in a broader discussion on sustainability in State aid law and policy. In this respect, public consultations may be particularly valuable as a starting point and a reference for further discussions on a more advanced and technical level.

Second, on 10 September 2019, the President-elect of the European Commission, Ursula von der Leyen, explained in more detail what she expects from the Commissioners-designates. Her ambition to take 'bold action against climate change' is demonstrated by appointing Frans Timmermans as the Commissioner responsible for coordinating the work on the European Green Deal, which is supposed to 'become Europe's hallmark.' As she emphasised, 'At the heart of [the European Green Deal] is our commitment to becoming the world's first climate-neutral continent. It is also a long-term economic imperative: those who act first and fastest will be the ones who grasp the opportunities from the

ecological transition. I want Europe to be the front-runner. I want Europe to be the exporter of knowledge, technologies and best practice.'

In regard to the question of promoting sustainability in the rules on State aid law, however, it is even more important to draw attention to von der Leyen's mission letter to Margrethe Vestager. Vestager is designated to coordinate the whole agenda on a Europe fit for the digital age and continue as the Commissioner for Competition responsible for State aid policy. In the mission letter to Vestager the President-elect not only emphasised that 'Each Commissioner will ensure the delivery of the United Nations Sustainable Development Goals within their policy area', but also stressed the importance of the ongoing review of State aid rules and guidance [36].

Given the impact that the political agenda of the outgoing President of the European Commission has had on State aid policy, the priorities of the President-elect of the European Commission should be duly taken into consideration. When Jean-Claude Juncker presented his team on 10 September 2014, he stressed his intention to be 'serious about being big on big things and small on small things' [37]. In State aid law, that resulted in amongst others investigations into tax rulings granted by some Member States and much debated decisions concerning such multinational companies as Apple, Fiat or Starbucks. At the same time, the Commission clarified when relatively minor in terms of amount state investments in crucial local infrastructure normally do not count as State aid [38]. Moreover, in the period 2014–2019, the Commission expanded the legal framework allowing to grant aid without the Commission's prior approval, which allowed the Commission to focus on 'big cases'. Since 2015, more than 96% of new state measures for which expenditure has been reported for the first time was granted without the Commission's prior approval [33].

While it is for the Commission to decide whether to propose promoting more sustainability by granting aid and, if so, how to design the relevant provisions, this article aims to initiate a discussion on that issue. As rightly pointed out by Svenskt Näringsliv (the Confederation of Swedish Enterprise) in its input to the 'fitness check' of the 2012 State aid modernization package, 'One of the key issues in our time is climate change, an issue of importance for whole mankind and for future generation. In line with this, state aid rules as well as other regulations must benefit the development towards lower carbon emissions and ultimately a carbon emission free economy. The Commission should therefore weigh in the climate parameter in all the state aid rules, to make sure that measures to address climate change are made possible, and that state aid that drives carbon emissions are phased out' [39].

2. Analysis and the Findings

2.1. The Rationale for State Aid Control in the Internal Market

A well-functioning internal market is at the heart of the ambitious project of the European integration. The proper functioning of the internal market, however, depends on safeguarding an undistorted competition and a 'level playing field' for all market participants. By ensuring that companies compete fairly with each other the European competition policy aims to encourage enterprise and efficiency, create a wider choice for consumers and help reduce prices and improve quality of goods and services. The EU/EEA competition law addresses such anti-competitive behaviour of companies as the creation of a cartel between competitors, which may involve price-fixing and/or market sharing or—in situations in which a company that holds a dominant position on a given market—an abuse of that position by for example charging unfair prices, limiting production, or refusing to innovate to the prejudice of consumers. The relevant legal framework also encourages liberalization that is opening markets for more competition, as it was the case in the railway, telecommunications, postal or energy sector.

Yet, given the state's (at least theoretically) 'unlimited resources' and its dual capacity as a public authority and a market participant competing with private companies in the market, the EU/EEA also addresses state interventions that may efficiently distort competition in the internal market. Therefore, State aid control was introduced into the EU Treaties to prevent Member States from granting financial

support to their national champions. Such subsidies would inevitably result in retaliatory measures taken by other Member States. This would lead to detrimental and expensive ‘subsidy races’ and ‘beggar-thy-neighbour’ policies that would undeniably undermine the creation and proper functioning of the internal market.

Importantly, the notion of State aid is wider than the notion of subsidy that amounts to a positive economic advantage such as a direct grant. State aid covers any state measure that amounts to an economic advantage being granted by the state or through state resources on a selective basis, which distorts or at least threatens to distort competition and is likely to affect trade between the Member States [40]. Hence, both direct grants, capital injections, guarantees or loans on preferential terms as well as tax waivers, tax exemptions or tax reductions may qualify as aid. This is because a tax exemption has the same effect on a recipient company as a direct grant: it strengthens its position when compared to its competitors.

As noted, the ban on granting aid is by no means absolute and the EU/EEA law leaves room for a number of policy objectives for which aid can be considered compatible with the internal market if its positive effects outweigh competition distortions. The compatibility assessment is an exclusive competence of the Commission and ESA. Under certain conditions, they may authorize the Member States to grant aid.

Interestingly, while the main reason why State aid control was introduced into the EU law was the prevention of subsidy races and thus the ban on granting aid, the evolution of State aid law and policy shifted their focus towards facilitating the pursuit of legitimate public policy goals by efficient state interventions and promoting fiscal discipline [41]. The current regulations provide for a number of possibilities of granting ‘good aid’ and, depending on the complexity of a given aid measure, different procedures are to be followed. More sustainability is undeniably a legitimate objective that should be promoted by granting ‘good aid’.

2.2. State Aid Control in Practice—How to Grant ‘Good Aid’?

Under the EU/EEA State aid rules, the Member States in principle have to notify aid to the Commission or ESA before implementation [42]. Aid can only be implemented once it has been approved. The Member States must thus observe the ‘stand-still’ clause. Otherwise aid is considered to be illegal. If a Member State not only infringes the ‘stand-still’ clause, but also grants aid that is found to be incompatible with the internal market, it must be repaid with interest [43]. In practice, the recipient companies have very slim chances to avoid such repayment. The purpose of recovery is to restore the situation which existed in the internal market before the aid was paid, that is before competition was distorted [44].

2.2.1. General Block Exemption Regulation (GBER)

While the obligation to notify aid enables the Commission and ESA execute State aid control, the notification is time and resource consuming for both the Commission or ESA and the Member States. Therefore, given the positive experiences from the field of antitrust law, the Commission introduced block exemptions into State aid law [45]. The Commission exempted some aid measures from the notification obligation, provided that certain conditions are fulfilled. This ensures that the aid measures are compatible with the internal market. The adoption of GBER provided the Member States with legal certainty and reduced the Commission and ESA’s workload. They may thus focus on cases most liable to distort competition. The exempted measures must be simply communicated to the Commission or ESA, but they are not subject to a ‘stand-still’ clause and can be quickly implemented by public authorities.

