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**TOWARDS MORE SUSTAINABLE TRANSPORTATION AND MOBILITY CHOICES –
MEASURES DISCUSSED IN GERMANY AND HURDLES TO THEIR
IMPLEMENTATION**

BACHELOR THESIS

BY

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A Thesis Submitted in Partial Fulfilment of the Requirements of the Degree of

Bachelor of Arts

In

International Relations

By

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Supervised by

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Date of Submission

April 06, 2023

Abstract

Decarbonising the German transport sector is crucial to staying in line with the Paris Agreement. Public transport is a sustainable alternative to carbon-intensive means of transport like cars and planes. Hence, increasing its attractiveness can raise passenger numbers while decreasing the use of, e.g., car usage, which helps to reduce carbon emissions in the transport sector. To answer the question of how the German government could make sustainable passenger transportation choices more attractive, examples from other European countries were presented as references. Then, a selection of those measures and hurdles to their implementation in Germany were analysed more closely using minutes of discussion in the German parliament between October 2017 and October 2022. The measures at stake were infrastructure investments, carbon pricing, and free public transport. The latter included an analysis of the discussions around the introduction of first the 9-Euro-Ticket, and then the Deutschlandticket as its successor. The analysis of the parliamentary minutes found that, amongst others, new crises constantly emerging which require the government's urgent attention as well as different interests like a strong position of cars in Germany hindering a strong line towards climate action like supporting attractive public transport. Furthermore, competences being divided between the national and federal state levels make it challenging to agree on the division of (financial) responsibilities. Additionally, concerns regarding the financing of these measures as well as mitigating extreme impacts for, e.g. low-income households were discussed.

Keywords: 9-Euro-Ticket, carbon pricing, climate change mitigation, Deutschlandticket, free public transport, good practice examples, infrastructure investments, the German parliament, transport, sustainability.

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List of Abbreviations

AfD	Alternative for Germany (<i>Alternative für Deutschland</i>)
BEHG	Fuel Emissions Trading Act (<i>Brennstoffemissionshandelsgesetz</i>)
BMK	Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (<i>Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie</i>)
BMUV	German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (<i>Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz</i>)
bpb	Federal Agency for Civic Education (<i>Bundeszentrale für politische Bildung</i>)
CO ₂	Carbon dioxide
COP21	Conference of the Parties 21
Council of the EU	Council of the European Union
CDU	Christian Democratic Union (<i>Christlich Demokratische Union</i>)
CSU	Christian Social Union (<i>Christlich-Soziale Union</i>)
DB	German Railways (<i>Deutsche Bahn</i>)
DB AG	<i>Deutsche Bahn AG</i>
DB Regio AG	<i>Deutsche Bahn Regio AG</i>
DG MOVE	Directorate-General for Mobility and Transport
DW	Deutsche Welle
EC	European Commission
EEA	European Environment Agency
ETS	Emissions Trading System
EU	European Union
FDP	Free Democratic Party (<i>Freie Demokratische Partei</i>)
GDP	Gross domestic product
GHG	Greenhouse gases
HBS	Heinrich Böll Foundation (Heinrich Böll Stiftung)
IfW	Kiel Institute for the World Economy
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ITF	International Transport Forum
NPM	National Platform Future of Mobility (<i>Nationale Plattform Zukunft der Mobilität</i>)
OECD	Organisation for Economic Co-operation and Development

ÖBB	Austrian Federal Railway Company (<i>Österreichischen Bundesbahnen</i>)
ÖPNV	Local public transport (<i>Öffentlicher Personennahverkehr</i>)
ÖV	Public transport (<i>Öffentlicher Verkehr</i>)
SPD	Social Democratic Party (<i>Sozialdemokratische Partei Deutschlands</i>)
The Greens	Alliance 90 / The Greens (<i>BÜNDNIS 90 / DIE GRÜNEN</i>)
The Left	<i>DIE LINKE</i>
UK	United Kingdom
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNFCCC	UN Framework on Climate Change
VAT	Value-added tax
VCD	German Transport Club (<i>Verkehrsclub Deutschland e.V.</i>)
VDV	Association of German Transport Companies (<i>Verband Deutscher Verkehrsunternehmen e. V.</i>)
WTO	World Trade Organisation
WZB	WZB Berlin Social Science Center (<i>Wissenschaftszentrum Berlin für Sozialforschung</i>)
ZDF	Second German Television (<i>Zweites Deutsches Fernsehen</i>)
ZDFheute	Second German Television Today (<i>Zweites Deutsches Fernsehen heute</i>)

1 Introduction

Climate change, driven by anthropogenic emissions, is one of the biggest challenges of our time, and several scientific institutions have urged governments to increase their efforts to diminish the emission of greenhouse gases (GHG) such as carbon dioxide (CO₂) (Organisation for Economic Co-operation and Development (OECD) 2012, p. 72; Hansen *et al.*, 2013, p. 16; Hagedorn *et al.*, 2019, p. 79; Intergovernmental Panel on Climate Change (IPCC), 2021, p. V). There are many already existing measures and strategies (OECD, 2008c). However, it seems like there is still limited political will to introduce measures and policies aimed at an appropriate reduction of GHG emissions which raises the question concerning what hinders the implementation of those measures. This thesis aims to examine possible answers to that question, taking Germany as well as human mobility and the passenger transportⁱ sector as an example. The question will be answered by analysing measures discussed in the German parliament (*Deutscher Bundestag*) paying special attention to what hinders the introduction of those measures in Germany. More specifically, the aim is to answer the following research question:

How could the German government make sustainable passenger transportation choices more attractive?

1.1 Importance of the Topic

With the threat of global climate crises and binding climate targets internationally agreed upon to avoid the aforementioned, the German government already planned to reform its mobility sector and expand public transport in Germany as a mean of staying in line with the Paris Agreement (Deutscher Bundestag, 2022g, p. 3198). However, Russia invading Ukraine on February 24, 2022 and the German sanctions as a response to the resulting war, demonstrated the German dependence on fossil fuel imports and made it more urgent to reform the mobility sector (Deutscher Bundestag, 2022g, pp. 3195–3196).

With sky-rocketing energy prices and the highest inflation in Germany since its reunification, with rates as high as 10.4% in October 2022, not only the electricity bills and prices for daily goods increased, but also the price of fuels for vehicles (tagesschau, 2023, para. 1-3). The German government targeted to mitigate this burden for the German citizens with a variety of measures; one of those was a low-priced public transport ticket, the so-called 9-Euro-Ticket, a transport ticket allowing the use of nationwide all public means of transport, except for high-speed trains, for a price of €9 per

ⁱ Throughout the thesis, transport may also be referred to as transportation or transit, which shall be regarded the same.

months between June and August 2022 (Deutscher Bundestag, 2022a, para. 4). This raised voices demanding a continuation of having decreased fares for public transport in Germany (Zweites Deutsches Fernsehen (ZDF), 2022) and launched a general discussion about possible ways of improving Germany's public transport system (Deutscher Bundestag, 2022g; 2022h; 2022j; 2022l).

1.2 Background: Climate Change and CO₂

"Man-made climate change is one of the greatest challenges of our time"ⁱⁱ (Sozialdemokratischen Partei Deutschlands (SPD), BÜNDNIS 90 / DIE GRÜNEN (The Greens) and Freien Demokraten (FDP), 2021, p. 54) as the current German government declared in its coalition agreement. Additionally, the OECD already emphasised in its Environmental Outlook in 2008 that governments urgently need to act to avoid "biodiversity loss, water scarcity and health impacts of pollution and (...) an increase in global temperature leading to increased heat waves, droughts, storms and floods" (OECD, 2008a, pp. 25–26). Over a decade later, the beginning of many of those predicted effects including "heatwaves, forest dieback, floods and droughts"² (The Greens, 2021, p. 12) are already noticeable in Germany in the past few years.

1.2.1 Man-made Climate Change

A changing climate is normal to some extent and changing temperatures have been observed on earth for millions of years (IPCC, 2021, p. 294). However, there is a difference between the climate naturally fluctuating and an anthropogenic massive climate change which is why scientists often refer to the climate change driven by anthropogenic emissions when speaking of the climate crisis according to the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (*Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz*, [BMUV]) (2022, p. 13). Since the beginning of the industrial revolution when humans started to burn fossil fuels for energy generation, the cumulative GHG emissions started to slowly but surely alter the earth's climate (IPCC, 2021, pp. 4–5).

The industrial revolution with its burning fossil fuels is described as the starting point of climate change driven by anthropogenic emissions (IPCC, 2021, p. 192). However, while the so-called global North is responsible for more emissions, the negative effects, namely environmental destruction and climate change, not to mention the social costs and

ⁱⁱ To provide better readability, German-language material directly quoted in this thesis is translated and displayed in English with all original passages in German in the annex. All direct quotes from sources in a language other than English are translated using the online translator DeepL (2023).

damages, are the highest in the states of the so-called global South (Berneiser, Becker and Loy, 2022, p. 4).

As the climate crisis is man-made, only humans would be able to mitigate it (IPCC, 2021, p. 28). However, the struggle with environmental issues like climate change is their global nature which means a coordinated international response is required to possibly mitigate its effects (IPCC, 2021). There have been various international conferences tackling this exact problem. The first one was "the 'Rio Convention' include[ing] the adoption of the [United Nations (UN)] Framework on Climate Change (UNFCCC) (...) aim[ing] at stabilising atmospheric concentrations of greenhouse gases" (Climate Action, 2015, para. 1). The summit in Rio was followed by a number of other international conferences including Paris climate summit in 2015, also known as Conference of the Parties 21 (COP21), whereover 193 states signed the Paris Agreement pledging to stay in line with the aim to limit global warming - ideally to 1.5°C but up to 2°C as the very maximum (UN, n.d.).

1.2.2 Passenger Transport Sector

The transport sector has a high importance in Europe, "contributing around 5% to [European Union (EU) Gross Domestic Product (GDP)] and employing more than 10 million people in Europe" (European Commission (EC), 2023b, para. 1). However, it has many downsides like accidents, blocked roads, and pollution in form of noise and GHG (EC, 2023b, para. 1). It is responsible for 18%, hence, around one-fifth of the man-made GHG emissions worldwide (International Transport Forum (ITF), 2017 cited in Liimatainen, Pöllänen and Viri, 2018, p. 1). In the European Union, the share of total GHG emissions for the transport sector is even higher, at around one-quarter (EC, 2023b, para. 2). According to the German Transport Association (Verkehrsclub Deutschland e.V., [VCD] (2021, para. 1), the transport sector causes "around one-fifth of Germany's greenhouse gas emissions, over 90 percent of which come from road traffic (...) [and] emissions from transport have fallen hardly at all since 1990 [in contrast to the other sectors]"³ (VCD, 2021, para. 1). At the same time, it is one of the sectors where a change in behaviour seems feasible for consumers. In other words, it can appear less complicated to decide to take the train instead of the plane or car than to e.g., exchange a heating system or old electric devices.

According to the Heinrich-Böll-Foundation (*Heinrich-Böll-Stiftung*, [HBS]), and VCD (2019, p. 33), airplanes emit more than 18 times and cars more than ten times more GHG than long-distance trains per kilometre per person. Even though short-distance trains and intra-city rail transport like the subway are less efficient than long-distance trains, they still emit only half the amount of GHG than cars do per kilometre per person (HBS and VCD, 2019, p. 33). Hence, for decreasing GHG emissions, it is crucial to

"[expand] environmentally friendly mobility alternatives (e.g., trains) and promoting sustainable travel" (Berneiser, Becker and Loy, 2022, p. 2).

The German economy is distorted when it comes to transport costs as different means of transport are differently taxed and subsidised which hides the true cost as Berneiser, Becker and Loy (2022, p. 7) declare. The HBS and VCD (2019, p. 31) remark that the transport sector received the biggest share of environmentally harmful subsidies in Germany in 2017, adding up to roughly €29 billion. Even though being the mode of transport with the highest GHG emissions per kilometre per person, "[t]he aviation sector is a highly subsidised sector with (...) financial assistance [at regional, national, and EU levels] to support airports, aircraft, and airlines" (Berneiser, Becker and Loy, 2022, p. 5). In Germany in 2017, this added up to €12 billion subsidies alone from having "no energy tax on kerosine (...) [and] no value added tax on international flights"⁴ (HBS and VCD, 2019, p. 31). Besides those tax exemptions, two-thirds of international airports in Germany and every single regional German airport is dependent on government subsidies to sustain itself according to Berneiser, Becker and Loy (2022, p. 7). Furthermore, they stress that "domestic air traffic alone caused external environmental costs (i.e., the health, environmental and climate damage to be borne by the general public) of 1.3 billion euros in 2017" (Berneiser, Becker and Loy, 2022, p. 7). Yet, even though airplanes emit the most when it comes to emission per kilometre per person (HBS and VCD, 2019, p. 33), regarding the annual emission in the transport sector, road vehicles emit more (VCD, 2021, para. 1). Rail traffic is one of the most sustainable mode of transport (HBS and VCD, 2019, p. 33), or as Andreas Scheuer, the former German Federal Minister for Transport and Digital Infrastructure described: "There is every reason to choose the train, and (...) we want to highlight this safe and secure, environmentally friendly and innovative mode of transport. Without a stronger role for trains, we cannot reach our climate targets" (Council of the European Union (Council of the EU), 2020, para. 2)

1.3 Research Design

This thesis aimed at answering the research question how the German government could make sustainable passenger transportation choices more attractive. An analysis of measures discussed in the German parliament and what hinders the introduction of those measures in Germany.

To answer the research question, a literature review was carried out to create a universe of options composed of good practice examples of possible measures. These existing measures could all be undertaken by the German government to tackle the factors hindering people from taking more sustainable choices when selecting their means of transport. The measures and good practice examples came from available secondary

source such as but not limited to national law, EU legislation, reports from the OECD, International Monetary Fund (IMF) and UN as well as studies on national or EU level.

From this universe of options, three measures were selected which have been discussed in the German parliament during the current or previous term of office. This means after October 24, 2018 when the first session of the German parliament of the 19th legislative period took place until October 26, 2022 which marked the end of the first year of the 20th legislative period (Deutscher Bundestag, 2022b). This created a relatively complete picture as the set-up of the German government recently changed after one party has been in power for over a decade (*Bundeszentrale für politische Bildung*ⁱⁱⁱ (bpb), 2021). Thus, the new as well as the previous government were taken under consideration using the minutes from the debates in the German parliament as well as the election manifestos and the coalition contracts.

The measures under consideration were selected based on the findings of the literature review regarding effectiveness, popularity in a sense of which measures were introduced in multiple countries or which were mentioned by multiple sources, as well as diversity to include measures from different regions and economic backgrounds. The most important condition was that the measures have already been discussed in the German parliament to analyse why there is no (or not yet a) political will to introduce the measures. Furthermore, this also showed why this might not (yet) be suitable for the political set up and societal mindset in Germany despite having been considered by the parliament. Two measures were analysed which are desired by the German population but have not yet been introduced, and one measure which requires further incentives or education as this measure has no public support yet.

As the political will can be seen as highly dependent on the personal preferences of the members of society, a subchapter including insights from environmental and political psychology was added to demonstrate the level of motivation to act sustainably throughout the German population. The German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection presented “different attitudes and behaviour patterns (...) [in form of] six ‘environmental awareness types’” (BMUV, 2022, p. 14) in its most recent edition of its biannual environmental awareness study. The data from that study was used to explain which measures are generally more and which are favoured less within the German population. Furthermore, it was taken under consideration which measures promise to be more effective for the rather motivated target group and which for the ones who are rather unmotivated to act

ⁱⁱⁱ Federal Agency for Civic Education

sustainably (Hamann, Baumann and Löschinger, 2016). In the end, the findings were discussed and put into context to draw a general conclusion.