The possibility to exempt aid from notification was introduced in 2008 when the original GBER was adopted [46]. Following its expansion by adding new types of aid, increasing the permitted aid intensities and thresholds above which aid must be notified in 2014 [34] and 2017 [47] the Member States have been awarded a possibility to grant aid in a swift and simplified manner if the given aid

fulfils all the GBER criteria. The simplification, however, was not the only objective the Commission wished to attain when it decided to adopt the GBER. The second one was to incentivise the Member States to spend more on aid that would contribute to achieving the Lisbon Strategy objectives [48,49]. The GBER enabled the Member States to grant more aid that would “stimulate growth and create more and better jobs while making the economy greener and more innovative” [49].

The data provided by State Aid Scoreboards seem to confirm that the Commission succeeded. As stated in the 2017 State Aid Scoreboard, “since 2015, more than 96% of new measures for which expenditure has been reported for the first time fell under the General Block Exemption Regulation, i.e., an increase of about 28p.p. compared to 2013. Looking at all measures for which expenditure has been reported (and not only new measures), about 82% of all measures were block exempted in 2017, an increase of respectively about 6p.p. and 22p.p. compared to 2015 and 2013. In terms of spending, total expenditure on GBER measures in the EU represented about EUR 41.7 billion in 2017, i.e., about 38% of total expenditure” [33]. As regards the objectives for which the Member States decide to grant aid under the GBER, “[t]he observed GBER uptake also complements EU policy initiatives such as i.a., the Europe 2020 Strategy; the Programme for the Competitiveness of Enterprises and SMEs (COSME); ensuring sufficient flexibility and high amounts of R&D&I aid in a context of strong global competition; or supporting easier deployment of broadband in line with the EU Digital Agenda that sets ambitious goals for broadband infrastructure development to support growth in Europe” [33].

Those trends and changes in granting aid are a result of significant benefits of granting aid under the GBER. The Regulation undeniably simplifies the procedure for aid-granting authorities at national, regional and local level. This is crucial given that State aid regulations have become quite complex and the risk of granting incompatible aid that must be repaid may discourage regional and local authorities from undertaking interventions that could have many positive effects. As noted, aid may also be disbursed more quickly. Moreover, the GBER introduced ex-post requirements for Member States such as the requirement to evaluate large aid schemes and to ensure greater transparency on aid awards. This contributes to a better use of public resources that are always scarce. As stated in the Regulation, GBER applies only to transparent aid, which is defined as aid in respect of which it is possible to calculate precisely the gross grant equivalent of the aid ex ante without any need to undertake a risk assessment [50]. In this respect, the Regulation provides a list of measures that are considered to be transparent. In addition, the GBER imposes conditions which aim to ensure that the companies that receive aid will indeed undertake the project or activity which they would not have undertaken had the aid not been granted. Therefore, one of the conditions of granting aid is the so-called incentive effect [51]. It results from the idea behind granting aid, which is rectifying a well-defined market failure.

At the same time, however, given that aid granted under GBER is not formally assessed by the Commission or ESA as regards its compatibility with the internal market, the granted measures must meet all the relevant conditions provided in the GBER. Only then, one may assume that the competition is not excessively distorted and aid may be considered compatible. In practice, the GBER defines thus in a very detailed way, both potential beneficiaries and aid they may receive with respect to amongst others its form, amount, and intensity. This may exclude the possibility of designing a state intervention that would be most appropriate in a given case and that could be exempted under the GBER.

Such a detailed regulation of characteristics of aid may be a major challenge with respect to promoting more sustainability. This is simply because it may be difficult to express sustainability understood as “securing the social foundation for people everywhere both now and in the future, while staying within planetary boundaries” by such factors as the form of aid or its maximum threshold. In this respect, one must first expand the current understanding of the notion of sustainability in State aid law, which in most cases is limited to environmental protection and energy saving. Moreover, given the amount of aid that is currently granted under the GBER, any new provision must be carefully considered as the risk of distorting competition is high. At the same time, however, such as exercise

seems to be worth the effort. If the Commission succeeds in designing new or redesigning the current GBER provisions with the view of promoting more sustainability, the results may be significant.

2.2.2. Guidelines on Granting Aid

State aid measures that are not automatically exempted from prior notification by the GBER are not necessarily incompatible with EU/EEA state aid rules. They simply have to be notified by Member States to the Commission or ESA that will examine whether they are in line with the relevant guidelines on granting aid. Such guidelines, which are referred to as Communications, Guidelines or Notices, set out the Commission and ESA's policy with respect to a given type of aid. The guidelines provide legal certainty to the Member States and the companies receiving aid as they are binding upon the Commission and ESA.

While the necessary notification and the compatibility assessment may be time consuming, the guidelines provide more flexibility in designing a state intervention. As a rule, every aid measure must be assessed on a case-by-case basis and the Commission or ESA must take into account all factors that are relevant in a given case. Following the SAM, aid may be considered compatible only if all the following common compatibility criteria are met: (1) The aid measure must be aimed at an objective of common interest; (2) It must be targeted towards a situation where aid can bring about a material improvement that the market cannot deliver itself, for example by remedying a market failure or addressing an equity or cohesion concern; (3) It must be an appropriate policy instrument to address the objective of common interest; (4) The aid must change the behaviour of the company(ies) concerned in such a way that it engages in additional activity that it would not carry out without the aid, or it would carry it out in a restricted or different manner or location; (5) The aid amount must be limited to the minimum needed to induce the additional investment or activity; (6) negative effects on competition and trade between Member States must remain sufficiently limited; (7) the relevant acts and pertinent information about aid awards must be transparent (public).

Currently, the Commission's guidelines concern (1) horizontal rules which apply across all industries, such as regional aid, R&D&I or environmental aid, (2) sector-specific rules such as aid to broadband, broadcasting or postal services, and (3) specific aid instruments, that is guarantees and export credit insurance.

As regards promoting more sustainability by granting aid under the guidelines, their flexibility in designing state measures may make them more appropriate for that purpose than the GBER. Moreover, a case-by-case assessment of a notified measure by the Commission or ESA will guarantee balancing the sustainability and competition. This reduces the risk of granting aid that excessively distorts competition and gives a possibility to gather more experience with measures that promote sustainability. In a longer perspective, a positive experience with certain types of aid may lead to including them in the GBER.

2.2.3. Compatibility Assessment Directly under the Treaty or the EEA Agreement

If a given aid measure falls outside the relevant guidelines or when there are no guidelines that could apply, the Commission or ESA will have to apply directly Article 107(3) TFEU or 61(3) EEA, respectively, in order to verify compatibility. In this respect, the measure is also assessed on a case-by-case basis under the seven common compatibility principles as provided above. Likewise, in case of guidelines, the Member States must notify aid and observe the 'stand-still' obligation.

2.3. *More Sustainability in the Rules on Granting State Aid to the Transport Sector?*

In 2011 in its White Paper 'Roadmap to a Single European Transport Area—Towards a competitive and resource efficient transport system', the Commission presented a roadmap of 40 concrete initiatives for the next decade to build a competitive transport system that would increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the Commission's proposals aimed to dramatically reduce Europe's dependence on imported oil and cut carbon emissions in

transport by 60% by 2050. By 2050, the key goals included: (1) no more conventionally-fuelled cars in cities; (2) 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions; (3) a 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport, (4) all of which will contribute to a 60% cut in transport emissions by the middle of the century [52].

In 2016, in response to stakeholders as well as European institutions and bodies who have requested to take stock and follow-up on the implementation of the 2011 White Paper, the Commission published an implementation report of the 2011 Roadmap. As the report showed, there is still little progress achieved towards the goals set in 2011 [53]. Indeed, in regard to the environmental issues, transport represents more than a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities [54]. Although the Commission has made a significant progress by issuing major legislative proposals and providing extensive analytical work in support of possible political actions in the future, it is not sufficient [54]. It is thus crucial to identify all measures that will reduce the transport's negative impact on the environment and the human well-being and that will respond to the new challenges.

In this respect, the Implementation report of 2016 draws attention to ageing and urbanization. As the authors pointed out, the ageing society would require more emphasis on the provision of safe, secure and reliable transport services featuring appropriate solutions for users with reduced mobility. One may thus expect higher demand for door-to-door mobility and drivers assistance solutions. At the same time, one may expect spending less public money on transport due to higher expenses related to pension payments, health care and nursing. As regards the progressing urbanization, it will further contribute to the problems affecting many agglomerations, such as congestion, air pollution, noise and saturation of transportation hubs [55]. The transition to a more environmentally-friendly and efficient transport is thus necessary. According to the European Environmental Agency, however, while most other economic sectors, such as power production and industry, have reduced their emissions since 1990, those from transport have risen. Moreover, a reversal of this trend is currently not in sight [56].

As the transport sector is characterised by a large degree of public investments and the provision of public transport services (in particular for passengers) relies to a large extent on public subsidies [57], it is of interest to take a closer look at aid that is granted in that sector. Currently, aid may be granted under both sector-specific rules such as Guidelines on State aid to airport and airlines, and horizontal rules such as Guidelines on State aid for environmental protection and energy 2014–2020 [58], GBER or, if necessary, directly under the TFEU or the EEA Agreement [59]. Moreover, if transport services are qualified as Public Service Obligation, one must take into account specific provisions safeguarding that aid is compatible with the internal market [60]. While this article does not pretend to provide a full overview of possibilities of granting aid to transport, it draws attention to those provisions that are most interesting from the point of view of sustainability. The sections below provide observations concerning road transport, aviation, rail and maritime transport.

2.3.1. Road Transport

Road transport produces more than 70% of the overall greenhouse gas emissions from transport. Additionally, road traffic is the most widespread source of noise, with more than 100 million people affected by harmful levels in the EEA Member States [56]. In fact, the World Health Organization (WHO) has classified traffic noise, including road, rail and air traffic, as the second most important cause of ill health in Western Europe, behind only air pollution caused by very fine particulate matter [61]. The EU has taken a number of initiatives aiming at reducing the CO₂ emissions such as setting CO₂ emission standards for cars and vans [62], as well as heavy-duty vehicles [63], and imposing a requirement of labels showing a car's fuel efficiency and CO₂ emissions [64].

In regard to the application of EU/EEA State aid rules to the road transport, the rules on environmental aid are the legal basis for aid schemes supporting the demand for zero-emissions vehicles and the charging infrastructure [65]. Clearly, the demand for such vehicles varies in the EU/EEA

Member States, which is caused by amongst others their price, available charging infrastructure and unlike levels of tax benefits and incentives provided by the Member States [66]. Not all Member States may afford granting tax benefits or subsidies to the provision of the charging infrastructure, which limits the efficiency of State aid rules for electric vehicles.

In this context, one must mention Norway that introduced a number of incentives to stimulate the demand for zero-emission cars. In 2017, ESA approved the second scheme that subsidizes electric cars to benefit the environment. In 2015, ESA approved (1) zero VAT rating for the supply and import of zero-emission vehicles; (2) zero VAT rating for the leasing of zero emission vehicles; (3) zero VAT rating for the supply and import of batteries for zero-emission vehicles; (4) reduced annual vehicle tax for zero-emission vehicles; (5) exemption from road tolls for zero-emission vehicles; (6) free boarding on classified national road ferries; and (7) favourable income tax calculation for employees benefitting from private use of zero-emission company vehicle [67]. In 2017, ESA approved new measures, that is (1) full exemption for zero-emission vehicles from annual tax/insurance tax; (2) a new exemption for zero-emission vehicles from re-registration tax; and (3) a new more favourable depreciation rate for electric cargo vans [68]. At present no other country in the world has more electric cars per capita than this Nordic country [69]. The approximately 200,000 electric cars constitute around 7% of the passenger car fleet. In March 2019, for the first time in history more than half of passenger cars that were registered were fully electric [70].

The Norwegian success should be seen in light of the considerable resources the state is able to spend to boost the demand for the zero-emission vehicles and to build the necessary infrastructure. Moreover, in many Norwegian families an electric car is the car number two. While State aid rules support the transition from fossil fuel to zero-emission vehicles, they cannot compensate for the lack of funding in the state budget or consumer buying power.

Furthermore, given that electric cars should run on renewable energy, Norway is in a truly unique situation. It has the highest share of electricity produced from renewable sources in Europe. Hydropower accounts for the most of Norwegian power supplies [71] while wind power is now dominating investments [72]. Access to such amounts of renewable energy, however, cannot be taken for granted in other Member States. For example, if Germany phased out gasoline vehicles by 2030 as called for by the Bundesrat, the country's upper legislative chamber in a proposal made in October 2016, it would actually boost emissions by an amount comparable with the present-day emissions of the entire country of Uruguay or the state of Montana [73]. This is because Germany is not able to produce enough green electricity in time [74]. In the aftermath of the 2011 Fukushima disaster in Japan, Chancellor Angela Merkel's government decided to shut down all the German nuclear plants by 2022. Currently, they generate around 13% of Germany's electricity. Even though Germany is moving towards energy transition at a fast pace and the renewable energy reached a record 47% of total electricity produced in the first five months of 2019 [75], 30.4% of energy generation still comes from coal and lignite. [76] In order to promote the transition to renewable energy sources Germany had amongst others implemented a scheme to support undertakings producing electricity from renewable energy sources and mine gas that was recently reviewed by the Court of Justice of European Union. [77] A transition to zero-emission vehicles is thus a very complex task that requires public support on many levels.