To limit the scope of this bachelor thesis, the focus was on incentivizing the use of public transport and mainly rail traffic as an alternative for CO₂-intensive means of transport. As mentioned before, trains for long distance travel emit essentially less CO₂ than planes or cars; this also applies to tram and subway systems for local travels substituting car use (HBS and VCD, 2019, p. 33). While, the transport sector is a big polluter, it is also one where several alternatives already exist and hence, there is often a choice between different means of transport.

Germany will be the example taken for questioning and for analysing why those already existing measures often do not find the political will to be implemented. Furthermore, Germany is a member country of the EU which is a big polluter yet has the aim to become net climate neutral by 2050 (Commission, 2021, Art. 1).

2 Theoretical Background

2.1. Central Concepts (Definitions)

Consumers

The term consumers refers to all people living in Germany who use transport means. They can be broadly divided into two groups (BMUV, 2022; Hamann, Baumann and Löschinger, 2016): the ones motivated and eager to act sustainably (the 'Motivated' from here on) and the ones with less to no interest in acting sustainably (the 'Unmotivated').

Externalities

Externalities refer to the harm caused throughout the production and consumption of a product whose costs are paid by a third party and neither the producer nor consumer; regarding environmental destruction, it is often society paying for correcting the damage caused (Scorse, 2010, p. 52).

Measures

Measures can be legislative acts, fiscal changes or (educational) campaigns implemented by governments. Those measures can directly or indirectly affect the transport sector. They can be divided into economic measures, informative measures as well as structural and innovative changes. Economic measures could be, but are not limited to, fiscal measures like a general carbon tax, but also a change in taxes and subsidies for the aviation, car or train sector. Another economic measure could be the introduction of affordable, if not free, public transport. Informative measures might include amongst others political education and informational campaigns. Another informative tool can be mandatory and/or voluntary labels as "in terms of changing

consumption patterns, [standards and mandatory labels] are the most direct policy instruments" (OECD, 2008c, p. 9). Additionally, structural and innovative approaches will also be considered which includes the introduction and promotion of night trains as well as a general improvement of railroad infrastructure.

Public Transport

In this thesis, public transport refers to the service of using non-private means of transport provided by a "transport enterprise which is principally owned (more than 50 per cent of the capital) by the country or public authorities and their enterprises" (Eurostat, United Nations Economic Commission for Europe (UNECE) and International Transport Forum (ITF), 2019, p. 47).

Sustainability

Sustainability will be broadly defined as the "use of the biosphere by present generations while maintaining its potential yield (benefit) for future generations" (UN, 1997, p. 71). This definition is also used by the Organisation for Economic Co-operation and Development (2008b, p. 526) and in a slightly modified version by the European Union (EC, 2019). The main focus will be on the ecological aspect as this one is most important for diminishing the effects of climate change, though all three different pillars of sustainability- ecological, social and economic- will be considered (Sanneh, 2018, p. 8). The CO₂ emissions will be taken as the primary metric to measuring sustainability as greenhouse gases emissions are one of the main accelerator for the man-made climate change (Hamann, Baumann and Löschinger, 2016; Hansen *et al.*, 2017, p. 1). Other environmental factors such as but not limited to destruction of flora and fauna caused by e.g., the construction of railroad tracks or streets will be ignored to limit the scope of the thesis.

Transport and mobility

Transport, transportation, transit and mobility are used synonymously throughout this thesis. While the focus is on the (public) transport sector, mobility includes means of locomotion independent from motorised or electronically driven means of transport, e.g., walking and cycling (VCD, 2021) and the transport sector can hardly be analysed completely isolated. This is why many means of locomotion are somehow considered even though the focus is on public transport and the railroad sector as trains are one of most sustainable means of transportation (HBS and VCD, 2019, p. 33) for distances which cannot be walked or cycled in a reasonable period of time.

Transport Infrastructure

Transport infrastructure can be defined as all "fixed installations [that support transport systems] including roads, railways, airways, waterways, canals and pipelines and

terminals such as airports, railway stations, bus stations, warehouses, trucking terminals" (Yılmaz and Çetin, 2017, p. 140). Throughout this thesis, the focus will be on public transport infrastructure like railways, roads and stations. As the focus for transport infrastructure expansion and modernization in Germany currently lies on the railroad sector (SPD, The Greens and FDP, 2021, p. 48), in most contexts in this thesis, infrastructure refers in most contexts in thesis to railroad infrastructure like "points[,] (...) the overhead line (...), the sleepers[,] (...) the station(...) [and] the signal boxes"⁵ (Deutscher Bundestag, 2022I, p. 6937) just to mention a few.

2.2 Understanding the Political Will in the German Population

Germany, or rather the "Federal Republic of Germany (...) is a federation (...) [comprised of] 16 Länder^{iv} (states)" (deutschland.de, 2018, para. 1). Both the national government as and the governments of the 16 federal states have clearly-defined competences which creates a decentralised political system (deutschland.de, 2018). The federal states are, for example, "[responsible] for internal security, schools, universities, culture, and municipal administration (deutschland.de, 2018, para. 2) as well as "local public transport" (Deutscher Bundestag, 2022I, p. 6946).

Every fourth year, the national German parliament (*Deutscher Bundestag*) is elected which is responsible for legislation and budgeting as well as electing and checking upon the chancellor providing checks and balances for the national government (bpb, 2021, para. 1). Germany has "a multiparty system consisting of two larger parties – the Christian Democratic (Social) Union (CDU/CSU^v) and Social Democratic Party (SPD) – as well as three smaller parties – the centre-right FDP^{vi}, the Greens^{vii} and The Left^{viii} (*Die Linke*, formerly PDS)" (Bakker, Hopmann and Persson, 2015, p. 203). In 2017, the "[right-wing populist party] Alternative for Germany (AfD) entered the German Bundestag for the first time - and became the third strongest force"⁶ (bpb, 2021, para. 9). According to the Federal Agency for Civic Education, three years later, AfD's "inner-party movement 'Der Flügel' which the AfD says has since been dissolved [was classified] as a 'proven

^{iv} Hereafter referred to as 'federal states' (*Bundesländer*). To avoid confusion with the country Germany, which some also refer to as (federal) state instead of federal republic, the term federal will only be used in relation with the *Bundesländer/Länder* (federal states). German or national will be the adjectives used when referring to the parliament or government of the whole country.

^v Christian Democratic Union (*Christlich Demokratische Union*) / Christian Social Union (*Christlich-Soziale Union*)

^{vi} Free Democratic Party (*Freie Demokratische Partei*)

^{vii} Bündnis 90 / Die Grünen (Alliance 90 / The Greens) was originally called Die Grünen (the Greens Party) (Prisner (, 2018, p. 33). As this political party does not use an acronym as most other German parties mentioned in this thesis, it will be referred to as 'The Greens' to improve readability.

^{viii} The Left party, which original German name is "DIE LINKE[,] (...), [is] a democratic socialist left [party], comprised of those of different political, ideological and religious backgrounds, of women and men, old and young, immigrants, those with disabilities" (DIE LINKE (, n.d., para. 2). To improve readability, the English translation 'The Left' will be used throughout this thesis.

right-wing extremist endeavour' [by the Federal Office for the Protection of the Constitution]"⁷ (bpb, 2021, para. 9). However, the party has been continued to be observed by the Federal Office for the Protection of the Constitution (*Verfassungsschutz*) (Deutscher Bundestag, 2022g, p. 3264).

Observing the German population, it can be noticed that the majority of people are aware of climate change and the human role played according to the BMUV (2022, p. 13). According to a study regarding environmental awareness, which the BMUV undertakes biannually, "over 90 percent say that 'urgent measures must be taken to adapt to the consequences'" (BMUV, 2022, p. 14).

The 2020^x edition of BMUV's environmental awareness study focuses on "climate action and the socioecological transformation" (BMUV, 2022, p. 16) and identifying "six 'environmental awareness types' [differing in attitudes and behaviour patterns]" (BMUV, 2022, p. 14). According to these different environmental awareness types, the German population can be quite evenly split into two groups depending on the level of motivation:

One half includes the Rejectors [8%], the Sceptics [18%] and the Undecideds [22%], who see fewer environmental problems or are less willing to change than the other half. This half gathers the Oriented [13%], the Open-minded [25%] and the Consistent [14%]. If both halves are considered in terms of their composition according to socio-economic characteristics, (...) high and low environmental and action orientations can be found to a greater or lesser extent in all social groups (...) [depending on] individual preferences. (BMUV, 2022, pp. 14–15)

The BMUV (2022) explains that the ones less willing to change, hereafter referred to as the 'Unmotivated', and the ones more willing the change, the 'Motivated', respond differently to the same measure taken. For example, political and environmental education seems most promising for the Sceptics and Undecideds as they perceive that they are lacking information according to the survey answers (BMUV, 2022, p. 60). This does not seem to be the case for Rejectors as they believe to already have all relevant information and hence, are not open to information campaigns (BMUV, 2022, p. 60). The Motivated described themselves as already relatively well-informed about climate change which indicates that more information would most likely not lead to more sustainable action as the BMUV's (2022, p. 60) study concludes.

The majority of the Motivated (Oriented, Open-minded and Consistent) as well as the Undecideds perceives "all measures (...) rather or very important"⁸ (BMUV, 2022, p. 61), while the Sceptics give little importance to "[c]limate policy measures (...) which can probably be seen in terms of a lack of acceptance"⁹ (BMUV, 2022, p. 61). The most unpopular are "measures that involve costs or restrictions"¹⁰ (BMUV, 2022, p. 61), at least for Rejectors and Sceptics.

^x The survey was done in 2020 but the results were published in 2022.

These findings are reflected in consumer behaviour of the transport sector. Similar to the aversion to measures involving costs, price is among the most considered criteria for the choice of means of transport as many scientists agree that travel time and price followed by comfort are the most important factors (Lassen, 2010, p. 738; Zucchini, 2021, pp. 30–31; Berneiser, Becker and Loy, 2022, p. 7; Zimmer *et al.*, 2022, p. 90). The European Environment Agency (EEA) agrees with those factors but adds some by stating that "[t]he main factors determining the choice are price, travel time, travel time reliability, frequency of the connections and other factors such as convenience, comfort and safety" (EEA, 2021, p. 16). Furthermore, it distinguishes between different travel purposes as to some extent, "business passengers are more sensitive to total travel time and weekly frequency than leisure travellers and are less sensitive to fares" (EEA, 2021, pp. 16–17).

This importance of cost reflects in desired measures for the transport sector among the participants of the BMUV's (2022) study. 93% of them support a reduction of fares for public transport while slightly less claim that infrastructure improvements through "expanding the transport network and increasing the frequency of service" (BMUV, 2022, p. 72) are needed.

2.3 Literature Review: Universe of Options

Good practice examples from different countries can help discover possible measures to incentivise the usage of sustainable means of transport. This thesis focuses on examples executed in Europe, especially in the EU. According to political scientist Evert Vedung (1998), policy instruments can be divided into "three classes (...) called regulations, economic means, and information (...) [also known as] the stick, the carrot, and the sermon" (Vedung, 1998, pp. 29–30). Those three categories expand from restrictive to non-restrictive as the first constitutes an obligation, the second creates a financial incentive hence, having the consumer pay for certain behaviour or receiving money, and the third aims at convincing the target group as Vedung (1998) elaborates.

However, there seems to be a consensus in the German parliament that harsh regulations like e.g., prohibitions of certain means of transport or technologies are not a solution and that the emphasis should be on giving a choice between different means of transport and combining different mobility forms (Deutscher Bundestag, 2022c). Therefore, restrictive regulation will be left out in order to limit the scope of the thesis and because the current German government is "seeking acceptance for the necessary change processes"¹¹ (SPD, The Greens and FDP, 2021, p. 48) and thus, focuses on less restrictive measures. The measures considered in this chapter are instead divided into three categories: Economic measures, informative measures, as well as structural and innovative changes. Furthermore, these three types refer back to the three main factor influencing the choice of means of transport: price, time and comfort (Lassen, 2010,

p. 738; Zucchini, 2021, pp. 30–31; Berneiser, Becker and Loy, 2022, p. 7; Zimmer *et al.*, 2022, p. 90).

2.3.1 Economic Measures

Economic measures are “market-based mechanisms” (Scorse, 2010, p. 51) which are most likely clear and undisputed in their theoretical understanding but require the correct implementation to be accepted throughout society and to show the desired effect. In this thesis, economic measures include financial incentives such as free public transport and fiscal measures like a general carbon tax and taxes for different parts of the transport sector, e.g., only for the railroad, vehicle, or aviation sector. These measures are mainly addressed to influence the prices of the different means of transport as this is one factor influencing the mobility choice.

2.3.1.1 Fiscal Measures and Carbon Pricing

Fiscal measures, in this case, environmental taxes lead to an increase in price of the taxed good (OECD, 2023). Therefore, they have the ability to influence people’s decision making process when choosing between means of transport as the price is an important factor for the choice of means of transport (Lassen, 2010, p. 738; Zucchini, 2021, pp. 30–31; Berneiser, Becker and Loy, 2022, p. 7; Zimmer *et al.*, 2022, p. 90). In that sense, fiscal measures follow an elementary idea: taxes decrease the demand for the good taxed; hence, if less environmentally harmful behaviour is desired, then the environmentally harmful behaviour must be taxed (Mankiw, 2008, p. 216). What matters is levying taxes on the root cause. For example, taxing gasoline to discourage car usage does not address the actual problem, the greenhouse gasses emitted, which can cause “new distortions (...) that may actually lead to a shift toward even more polluting industries and technologies” (Scorse, 2010, p. 54). Scorse (2010, pp. 52–53) narrows down the unique advantage of environmental taxes and the chances they offer:

Not only do environmental taxes generate the revenue needed to compensate those who are harmed by the pollution and/or to mitigate the negative impacts, but they also raise the price of the good or service in question, thereby decreasing the quantity demanded. This is exactly the result that environmentalists should favor: a shift away from environmentally harmful goods once their prices reflect the true costs imposed on society.

A reflection of the true costs of a product is often related to the incorporation of externalities into a product’s price (Scorse, 2010, p. 9). Environmental taxes can internalise those unwanted externalities (OECD, 2008c, p. 13; Scorse, 2010, pp. 9, 52). However, environmental taxes differ in effectiveness and are not always politicians’ first-choice tools to correct this market failure. The latter relates to politicians’ general fear of upsetting voters if they raise taxes (Mankiw, 2008, p. 216; Scorse, 2010, p. 53); the former is slightly more complex. One of the most criticised aspects of environmental

taxes is their distributional issue. Scorse (2010, pp. 55–56) notes that environmental taxes “[hurt] the poor disproportionately more than the middle classes and the wealthy”. Yet, taxes generate revenue as one of the few, if not the only governmental measures against environmental problems (IMF, 2012, p. 21). Hence, the disproportionate burden of environmental taxes on people with a lower income could be overcome by using the revenue levied to support them (OECD, 2008c, p. 13; Scorse, 2010, pp. 55–56). Mankiw (2008, p. 216) claims that a reduction on “payroll taxes [could be used] in a way that would leave the distribution of total tax burden approximately unchanged”, while Scorse (2010) proposes redistribution “in the form of tax credits or a minimum income” (Scorse, 2010, pp. 55–56).

Fiscal measures can come in different forms. Probably the most famous one is the carbon tax, and many “Nordic countries (Denmark, Finland, Norway and Sweden) introduced a CO₂ tax as part of their ecological tax reforms in the 1990s” (OECD, 2008c, p. 14). Mankiw (2008, p. 216) notes that this is a logical step to take as he points out that scientific findings prove the effect humans’ CO₂ emissions have on the climate, while economic principles state that taxes decrease the demand for a product. Hence, a carbon tax would lower emissions (Mankiw, 2008, p. 216). Bingler (2022, p. VIII) goes as far as saying that a carbon tax is the best possible solution, given that consumers are well-informed about the existence and function of the tax. She stresses that the essential information “must be (1) available, (2) understandable and (3) processed [for price signals to work]”¹² (Bingler, 2022, p. VIII). The International Monetary Fund (IMF) (2012) does not doubt that carbon pricing instruments are the most effective measures while declaring that “carbon taxes and emissions trading systems” (IMF, 2012, p. 1) (ETS) have similar effects. What matters, according to the IMF (2012), is having some kind of well-executed carbon pricing; which includes using the revenue raised to mitigate extreme impacts for low-income households and small industries.