2.3.2. Aviation

In regard to aviation, the second largest emitter in the transport sector, it is one of the fastest-growing sources of greenhouse gas emissions [78]. Direct emissions from aviation account for about 3% of the EU's total greenhouse gas emissions and more than 2% of global emissions. If global aviation was a country, it would rank in the top 10 emitters [22]. Admittedly, the EU is taking action to reduce aviation emissions in Europe and is working with the international community to develop measures with global reach. In particular, one must mention the EU emission trading system that includes CO₂

emissions from aviation [79]. At the same time, however, EU/EEA law of State aid provides for a possibility to grant aid to air transport [29].

The current guidelines on State aid to airports and airlines have been adopted as part of the SAM. They refer to the Europe 2020 Strategy that underlines the importance of transport infrastructure as part of the EU's sustainable growth strategy for the coming decade and the Commission's own White Paper 'Roadmap to a Single Transport Area'. The Roadmap emphasizes the importance of an efficient use of resources, which means that transport has to use less and cleaner energy, better exploit a modern infrastructure and reduce its negative impact on the climate and the environment and, in particular, on key natural assets like water, land and ecosystems.

The concrete provisions regulating the conditions under which aviation aid may be granted are, however, exclusively focused on promoting economic growth, regional connectivity, increased mobility of the EU citizens and competitiveness of the EU. As the Commission admits, 'The application of State aid rules to the airport and air transport sectors constitutes part of the Commission's efforts aimed at improving the competitiveness and growth potential of the Union airport and airline industries. A level-playing field among airlines and airports in the Union is of paramount importance for those objectives, as well as for the entire internal market. At the same time, regional airports can prove important both for local development and for the accessibility of certain regions, in particular against the backdrop of positive traffic forecasts for air transport in the Union' [80].

Due to the importance of the regional airports and the fact that they had received widespread operating support from public authorities prior to the adoption of the current guidelines, the Commission provided the Member States with a ten-year time frame to wind down operational state aid to lossmaking airports even though such support for day-to-day running costs is the most distortive form of state aid. That period was considered to be sufficient to make airports requiring such aid profitable. In 2016, the Commission provided for more possibilities of granting aid to airports by allowing investment aid to airports under 3 million passengers per annum, and operational aid to airports under 200,000 passengers per annum, in a revision to the GBER. Granting aid to certain airport has thus become even easier.

In light of the aim to reduce emissions from aviation, the Commission should review rules on granting aid to airports and airlines. In particular, the operational aid to airports should be reconsidered. In this respect, an interesting solution was proposed by one of the stakeholders who participated in the public consultations being part of the 'Fitness Check'. A Study by Transport and Environment suggested that the Commission should assess the profitability of all airports receiving operational aid at the five-year mark and proceed to wind down aid to all those not already on a clear path to profitability. A model for such an approach is the 2010 reforms adopted to the state aid rules for non-profitable coal mines. These reforms provided a roadmap for the ending of public subsidies to loss-making mines, which were seen to be distorting the single market and supporting this carbon intensive mode of electricity generation. Under these reforms, the Member States had to, year on year, progressively reduce the amount of aid provided to such mines so as to eliminate all such aid by 2019. To ensure these mines were closed in an orderly fashion, the Member States had to draft irrevocable closure plans which detailed procedures for their winding down. Member States were permitted to continue granting aid to the local communities affected by the closure of such mines (for example to fund environmental clean-ups or retraining) but continuing aid to the mines themselves was strictly prohibited [81].

While this solution is not necessarily ideal or even possible to be implemented in the aviation sector, especially given the importance of aviation to the economies of the Member States, ignoring the emissions and noise generated by air transport is not a solution either. Regrettably, electric aviation is still much less advanced when compared to the zero-emission road transport. As one may add, also here Norway intends to become a world leader. The Norwegian Air Sports Federation and Avinor, a state-owned limited company that operates most of the civil airports in Norway, work towards

developing electric aviation. The project is backed by the Norwegian Ministry of Transport and Communications [82].

2.3.3. Rail

While both road transport and aviation contribute to an increase in greenhouse gases emissions, rail is the exception—it is the only mode of transport which has reduced its emissions while increasing passenger and freight volumes. Energy-efficient low-emission railway is therefore the solution to address the current emissions gap compared to the ambition for 60% greenhouse gases reduction target by 2050 for transport, as set in the 2011 Transport White Paper [83].

In this respect, the current guidelines on State aid for railway undertakings of 2008 have not been updated as part of the SAM package. As pointed out by European Rail Freight Association, the guidelines are outdated also in respect to environmental issues. In this regard, the Association proposed creating a specific category of aid for the investments in retrofit of wagons or locomotives in order to make them more interoperable or more environmentally-friendly. Currently, under GBER, aid shall not be granted where investments are undertaken to ensure that undertakings comply with Union standards already adopted and not yet in force. Yet, by way of derogation, aid may be granted for (a) the acquisition of new transport vehicles for road, railway, inland waterway and maritime transport complying with adopted Union standards, provided that the acquisition occurs before those standards enter into force and that, once mandatory, they do not apply to vehicles already purchased before that date, (b) retrofitting of existing transport vehicles for road, railway, inland waterway and maritime transport, provided that the Union standards were not yet in force at the date of entry into operation of those vehicles and that, once mandatory, they do not apply retroactively to those vehicles [84].

The Community of European Railway and Infrastructure Companies (CER) and the European Rail Infrastructure Managers (EIM) have suggested broadening the Guidelines by including possibilities for public financing of additional incentive measures for the Railway Undertakings, such as aid for digitization [85]. Indeed, a more efficient rail transport would make it more attractive, especially to passengers that currently prefer to travel by plane. Obsolete infrastructure and inefficiency of rail services do not encourage to travel by train.

As CER and EIM also pointed out, currently, the GBER does not include measures granted in the rail sector. Such an option could be considered provided one may design aid measures that do not excessively distort competition. Moreover, the Guidelines do not presume the compatibility of the State aid beyond the set thresholds. Section 6 of the Guidelines provides for a specific assessment for aid for coordination of transport. In particular, it sets the intensity threshold for such aid, which for aid for reducing external costs and interoperability aid amounts to 50% of the eligible costs. CER and EIM would thus welcome greater flexibility on these thresholds, namely presumption of compatibility of all types of aid for coordination of transport up to 100% of the eligible costs, or even a block exemption for such measures. Again, this would need to be considered in light of the increased competition distortion.

Finally, CER and EIM propose an interesting shift in the EU policy with respect to aid in the transport sector. As they argue, State aid rules should always be proportionate to current EU priorities. One of them is addressing the climate change. As they argue, to adequately support railway transport that bears high infrastructure and operating costs, but incurs significantly lower external effects on the environment (pollution, accidents, greenhouse gas emissions), the Guidelines should allow for more flexibility. Currently, the Guidelines allow aid for reducing external costs to be granted to the RUs only to level the playing field with other modes of transport, but not to stimulate the railway sector compared to more polluting modes of transport [86].