The OECD (2008c, p. 13) highlights the importance of having a strong-enough tax, warning that “[too] often, taxes and charges to promote sustainable consumption are not set at a sufficiently high level [to enter the decision-making process]”. It is, therefore, crucial to steadily raise the CO₂ tax to a level that encourages a drastic reduction of carbon emissions, as Hansen *et al.* (2017, p. 1) highlight. For Germany, such a tax could be equivalent to the estimated costs caused by the climate damage, which is calculated to be around “€180 per tonne of CO₂ equivalent”¹³ (HBS and VCD, 2019, p. 30) for the year 2017.

Besides a general carbon tax, sector-specific subsidies, taxes, and tax exemptions can significantly influence the price and, hence, transport choice (OECD, 2008c; HBS and VCD, 2019). However, only ticket prices that represent the true cost can create fair

competition between the different means of transport, which means similar taxation schemes and inclusion of externalities are needed (HBS and VCD, 2019, pp. 9, 30).

The unfair competition is easily illustrated by the value-added tax (VAT) rates for Germany's railroad and aviation sectors. While the ticket prices for international flights are exempt from the VAT (HBS and VCD, 2019, p. 31; Berneiser, Becker and Loy, 2022, p. 7), the train tickets in Germany are taxed with some of the highest VAT rates in Europe (HBS and VCD, 2019, p. 32). Hence, taxing plane tickets at a similar rate, or introducing a VAT exemption for the railroad sector, as has been done for the aviation one, would create an equal level playing field in the transport sector.

Directly taxing environmentally harmful means of transport can be another economic measure which could be achieved, e.g., through fuel taxes or congestion charges meaning vehicles have to pay before entering a specific zone, as is the case for London and Stockholm, amongst others (OECD, 2008c, pp. 13–14). However, such taxes and charges only work if they create a significant price difference to “close the price gap for more sustainable products or create significant tax rebates for their use” (OECD, 2008c, p. 17).

2.3.1.1 Free Public Transport

As elaborated in sub-chapter 2.2 Understanding the Political Will in the German Population, price is one of the main criteria when it comes to the selection of means of transport (Lassen, 2010, p. 738; Zucchini, 2021, pp. 30–31; Berneiser, Becker and Loy, 2022, p. 7; Zimmer *et al.*, 2022, p. 90). However, prices for the different means of transport often do not represent the true cost which is particularly the case for the aviation sector as “cheap tickets made possible by [governments providing financial assistance] do not reflect the true costs of air travel” (Berneiser, Becker and Loy, 2022, p. 5).

Free public transport is one way of providing an alternative to planes and cars (Prince and Dellheim, 2018, p. 4), the two means of transport with the highest GHG emissions per kilometre per person (HBS and VCD, 2019, p. 33). There are different types of fare-free public transport argue Prince and Dellheim (2018, p. 1). They propose a differentiation “between 'full' and 'partial' free public transit” (Prince and Dellheim, 2018, p. 1) as fares are fully removed in some cases and in other cases, they are only partially removed for certain timeslots or groups of society.

According to Prince and Dellheim (2018, p. 4), almost 100 cities worldwide provide full free public transport. The first state to introduce free public transport nationwide was Luxembourg, abolishing fares in March 2020, according to Deutsche Welle (DW) (2020, para. 1). The small state has slightly more than 600.000 inhabitants but more than 200.000 commuters from neighbouring countries which cause a lot of congestion (DW,

2020, para. 2-5). Ticket-free transport in buses, trams and trains, including high-speed trains, is supposed to reduce traffic jams and encourage the usage of public transport (DW, 2020).

Some may argue now that Luxembourg is an exceptionally rich country having the highest GDP per capita of all member states of the EU (Eurostat, 2022). While it is true that the country has a comfortable financial situation and already covered 92% of its transport expenditure from sources other than ticket revenue previous to abolishing fares (DW, 2020, para. 4), there are plenty of examples of cities with free public transport in poorer countries (Prince and Dellheim, 2018). While most cities with free public transport in Europe can be found in France and Poland with around 20 cities each, the biggest city having removed fares is "Tallinn, the capital of Estonia, with a population of over 400,000" (Prince and Dellheim, 2018, p. 4).

Prince and Dellheim (2018, p. 90) explain that free public transport was introduced in Tallinn in 2013 as a mean to sooth the economy but also as a social measure after the economic crisis, which started in 2008. The authors (2018, p. 90) report that the city already subsidised public transport by covering 70% of the expenditures and that it let its citizens decide in a public referendum where they clearly expressed their support for abolishing fares. While the usage of municipal means of transport increased only slightly as there was already partial free public transport for certain groups of society like students and elderly, this was different for the state-run train system (Prince and Dellheim, 2018, p. 92). The usage of trains free of charge was introduced in Tallinn slightly delayed due to disagreements with the national train company; however once introduced, there was an enormous leap in passenger numbers as "at the end of the first month of free train rides, Tallinners' usage tripled, and after six months it stabilised at sevenfold" (Prince and Dellheim, 2018, p. 92). This underlines how a decrease in price can cause an increase in demand.

According to Prince and Dellheim (2018, p. 92), there is another important lesson to learn from Tallinn's introduction of free public transport. Slightly before the abolishment of charges of trains for Tallinners, the old trains in the city were replaced with significantly more modern ones which did not cause any change in passenger numbers until the introduction of fare-free usage of the trains which shows that "the quality of the service alone is irrelevant but its affordability is very important [to encourage increased use of trains]" (Prince and Dellheim, 2018, p. 92).

2.2.3 Structural and Innovative Changes

Structural and innovative changes refer to technical alternatives to conventional means of transport as well as to improvements of already existing means in the context of this

thesis. This sort of measures may decrease travel time and frequency of transport options. As a side effect, comfort could potentially rise as well but the focus is on the previous two factors.

2.2.3.1 Night Trains

Night trains have the potential to reduce CO₂-emissions as they are a “climate-friendly alternative to short-haul flights”¹⁴ (Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie^x (BMK), 2022, para. 3). Furthermore, they promise to be more attractive as other sustainable means of transport as they can offer more comfort, space and privacy as many coaches or day trains (BMK, 2022, para. 4).

According to a report issued by the European Commission’s Directorate-General for Mobility and Transport (DG MOVE), a night train is not just a train running at night but can be defined as “[a]ny train consisting partly or wholly of night train rolling stock (...) [which are r]ail vehicles dedicated to, or reconfigured for, overnight travel” (EC, 2021b, p. iv). DG MOVE’s report points out that the amount of night train connections decreased substantially since 2001 (EC, 2021a, p. 1). This decrease by almost two-thirds can be partially explained by the massive increase of high-speed trains which caused some connections to be too short to be suitable for a night train line (EC, 2021b, p. viii). However, the uptake of the aviation sector can also be assumed to have played a role as the majority of cross-border journeys in the EU, Norway, Switzerland and the United Kingdom (UK) was done by airplane according to the EC (2021b, p. viii).

A lack of financial viability might also have contributed to the decrease in night train connections as “sleeping accommodation on night trains appears to cost more to provide than seats on aircraft, coaches and other trains” (EC, 2021b, p. ix). As a consequence, “[a]ir traffic presents strong competition to rail transport because of relatively low ticket prices” (Rüger and Matausch, 2020, p. 257). This could be due to the fact that the price of air travel often does not reflect its true cost (Scorse, 2010, p. 9; Berneiser, Becker and Loy, 2022, p. 5). The European Commission’s report proposes “[h]igher prices for carbon-based fuels, or higher taxes on them at the global, European or national level, [which] would negatively impact the costs” (EC, 2021b, p. ix) and would decrease the comparative cost of night trains.

As previously mentioned, night trains can be an alternative to carbon-intensive means of transport, not just to airplanes but also cars (BMK, 2022, para. 3). The Austrian Federal Railway Company, *Österreichischen Bundesbahnen* (ÖBB), is said to have “[t]he largest and growing night train network” (EC, 2021b, p. 21). ÖBB recently introduced a new generation of their night trains called ‘Nightjets’, aiming to have 33 new Nightjets running

^x Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

until 2025 (BMK, 2022, para. 2). Night trains like the Austrian ones have the potential to reduce the GHG emissions in long-distant travel; however, it is difficult to provide exact numbers as "little information is available on existing passenger numbers, revenue or profitability [for long-distance cross-border night trains]" (EC, 2021b, p. ix). This is different for the aviation sector, which lead the EC (2021b, p. 15) to use potential seats in existing airplane connections between two destinations to illustrate the existing human movement between two destinations for which night trains could provide an alternative.

The EC (2021b) Study on Long-distance Cross-border Passenger Rails Services aimed, besides capturing the status quo, at determining promising routes for potential new night train connections. As an example, the Commission (2021b, p. 24) highlights the potential of a night train between Amsterdam and Zurich. In 2019, those two cities were connected through air travel with the capacities of "around 1.2 million airline seats" (EC, 2021b, p. 24). This shows how high the human movement between those two destinations is, which could be partially replaced by night trains. If the airline flights between cities along the potential night train route are taken into the calculation, the number rises by "further 2.2 million [annual airline] seats" (EC, 2021b, p. 24).

Most recently in January 2023, the European Commission announced ten new cross-border rail projects, including three new night train connections between Stockholm and Berlin, Paris and Venice, as well as Amsterdam and Barcelona (EC, 2023a). According to Adina Vălean, European Commissioner for Transport, this shall help meet the "[growing] demand for green mobility" (EC, 2023a, para. 2).

2.2.3.2 Improving Rail Infrastructure

For a well-functioning transport system, transport infrastructure needs to be in good shape and enough capacity and material (e.g., train vehicles) must be available (EC, 2021a, p. 2). As the European Union desires to increase the share of journeys done using sustainable means of transport, especially trains (EC, 2021b, p. viii), "additional Europe-wide rail routes would have to be built" (HBS and VCD, 2019, p. 38). Several European states intentionally boosted their rail infrastructure to induce an increase in attractiveness and passenger numbers, both for short and long distance (DW, 2020; KlimaTicket, 2022; Zweites Deutsches Fernsehen heute (ZDFheute) 2022).

According to the HBS and VCD (2019), Switzerland is the pioneer for attractive and modern public railroad transport. The country is famous for its well-functioning and reliable trains system (Deutscher Bundestag, 2019a, p. 11628) and "a regular and punctual timetable" (Switzerland Tourism, 2022, para. 1) known as the Swiss "*Taktfahrplan*" (Switzerland Tourism, 2022, para. 1). This translates to 'interval timetable' and refers to the regular timing for the major train connections in Switzerland having a

train between two large cities every 30 minutes (Switzerland Tourism, 2022, para. 1). Not only does Swiss public transport connect big transport hubs (Switzerland Tourism, 2022), but the country is also "a good role model for a 'regional mobility guarantee'"¹⁵ (HBS and VCD, 2019, p. 20). However, this is only possible through high investments which sum up to more than €400 per capita per year (ZDFheute, 2022; Deutscher Bundestag, 2022j). For comparison: Germany only invests between "88 [Euro]" (ZDFheute, 2022, para. 30) and "120 Euro" (Deutscher Bundestag, 2022j, p. 5159) per capita, depending on the source and the year taken as a reference.

Critics may argue that Switzerland can only invest this high due to its very comfortable financial position as it is amongst the richest countries in Europe considering the GDP per capita (Eurostat, 2022). However, Austria, a country with a GDP per capita similar to the German one (Eurostat, 2022), also is on its way to increase its public transport's attractiveness through major infrastructure investments (KlimaTicket, 2022). To accompany its climate ticket (*KlimaTicket*), which Austria recently introduced, the Austrian "[g]overnment is investing in a progressively more dense and comfortable public transport service offering in local, regional and long-distance transport" (KlimaTicket, 2022, para. 6-7). This has shown to be beneficial in Austria's capital Vienna as there, "a public transport-friendly settlement structure, a very attractive public transport service and restrictive parking management"¹⁶ (Civity, 2019, para. 2) led to a noticeable increase in passenger numbers even before a low-budget 365-Euro-ticket was introduced as a study carried out by the consulting company Civity (2019) revealed.

2.3.3 Informative Measures

Informative measures come in several shapes and formats. They can be described as

['Soft' policy instruments or] non-restrictive (...) tools that guide individual behaviour in a direction deemed beneficial by the regulator (e.g. environmental protection and/or sustainability), but [do] not formally restrict an individual's freedom of choice (...) [and they include] persuasion through information provision, moral suasion and educational campaigns. (Michalek *et al.*, 2016, p. 11)

The idea of these measures is to reduce the information deficit regarding certain topics, in this case, the negative externalities which certain means of transport have (HBS and VCD, 2019, p. 30). An increase in information provided can lead to more educated choices and could possibly influence the choice of means of transport. However, "aspects such as price, travel time and travel comfort play a more important role than environmental protection"¹⁷ (Zimmer *et al.*, 2022, p. 90). Hence, only a broad overview of informative measures is provided in the thesis while keeping the focus on targeting the former three aspects: price, time and comfort.

While, on average, environmental protection plays a subordinate role when choosing between different means of transportation, it still influences the decision making. More specifically, it can help "altering the priorities and significance agents attached to environmental issues" (Mickwitz, 2003, p. 419), and hence, could possibly increase the role environmental factors play in the decision making process. One way to facilitate informed choices could be "a simple and standardised rating system for the assessment of sustainability (...) e. g. a traffic-light system or graphical illustration which enable straight-forward comparisons" (Nationale Plattform Zukunft der Mobilität (NPM), 2020, p. 7). The UK "[introduced labels] in 2007 to inform consumers of the 'carbon footprint' of products based on grams of CO₂ emitted during production and distribution as verified through audits of participating companies" (OECD, 2008c, p. 30). Such labels or rating systems help to get a feeling for the environmental impact of a product or service on the first side and could also be implemented for the transport sector, e.g., when buying a ticket or fuel.

One essential role of informative measures is increasing the "public understanding and acceptance of the [environmental] policies" (OECD, 2008a, p. 36). This is for example the case for carbon taxes as Bingler (2022) explains. She elaborates that carbon taxes need to be accompanied by a general understanding of such a tax to create awareness of the underlying reasons and the importance of the tax as well as to decrease frustration in the population (Bingler, 2022, p. VIII).

Similarly, new means of transportation need to be properly introduced and made known to potential passengers (HBS and VCD, 2019, p. 14). Carsharing, for example, can be used for certain destinations or purposes which public transport, walking or cycling do not serve for as HBS and VCD (2019, p. 14) explain. Yet, in order to be accepted, potential users "need to be informed as much as possible about what [such a diverse range of mobility options] offers and how to use it"¹⁸ (HBS and VCD, 2019, p. 14).

Overall, it is important to notice that informative measures "have a much lesser impact on [the] set of feasible choices; they may be acknowledged or neglected regardless of the financial conditions" (Michalek *et al.*, 2016, p. 11). Consequentially, combining different kinds of measures appears to be most promising when looking for a political approach for making sustainable transport more attractive which is both effective and accepted by the population (Vedung, 1998, p. 21; OECD, 2008a, p. 34; OECD, 2008c, p. 49).