2.3.4. Maritime Transport

As regards the shipping sector, shipping emissions represent around 13% of the overall EU greenhouse gas emissions from the transport sector (2015) [87]. In 2013, the Commission set out a

strategy towards reducing greenhouse gasses emissions from the shipping industry. The strategy consists of 3 consecutive steps: (1) Monitoring, reporting and verification of CO₂ emissions from large ships using EU ports; (2) Greenhouse gas reduction targets for the maritime transport sector, (3) Further measures, including market-based measures, in the medium to long term.

The current guidelines on State aid to maritime sector were adopted in 2004 [88]. Even though the Guidelines enumerate improving a safe, efficient, secure and environment friendly maritime transport as the first of main objectives of granting aid, the main reasoning for granting public support is encouraging the flagging or re-flagging to Member States' registers and promote the competitiveness of the Community fleets in the global shipping market.

As regards the necessity of reducing the emissions, the current rules allow for providing investment support both for measures in the vessels, for infrastructure for emission-free maritime transport and for technology development. Likewise, in case of zero-emission vehicles, the success of such measure depends rather on the budgetary constraints of the member States. Moreover, electric vessels should run on clean energy. In this respect, Norway is once again an example of investing public resources in green transport [89].

3. Conclusions

Following an informal meeting in 2018 in Graz, the EU's Environment and Transport Ministers welcomed the Commission's efforts in preparing the 'Proposal for a strategy for long-term EU greenhouse gas emissions reduction in accordance with the Paris Agreement'. The Graz Declaration has also encouraged the Commission "to adopt a strategic holistic policy approach, including a comprehensive strategy for, and a pathway towards, clean, safe, accessible and affordable mobility, and also to strengthen innovation, competitiveness and social inclusion in Europe." In this respect, the Member States "together with cities, regions, companies and transport actors should be encouraged and supported to increase their efforts towards zero-emission mobility through incentives and financing instruments, which should be provided inter alia at European level and through a simplification of State aid rules" [90].

This article attempted to shed some light on the possibilities of using rules on granting aid to promote more sustainability in the transport sector. In spite of many initiatives that have already been taken to reduce the impact of transport on the environment and human well-being, the results are insufficient. Given that the transport sector heavily relies on public financing, it is worth considering whether the subsidies and others forms of aid are in line with the idea of sustainable growth. Bearing in mind the importance of that sector to the economy, however, any change in the legal framework that influences its funding should be carefully considered. As pointed out, the Commission took into account the role of regional airports when it updated the relevant guidelines and the GBER. At the same time, given the impact of aviation on the environment and human well-being, one should start phasing out aid measures that are detrimental to the environment and rather support investments that promote sustainability. In light of the budgetary constraints, one must rather change the transport policy and its objectives than argue for spending more money. The Member States must thus review their priorities and put more emphasis on sustainable mobility.

At the same time, given the current understanding of sustainability in State aid law that does not always correspond to securing the social foundation for people everywhere both now and in the future, the notion of sustainable growth must be redefined and translated into concrete provisions. The assessment of aid should take into account such factors as the expected CO₂ emissions, the impact on biodiversity or landscape.

Importantly, the relevant rules should be as simple and clear as possible. As von der Leyen pointed out in her mission letter to Margrethe Vestager, 'any legislation is only as good as its implementation'. The use of GBER for new or adjusted rules on granting aid seems thus to be a good option, but it will require a careful analysis of competition distortions. Another option is introducing more sustainability into the relevant guidelines, which safeguards a case-by-case assessment of every measure and allows

for gathering experience with the proposed state measures. The Commission cooperates with the Member States in bringing the proposed measures in line with the current regulations. Therefore, incorporating more sustainability into State aid law is feasible. This may be a difficult task, but the question is whether we can afford not trying to incorporate more sustainability in State aid law.

Finally, the new Commission is expected to develop any new instrument to deliver on a ‘One In, One Out’ principle. Every legislative proposal creating new burdens should relieve people and businesses of an equivalent existing burden at EU level in the same policy area. Thus, von der Leyen intends to work with Member States to ensure that, when transposing EU legislation, they do not add unnecessary administrative burdens [36].

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

References and Notes

1. See Leach, M.; Raworth, K.; Rockström, J. Between social and planetary boundaries: Navigating pathways in the safe and just space for humanity. In *MISSC/UNESCO World Social Science Report 2013: Changing Global Environments*; OECD Publishing: Paris, France; Unesco Publishing: Paris, France, 2013; p. 84. Available online: <https://doi.org/10.1787/9789264203419-en> (accessed on 3 October 2019).; Rockström, J.; Steffen, W.; Noone, K.; Persson, A.; Folke, C.; Nykvist, B.; Sörlin, S.; Costanza, R.; Svedin, U.; Falkenmark, M.; et al. Planetary Boundaries: Exploring the Safe Operating Space for Humanity. *Ecol. Soc.* **2009**, *14*, 32.
2. See Sjäffell, B.; Mähönen, J.; Johnston, A.; Cullen, J.; SMART DELIVERABLE D2.4. Obstacles to Sustainable Global Business. Towards EU Policy Coherence for Sustainable Development. 31 August 2018. Available online: <https://www.smart.uio.no/publications/reports/smartcomprehensive-analysis-31august2018-final.pdf> (accessed on 3 October 2019).
3. Agreement on the European Economic Area 1994 OJ L 1, p. 3; and EFTA States’ official gazettes.
4. The Treaty of Rome (The Treaty Establishing the European Economic Community (EEC)). Available online: <https://eur-lex.europa.eu/eli/treaty/teec/sign?eliuri=eli:treaty:teec:sign> (accessed on 3 October 2019).
5. This will not change even when (or ‘if’ as some still hope) the UK leaves the EU following the outcome of the so-called Brexit referendum of 23 June 2016. As the UK parliament has not yet approved the 2018 agreement on the conditions for leaving the EU, the 27 remaining EU countries and the British government have decided to postpone Brexit until 31 October 2019 at the latest. This date will be moved forward if the UK parliament approves the agreement earlier. Brexit will reduce the population of the EEA by approximately 67 million people.
6. See Decision No 1386/2013/EU of the European Parliament and of the Council of 20 November 2013 on a General Union Environment Action Programme to 2020 ‘Living well, within the limits of our planet’, OJ L 354, 28.12.2013, pp. 171–200; and Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, ‘Next steps for a sustainable European future European action for sustainability’, COM(2016)0739 final.
7. In 2017, the multi-stakeholder platform was set up by the European Commission to ‘support and advise the Commission and all stakeholders involved on the implementation of the Sustainable Development Goals on Union level’, see Commission Decision C (2017)2941 final, Article 2 para 1(a). The platform was already foreseen in the European Commission’s Communication on the ‘Next steps for a sustainable European future’, COM (2016)739 final, p. 18.
8. Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC; and Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC.
9. European Commission. Implementation of the Circular Economy Action Plan. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/environment/circular-economy/index_en.htm (accessed on 3 October 2019).