3 Analysis

While the previous chapter drew a picture of already existing measures in Europe, mainly in Germany's neighbouring countries, this chapter is about measures discussed or

partially implemented in Germany. First, the coalition agreements and election manifestos from the governing parties from the 19th and the first year of the 20th legislative period were analysed to get an idea what the political parties in power have foreseen in the mobility sector. Then, three measures considered in the German parliament were analysed more deeply using the minutes from the parliamentary debates. To conclude, the findings from the analysis of the election manifestos, coalition agreements and minutes were summarised and put in context to point out general hurdles.

3.1 Election Manifestos and Coalition Agreement of Governing Parties in 2017

The 2017 election took place two years after the "Paris Climate Agreement (...) [which commits Germany] to limiting global warming to well below two degrees Celsius and, if possible, to 1.5 degrees Celsius"¹⁹ (CDU/CSU and SPD, 2018, p. 142). Furthermore, German politicians still work on the aftermaths "of the largest refugee movement of the post-war period to date" (CDU/CSU, 2017, pp. 62–63), in particular in 2015.

3.1.1 CDU/CSU 2017

The two political parties CDU, short for "Christian Democratic Union"²⁰ (CDU, 2022, para. 1), and the CSU, which stands for "Christian Social Union"²¹ (CDU, 2022, para. 9), form a "Christian-social, liberal and conservative"²² (CDU/CSU, 2017, p. 7) parliamentary group valuing internal "security and stability"²³ (CDU/CSU, 2017, pp. 6–7). For the 2017 election campaign, the parliamentary group was in a relatively comfortable position as Angela Merkel, chancellor at that time, had been already re-elected twice before and was running for office again (CDU/CSU, 2017; bpb, 2021). Most German voters were satisfied with Angela Merkel's work (Infratest dimap, 2017, p. 7), which was a favourable pre-condition for the election from the perspective of the CDU/CSU.

The CDU/CSU's (2017) 75-page-long election programme explains their positions on a variety of different topics such as but not limited to the economy, family support, security, digitalisation, equal living conditions, and quality of life (CDU/CSU, 2017). They have an entire chapter on "good climate also for tomorrow"²⁴ (CDU/CSU, 2017, p. 67) as well as a sub-chapter on the transport infrastructure, mobility in general and digitalisation for environmental protection (CDU/CSU, 2017, pp. 1–2).

Generally, the CDU/CSU (2017, p. 68) acknowledge the danger of climate change and they support the Paris Agreement. Equally, they value environmental protection which they do not see as a threat for a growing and prosperous economy but argue that one can lead to the other as they are interconnected (CDU/CSU, 2017, p. 6). More specifically, they see the market and its instruments in charge for climate protection measures as they are against state intervention (CDU/CSU, 2017, p. 69).

The most concrete action related to transport or the railroad system mentioned in this election programme is the aim to introduce the so-called “Deutschlandtakt” (CDU/CSU, 2017, p. 20) (Germany pace), a project similar to the Swiss “*Taktfahrplan*” (Switzerland Tourism, 2022, para. 1) to ‘interval timetable’. The Deutschlandtakt will be further explained in sub-chapter 3.3.2 Infrastructure improvements and Deutschlandtakt.

Generally speaking, the 2017 CDU/CSU election manifesto contains some promising ideas for the human mobility and the transport sector. However, there are no measurable goals for when to introduce those possible initiatives. The aviation sector is not mentioned at all. The CDU/CSU (2017) supports the car sector as they see it as an important branch of the German economy with many jobs attached to; furthermore, they want to continue investing into road infrastructure (CDU/CSU, 2017, p. 19). Their general attitude towards mobility is best summarised by them stating that “individual mobility must be available in the same way as the use of local public transport or trains”²⁵ (CDU/CSU, 2017, p. 46) showing their goodwill towards the vehicle sector.

3.1.2 SPD 2017

The “Social Democratic Party of Germany”²⁶ (bpb, 2021, para. 8), short SPD, has a strong focus on justice which it emphasises with the slogan of its election manifesto “it is time for more justice”²⁷ (SPD, 2017, p. 6). On 113 pages, the party elaborates its aims for the 2017-2021 election period focusing on social justice and its related issues (SPD, 2017). The SPD’s (2017) focal points are families, education, care taking, social market economy, just migration policies and international cooperation, amongst others. This includes environmental and intergenerational justice arguing how environmental issues threaten to increase social injustice and how future generation deserve an intact ecosystem (SPD, 2017, p. 61). While having a whole chapter on sustainability and a sub-chapter on mobility, the general emphasis is rather on the social component than the ecological one (SPD, 2017).

Concerning passenger transport, the SPD aims for “affordable and sustainable mobility”²⁸ (SPD, 2017, p. 58) . The party opposes to dealing with the different means of transport separately but instead wants an alliance dealing with the entire mobility sector (SPD, 2017, p. 58). However, this does not always translate on their election manifesto. When mentioning the issues of traffic jams created through commuting, it proposes a different highway toll for trucks instead of tackling the actual problem and offering different means of transport for moving away for carbon intense transport (SPD, 2017, p. 59). Cars are seen as an important mode of transport for individual mobility (SPD, 2017, pp. 58–59); according to the SPD, electrification shall help to keep emissions low with electric vehicles made in Germany along “the entire value chain of the automobile”²⁹ (SPD, 2017, p. 29). New technologies are also meant to change the aviation sector

(SPD, 2017, p. 34). The SPD (2017, p. 60) sees this sector as crucial for staying internationally connected, but as an important one for climate protection and to make changes to stay in line with the 2015 Paris Agreement.

Mobility is generally seen to play an essential role for “Germany to reach its climate emission goals”³⁰ (SPD, 2017, p. 58). Special attention is paid to the railroad sector where the SPD states that its “focus is not on maximising profit, but on maximising rail transport in Germany”³¹ (SPD, 2017, p. 59). It wants the German railroad company Deutsche Bahn (DB) to act more in the interest of the passengers and convince with “punctuality, good service and high quality”³² (SPD, 2017, p. 59). As a concrete goal, the SPD want to double the number of train passenger in Germany until 2030 compared to 2017 (SPD, 2017, p. 59). Similar to the CDU/CSU, the SPD also aim for connecting all major city with hourly train connections through a so-called “*Deutschlandtakt*” (SPD, 2017, pp. 59–60) which translates to Germany tact. However, rural areas should also have a convenient public transport according to the SPD (2017, p. 57).

3.1.3 Coalition Agreement of CDU/CSU and SPD 2017

The coalition of CDU/CSU and SPD highlight in their 2017 coalition agreement their past successes from the previous election period which they already governed together (CDU/CSU and SPD, 2018, p. 4). They express their pride of the strong German economy as well as high employment and aim for “a sustainable and inclusive growth whose revenues benefit all”³³ (CDU/CSU and SPD, 2018, p. 4).

When it comes to environmental protection, they intent to stand by the Paris Agreement and the national climate goals, and to limit global warming to maximum 2°C, ideally less than 1,5°C (CDU/CSU and SPD, 2018, p. 142). This includes “reaching the sector goal 2030”³⁴ (CDU/CSU and SPD, 2018, p. 143) for the transport sector. However, the CDU/CSU and SPD aim to do so “while taking social concerns into account, guaranteeing the competitiveness of industry and ensuring affordable mobility”³⁵ (CDU/CSU and SPD, 2018, p. 75). Considering aspects from social, economic and ecological sustainability, they plan to keep Germany’s nature alive and divers for future generations (CDU/CSU and SPD, 2018, p. 137). This approach for intergenerational justice was already mentioned by the CDU/CSU (2017, p. 68) and the SPD (2017, p. 61) in their respective election manifestos.

When it comes to mobility in general, the parties aim for “modern, clean, accessible and affordable mobility for all people in Germany”³⁶ (CDU/CSU and SPD, 2018, p. 74). This comprises public transport including railroad but also individual mobility meaning cars- both electric and with ideally clean combustion engines (CDU/CSU and SPD, 2018, p. 75). The coalition urges to improve air quality, namely through reducing emissions

from vehicles. However, it seems that the focus is not on reducing the use of those vehicles itself but mainly on technical advancement to solve the issue polluted air, in particular in big cities (CDU/CSU and SPD, 2018, pp. 75–76). They emphasize that they want to avoid driving restrictions; yet, they want to provide alternatives to commuting by car by promoting so-called ‘park+ride’ offers (CDU/CSU and SPD, 2018, p. 76).