10. European Commission. Commission action plan on financing sustainable growth. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/info/publications/180308-action-plan-sustainable-growth_en (accessed on 3 October 2019).
11. Yet, as pointed out in Sjøfjell, B.; Mähönen, J.; Johnston, A.; Cullen, J.; SMART DELIVERABLE D2.4. Obstacles to Sustainable Global Business. Towards EU Policy Coherence for Sustainable Development, 31 August 2018. Available online: <https://www.smart.uio.no/publications/reports/smartcomprehensive-analysis-31august2018-final.pdf.atp.104> (accessed on 3 October 2019), the EU Commission's Action Plan: Financing Sustainable Growth does not contain the words 'limits' or 'boundaries', which 'illustrates silo-thinking, as the EU's 7th Environmental Framework Programme explicitly sets out (as its title indicates), that we indeed must find out how to live well within the limits of our planet.' Also, the Public Procurement Directives of 2014 have a limited impact as their implementation depends on the Member States, see Sjøfjell, B.; Wiesbrock, A. (Eds.) *Sustainable Public Procurement: A New Role for the State as Stakeholder*; Cambridge University Press: Cambridge, UK, 2015.
12. See Buelens, C.; Garnier, G.; Meiklejohn, R.; Johnson, M. The Economic Analysis of State Aid: Some Open Questions, European Economy. Economic Papers, Number 286. September 2007. European Commission. p. 10. Available online: https://ec.europa.eu/economy_finance/publications/pages/publication9549_en.pdf (accessed on 3 October 2019).
13. Treaty on the Functioning of the European Union – TFEU (Consolidated version 2016). OJ C 202, 7.6.2016, pp. 47–388.
14. European Commission. State Aid Studies and Report Archive. Available online: https://ec.europa.eu/competition/state_aid/studies_reports/archive/scoreboard_arch.html (accessed on 3 October 2019).
15. European Commission, Competition DG. State Aid Scoreboard 2018: Results, Trends and Observations Regarding EU28 State Aid Expenditure Reports for 2017, Brussels. 7 January 2019, p. 19. Available online: https://ec.europa.eu/competition/state_aid/scoreboard/state_aid_scoreboard_2018.pdf (accessed on 3 October 2019).
16. As provided in State Aid Scoreboard 2018, at EU level, the observed overall change in reported State aid expenditure in 2017 compared to 2016 largely differs by policy objective. The largest variations, in nominal terms, have been identified for the State aid to environmental protection and energy savings: an increase of about 4.4 billion EUR. Expressed as % of GDP and compared to 2016, increases in expenditure for this objective have been registered in 19 Member States. In absolute amounts, the most noticeable increases occurred in Germany (+1.4 billion EUR), France (+1 billion EUR), Italy (+853 million EUR), Poland (+359 million EUR) and Hungary (+211 million EUR), corresponding to spending increases for existing schemes or to the implementation of new schemes: (i) to support renewables in Germany, France and Hungary; (ii) to reduce the renewable and cogeneration surcharge for electro-intensive users in Italy; (iii) to invest in the (re)construction of an energy efficient heating/cooling network in Poland; and (iv) to support environmental protection and energy efficiency in Hungary, pp. 11–12.
17. As provided by 2018 State Aid Scoreboard, when compared to 2016, in 2017 one could note an increase of State aid to environmental protection and energy of about EUR 4.4 billion.
18. State Aid Scoreboard for 2017 for the EEA EFTA States, EFTA Surveillance Authority. March 2019, p. 10. Available online: <http://www.eftasurv.int/media/uncategorized/State-aid-scoreboard-2018-March-pdf> (accessed on 3 October 2019).
19. Still, there seems to be space for certain improvements, see for example, Maillo, J.; Balancing Environmental Protection, Competitiveness and Competition: A Critical Assessment of the GBER and the EEAG, *EStAL*, Volume 16, Issue 1, 2017, pp. 4–10.
20. Rentschler, J. *Fossil Fuel Subsidy Reforms, a Guide to Economic and Political Complexity*, 1st ed.; Routledge: Abingdon, UK, 2018.
21. Stefanski, R. Dirty Little Secrets: Inferring Fossil-Fuel Subsidies from Patterns in Emission Intensities, School of Economics and Finance Discussion Papers, Paper No. 1705. 6 March 2017. Available online: https://research-repository.st-andrews.ac.uk/bitstream/handle/10023/10412/Stefanski_EconDiscPap_1705.pdf?sequence=1&isAllowed=y (accessed on 3 October 2019).

22. European Commission. Reducing Emissions from Aviation. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/clima/policies/transport/aviation_en (accessed on 3 October 2019).
23. Communication from the Commission ‘Europe 2020—A strategy for smart, sustainable and inclusive growth’ (‘Europe 2020 strategy’), COM(2010) 2020 final.
24. Communication from the Commission—Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest. OJ C 188, 20.6.2014, pp. 4–12.
25. Guidelines on regional State aid for 2014–2020, OJ C 209, 23.7.2013, pp. 1–45.
26. Communication from the Commission—Framework for State aid for research and development and innovation OJ C 198, 27.6.2014, pp. 1–29.
27. Communication from the Commission—Guidelines on State aid to promote risk finance investments, OJ C 19, 22.1.2014, pp. 4–34.
28. Communication from the Commission—Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (2013/C 25/01).
29. Guidelines on State aid to airports and airlines, OJ C 99, 4.4.2014, p. 3.
30. European Commission. State Aid Modernisation (SAM) and its implementation. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/competition/state_aid/modernisation/index_en.html (accessed on 3 October 2019).
31. Communication on EU State Aid Modernisation (SAM), COM(2012) 209 final.
32. Communication from the Commission—Guidelines on State aid to promote risk finance investments, OJ C 19, paras 72, 75, 92, 127, 22 January 2014, pp. 4–34.
33. European Commission. State Aid Scoreboard 2018. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/competition/state_aid/scoreboard/index_en.html (accessed on 7 November 2019).
34. Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187 26.6.2014, p. 1 (GBER), Article 16.
35. See Nicolaides, P.; Kleis, M. A Critical Analysis of Environmental Tax Reductions and Generation Adequacy Provisions in the EEAG 2014–2020, *EStAL*, Volume 13, Issue 4, 2014, pp. 636–649; Ezcurra, M. EU State Aid and Energy Policies as an Instrument of Environmental Protection: Current Stage and New Trends *EStAL*, Volume 13, Issue 4, 2014, pp. 665–674, Maillou, J., Balancing Environmental Protection, Competitiveness and Competition: A Critical Assessment of the GBER and the EEAG, *EStAL*, Volume 16, Issue 1, 2017, pp. 4–10, Villar Ezcurra, M.; The Concept of ‘Environmental Tax’ in a State Aid Context When a Fiscal Energy Measure Is Concerned, *EStAL*, Volume 16, Issue 1, 2017, pp. 11–24.
36. von der Leyen, U. President-Elect of the European Commission, Mission Letter to Margrethe Vestager, Brussels. Available online: https://ec.europa.eu/commission/sites/beta-political/files/mission-letter-margrethe-vestager_2019_en.pdf (accessed on 3 October 2019).
37. The Juncker Commission: The Right Team to Deliver Change. Available online: https://europa.eu/rapid/press-release_SPEECH-14-585_en.htm. (accessed on 5 November 2019).
38. Margrethe Vestager, High Level Forum on State Aid Modernization, Brussels. 19 June 2018. Available online: https://ec.europa.eu/commission/commissioners/2014-2019/vestager/announcements/state-aid-rules-fair-competition_en (accessed on 3 October 2019).
39. Svenskt Näringsliv (Confederation of Swedish Enterprise); HT.5473—Input to the fitness check of the 2012 State aid modernisation package, railways guidelines and short-term export credit insurance. Ref. Ares (2019)3682866—07/06/2019.
40. Treaty on the Functioning of the European Union – TFEU (Consolidated version 2016). OJ C 202, 7.6.2016, Article 107(1) and 61(1) EEA (Agreement on the European Economic Area 1994 OJ L 1, p. 3; and EFTA States’ official gazettes).
41. See Lopez, The Concept of State Aid under EU Law—From internal market to competition and beyond (OUP, 2015), p. 11, and Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee of the Regions, EU State Aid Modernization (SAM), COM(2012)0209 final, paras 5,12,14.
42. Treaty on the Functioning of the European Union – TFEU (Consolidated version 2016). OJ C 202, 7.6.2016, Article 108.

43. Commission Notice on the recovery of unlawful and incompatible State aid. OJ C 247, 23.7.2019, pp. 1–23.
44. See Case C-610/10 Magesfa II, ECLI:EU:C:2012:781, para 105.
45. For more on the genesis of GBER and its impact, see for example Deiberova, K. and Nyssens, H. The new General Block Exemption Regulation (GBER): What changed? *European State Aid Law Quarterly* Volume 8, Issue 1 (2009) p. 27.
46. Commission Regulation (EC) 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty, OJ L 214 9.8.2008, p. 3.
47. Commission Regulation (EU) 2017/1084 of 14 June 2017 amending Regulation (EU) No 651/2014 as regards aid for port and airport infrastructure, notification thresholds for aid for culture and heritage conservation and for aid for sport and multifunctional recreational infrastructures, and regional operating aid schemes for outermost regions and amending Regulation (EU) No 702/2014 as regards the calculation of eligible costs. OJ L 156, 20.6.2017, pp. 1–18.
48. Deiberova, K.; Nyssens, H. The new General Block Exemption Regulation (GBER): What changed? *EStAL* **2009**, *8*, 27. [[CrossRef](#)]
49. European Commission. Lisbon Strategy for Growth and Jobs. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/archives/growthandjobs_2009/ (accessed on 2 November 2019).
50. Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187 26.6.2014, p. 1 (GBER), Article 5.
51. Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187 26.6.2014, p. 1 (GBER), Article 6.
52. WHITE PAPER Roadmap to a Single European Transport Area—Towards a competitive and resource efficient transport system, COM(2011)0144 final.
53. European Commission. Commission Staff Working Document ‘The Implementation of the 2011 White Paper on Transport “Roadmap to a Single European Transport Area—Towards a Competitive and Resource-Efficient Transport System” Five Years After Its Publication: Achievements and Challenges’, Brussels. 1 July 2016. Available online: https://ec.europa.eu/transport/sites/transport/files/themes/strategies/doc/2011_white_paper/swd%282016%29226.pdf (accessed on 3 October 2019).
54. European Commission. Transport Emissions. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/clima/policies/transport_en (accessed on 3 October 2019).
55. European Commission. Commission Staff Working Document ‘The Implementation of the 2011 White Paper on Transport “Roadmap to a Single European Transport Area—Towards a Competitive and Resource-Efficient Transport System” Five Years After Its Publication: Achievements and Challenges’, Brussels. 1 July 2016, p. 35. Available online: https://ec.europa.eu/transport/sites/transport/files/themes/strategies/doc/2011_white_paper/swd%282016%29226.pdf (accessed on 3 October 2019).
56. European Environment Agency. Transport. European Environment Agency: København, Denmark. Available online: <https://www.eea.europa.eu/themes/transport/intro> (accessed on 3 October 2019).
57. Woll, U.; Meaney, A. *Transport Aid in EU State Aid Control. Law and Economics*; Werner, P., Verouden, V., Eds.; Kluwer Law International: Alphen aan den Rijn, The Netherlands, 2017; p. 605.
58. 233/16/COL: EFTA Surveillance Decision of 15 December 2016 on ENOVA’s Eco-Inn scheme 2017–2022. Available online: <http://www.eftasurv.int/media/esa-docs/physical/233-16-COL.pdf> (accessed on 3 October 2019).
59. 232/16/COL: EFTA Surveillance Decision of 15 December 2016 Raising No Objections to the Prolongation and Budget Increase of the Programme for Alternative Fuels Infrastructure. Available online: <http://www.eftasurv.int/media/esa-docs/physical/232-16-COL.pdf> (accessed on 3 October 2019).
60. See Regulation (EC) No 1370/2007 of the European Parliament and of the Council of 23 October 2007 on public passenger transport services by rail and by road and repealing Council Regulations (EEC) Nos 1191/69 and 1107/70, OJ L 315, 3.12.2007, pp. 1–13 and Council Regulation (EEC) No 3577/92 of 7 December 1992 applying the principle of freedom to provide services to maritime transport within Member States (maritime cabotage). OJ L 364, 12.12.1992, pp. 7–10.

61. See Hänninen, O.; Knol, A.B.; Jantunen, M.; Lim, T.A.; Conrad, A.; Rappolder, M.; Carrer, P.; Fanetti, A.C.; Kim, R.; Buekers, J.; et al. Environmental Burden of Disease in Europe: Assessing Nine Risk Factors in Six Countries. *Environmental Health Perspectives* **2014**, *122*, 439–446. [CrossRef]; WHO and JRC, 2011, Burden of disease from environmental noise—quantification of healthy life years lost in Europe, World Health Organization, Geneva, Switzerland accessed 5 May 2014 (accessed on 3 October 2019).
62. Regulation (EU) 2019/631 of the European Parliament and of the Council of 17 April 2019 setting CO₂ emission performance standards for new passenger cars and for new light commercial vehicles, and repealing Regulations (EC) No 443/2009 and (EU) No 510/2011 (Text with EEA relevance.), PE/6/2019/REV/1, OJ L 111, 25.4.2019, pp. 13–53.
63. Regulation (EU) 2019/1242 of the European Parliament and of the Council of 20 June 2019 setting CO₂ emission performance standards for new heavy-duty vehicles and amending Regulations (EC) No 595/2009 and (EU) 2018/956 of the European Parliament and of the Council and Council Directive 96/53/EC, PE/60/2019/REV/1, OJ L 198, 25.7.2019, pp. 202–240.
64. Directive 1999/94/EC of the European Parliament and of the Council of 13 December 1999 relating to the availability of consumer information on fuel economy and CO₂ emissions in respect of the marketing of new passenger cars.
65. See, for example, State aid No SA.37356 (2014/N)—Denmark Pilot scheme for purchase of electric vehicles -amendment to include further types of environmentally friendly vehicles, Brussels, 8.5.2014 C(2014)3184 final; SA.45182(2016/N)—State aid scheme for supporting the deployment of publicly accessible recharging and refueling stations for vehicles running on alternative fuels in the Czech Republic, Brussels, 11.8.2017 C(2017) 5588 final; SA.48190 (2017/N)—Germany—Support scheme for the acquisition of electric buses for urban public transport, Brussels, 26.2.2018 C(2018) 1098 final.
66. European Automobile Manufacturers Association. Overview—Electric Vehicles: Tax Benefits and Incentives in the EU. 14 May 2019. Available online: <https://www.acea.be/publications/article/overview-of-incentives-for-buying-electric-vehicles> (accessed on 3 October 2019).
67. EFTA Surveillance Authority Decision No 150/15/COL OJ C 232, 16.7.2015, p. 13.
68. EFTA Surveillance Authority Decision 228/17/COL of 19 December 2017 Tax reductions on zero emission vehicles 2018 OJ C107/10.
69. For more information on the zero emission vehicles and the technical and technological challenges raised by the increased number of such vehicles see Hanne Saele, Electric vehicles in Norway and the potential for demand response, #SINTEFblog. 1 April 2019. Available online: blog.sintef.com/sintefenergy/electric-vehicles-norway-demand-response (accessed on 3 October 2019).
70. According to the statistics provided by the Norwegian Road Federation (OFV), zero emission vehicles that is electric vehicles and hydrogen vehicles accounted for 58.4% of the passenger cars that were registered in March 2019. That was a record high market share, ofv.no/bilsalget/bilsalget-i-mars-2019-1 (accessed on 3 October 2019).
71. In February 2019, the share of hydropower in electricity production was 93.6%, see Statistics Norway. Available online: www.ssb.no/en/energi-og-industri/statistikker/elektrisitet (accessed on 3 October 2019).
72. More information on the Norwegian energy sector may be found at a website of the Norwegian Ministry of Petroleum and Energy energifaktanorge.no/en (accessed on 3 October 2019).
73. Csala, D. Germany's Plan for 100% Electric Cars May Actually Increase Carbon Emissions. Available online: <https://theconversation.com/germanys-plan-for-100-electric-cars-may-actually-increase-carbon-emissions-7299726February2017> (accessed on 3 October 2019).
74. Energy Hit. Germany's Decision to Slow the Expansion of Green-Energy Production is a Reasonable Move. Available online: <https://www.nature.com/news/energy-hit-1.20041> (accessed on 3 October 2019).
75. Parkinson, G. Germany Renewable Energy Share Jumps to Record 47% for First Five Months of Year, RENEW ECONOMY, Clean Energy News and Analysis. 3 June 2019. Available online: <https://reneweconomy.com.au/germany-renewable-energy-share-jumps-to-record-47-for-first-five-months-of-year-87091/> (accessed on 1 November 2019).
76. Cross, D.T. Germany's Green Energy Struggles Impact Europe. Sustainability Times. Available online: <https://www.sustainability-times.com/low-carbon-energy/germanys-green-energy-struggles-impact-europe/> (accessed on 1 November 2019).
77. Case C-405/16P *Germany v Commission* ECLI:EU:C:2019: 268

78. For Most Recent Findings on the Aviation's Impact on the Environment, Climate and People's Health, see the Second European Aviation Environmental Report 2019 Published Jointly by EASA, the EEA and EUROCONTROL. Available online: <https://www.easa.europa.eu/eaer/> (accessed on 3 October 2019).
79. European Commission. EU Emissions Trading System. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/clima/policies/ets_en (accessed on 3 October 2019).
80. Guidelines on State aid to airports and airlines, recital 9.
81. See, Jeanne, N.; Murphy, A.; Hemmings, B.; Calvo Ambel, C.; A Study by Transport and Environment: Analysis of state aid to selected Ryanair airports. State aid helping drive Ryanair's emissions growth, but faces potential crackdown under revision of EU guidelines, 2019 European Federation for Transport and Environment AISBL, Ref. Ares (2019)4597033—16/07/2019.
82. Meld. St. 33 (2016–2017) Melding til Stortinget, nasjonal transportplan 2018–2019—the National Transport Plan, pp. 48 and 241.
83. CER-EIM-UNIFE Position Paper: EU Strategy for Long-Term Greenhouse Gas Emissions Reductions—The Crucial Role of Rail, Brussels. Available online: <https://eimrail.org/2018/11/29/eu-strategy-for-long-term-greenhouse-gas-emissions-reductions-the-crucial-role-of-rail/> (accessed on 3 October 2019).
84. Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L 187 26.6.2014, p. 1 (GBER), Article 36(4).
85. European Rail Infrastructure Managers and CER, Position Paper, Fitness Check on State Aid Rules, ('Guidelines on State Aid for Railway Undertakings'). 18 July 2019. Available online: http://www.cer.be/sites/default/files/publication/190718_Joint%20CER-EIM%20PositionPaper_Fitness%20Check%20on%20State%20Aid%20Rules.pdf (accessed on 3 October 2019).
86. European Rail Infrastructure Managers and CER, Position Paper, Fitness Check on State Aid Rules, ('Guidelines on State Aid for Railway Undertakings'). 18 July 2019, p. 4. Available online: http://www.cer.be/sites/default/files/publication/190718_Joint%20CER-EIM%20PositionPaper_Fitness%20Check%20on%20State%20Aid%20Rules.pdf (accessed on 3 October 2019).
87. European Commission Reducing Emissions from the Shipping Sector. European Commission: Brussels, Belgium. Available online: https://ec.europa.eu/clima/policies/transport/shipping_en#tab-0-0 (accessed on 3 October 2019).
88. Commission communication C(2004) 43—Community guidelines on State aid to maritime transport, OJ C 13, 17.1.2004, pp. 3–12.
89. The annual report of ENOVA. A State Enterprise That Distributes, the Measures from the Climate and Energy Fund. Available online: <https://www.enova.no/about-enova/> (accessed on 3 October 2019).
90. Austrian Presidency of the Council of the European Union 2018. Graz Declaration. Available online: <https://www.eu2018.at/latest-news/news/10-30-Graz-Declaration.html> (accessed on 3 October 2019).