Their vision for the transport sector shall be accompanied by investments, in particular 1 billion euros for regional mobility (CDU/CSU and SPD, 2018, p. 75). Special attention will be paid to the railroad sector, aligned with the rail pact made for 2030, the so-called "Railway Pact 2030"³⁷ (CDU/CSU and SPD, 2018, p. 14). To make the railroad sector more attractive, “punctuality, good service and high quality”³⁸ (SPD, 2017, p. 59; CDU/CSU and SPD, 2018, p. 77) shall be guiding principles with the goal to double the number of train passenger in Germany until 2030 as already mentioned in the SPD election manifesto. However, there are few concrete quantitative goals explicitly stated. For example, there is no mention of what passenger number is taken as the current one to then be doubled. Furthermore, the measures which shall be taken by the German railroad company DB are not specified but only left vaguely as mentioned above.

When it comes to the aviation sector, there is a general appeal for this sector to work against the negative externalities caused by the emissions of the aviation sector (CDU/CSU and SPD, 2018, p. 80). However, this does not seem to include a reduction of air travel in general as alternative fuels for airplanes shall be researched (CDU/CSU and SPD, 2018, p. 81) and the option of increasing airports’ capacities is explicitly kept as a possibility (CDU/CSU and SPD, 2018, p. 80).

While the CDU/CSU and SPD (2018) CDU/CSU and SPD want to create fairness between the different airlines especially on an international level when it comes to “unilateral national costs”³⁹ (CDU/CSU and SPD, 2018, p. 80), equal treatments in form of taxes or subsidies is the greatest part ignored in the coalition agreement. However, all subsidies are meant to be reviewed to check whether they are in line with the principle of sustainability (CDU/CSU and SPD, 2018, p. 137).

3.2 Election Manifestos and Coalition Agreement of Governing Parties in 2021

The election of 2021 took place in very crises-driven times. First of all, there was the "Corona pandemic continu[ing] to weigh heavily on the country (...) accompanied by existential worries and great suffering for many”⁴⁰ (SPD, The Greens and FDP, 2021, p. 4). It guided the political focus to Germany’s struggling health system (SPD, The Greens and FDP, 2021, p. 80). Second, there was the war in the Ukraine after Russia’s invasion in February 2021 (Deutscher Bundestag, 2022g, pp. 3195–3196) which lead to a debate about the strength and needs of the German army and how to best support

Ukraine (Deutscher Bundestag, 2022f, pp. 2665–2666). And then, the country was struck by sky-rocketing energy prices which lead to the highest inflation since Germany's reunification with unusually high inflation rates over 10% (tagesschau, 2023, para. 1-3). And finally, the climate crisis seemed to gain more attention due to first visible effects "in [German] forest[s and] (...) especially against the backdrop of the 2021 flood disaster"⁴¹ (SPD, The Greens and FDP, 2021, pp. 39–40).

3.2.1 SPD 2021

The social-democratic SPD (2021) focuses in its 65-page-long 2021 election manifesto on social problems, and promises a respectful, future-oriented and solidary governing of Germany. The party (2021, p. 3) claims that the Corona crisis took the focus of several pressing issues Germany is currently facing, among which how to mitigate man-made climate change. The election manifesto is very future-oriented including "four missions for the future that are of central importance to [them]"⁴² (SPD, 2021, p. 8). One of the missions regards climate change and "limit[ing] global warming to 1.5 degrees Celsius (...) [including] the goal of being completely climate neutral in Germany by 2045 at the latest"⁴³ (SPD, 2021, p. 8). However, the SPD (2021, p. 8) stresses that environmental protection and prosperity are not exclusive but can go hand in hand.

One of the SPD's (2021, p. 11) four missions for the future specifically addresses Germany's mobility system. It (2021, p. 5) claims that a stable and socially-just society requires, amongst others, access to mobility and transport. Envisioning "sustainable, affordable, fully accessible and reliable [mobility]"⁴⁴ (SPD, 2021, p. 11), the SPD (2021) focuses on public transport, equally in urban as in rural areas, while acknowledging that some people depend on their car. Hence, the SPD (2021, p. 8) foresees investments in research and development of climate-friendly vehicles as well their production in Germany to ensure that "the emission of pollutants will be reduced to zero"⁴⁵ (SPD, 2021, p. 11) for the road sector.

To modernize the mobility sector, the SPD (2021, p. 11) plans investments in infrastructure, focusing on the railroad sector, and aiming to introduce the Deutschlandtakt and establish more night train connections. That way, it wants to achieve its goal that "rail travel within Europe should be cheaper and more attractive than flying"⁴⁶ (SPD, 2021, p. 11). Furthermore, investments are foreseen for regional public transport:

We support models such as the 365-Euro-Ticket or model projects for ticket-free local transport. (...) Above all, we will improve the attractiveness of local transport by investing in the range and quality of trains and buses and by reactivating old railway lines. We will enable tighter, reliable intervals, more comfortable trains with area-wide W-LAN and a reservation option for seats.⁴⁷ (SPD, 2021, p. 11)

While having relatively ambitious goals regarding the modernization the transport sector, mitigating climate change and environmental protection, the SPD (2021, p. 8) wants to ensure a socially-just transition creating new jobs, having all benefit from the changes it foresees, and protecting and compensating the most vulnerable groups of the German population.

3.2.2 BÜNDNIS 90/DIE GRÜNEN 2021

The BÜNDNIS 90 / DIE GRÜNEN (2021), hereafter referred to as 'The Greens', is a political party "focusing on ecological issues" (Prisner, 2018, p. 33). In its 2021 election programme, the party (2021) elaborates on 272 pages what changes it would undertake once elected into office. The party being previously in the opposition (bpb, 2021), declares for the 2021 election that "for the first time in the history of the Federal Republic of Germany, (...) [they] are fighting for political leadership in this country, in terms of content and personnel"⁴⁸ (The Greens, 2021, p. 11). Annalena Baerbock was The Greens' candidate running to be the next chancellor (bpb, 2021, para. 12).

The Greens' (2021) focus is on ecological problems like the climate crises, wanting to adjust Germany's political strategy on passing policies and investments which support a social-ecological transition. This includes "align[ing] the actions of all ministries [to the Paris Agreement and] (...) the 1.5 degree path"⁴⁹ (The Greens, 2021, p. 12). The party describes the Corona crisis as a challenge for the country and wants to rebuild the country in a sustainable way during and after the crisis (The Greens, 2021, pp. 60–61).

The party envisions a "socio-ecological transformation (...) [towards c]limate neutrality (...) [as well as] social justice and climate-friendly prosperity"⁵⁰ (The Greens, 2021, p. 19) but also a future-proved economy. Regarding the transport sector, there are sub-chapters dedicated to sustainable mobility in general, the regional public transport, the vehicle industry, the aviation sector, as well as mobility in rural and urban areas (The Greens, 2021).

To revolutionise transport in Germany, The Greens (2021, p. 29) aim to increase quality of life, security and inclusion, while decreasing environmental destruction and congestions. The Party promises major investments in infrastructure of the mobility sector and grants a "mobility guarantee creating nationwide connections"⁵¹ (The Greens, 2021, p. 31). That way, the main focus of Germany's mobility strategy is supposed to be moved away from individual vehicles to focusing on the members of society's different needs: "Instead of unilaterally favouring one mode of transport over another, as has been the case for decades, we ensure a fair balance - with a strong railroad, modern public transport and the best conditions for cyclists and pedestrians"⁵² (The Greens, 2021, p. 29).

Despite this strong opposition to giving vehicles such a domination on German roads, The Greens (2021, p. 13) are not completely opposed to cars but strive for emission-free vehicles to replace combustion engine. Furthermore, the party proposes an increase in alternatives to individual vehicle usage in form of “dial-a-bus or carsharing”⁵³ (The Greens, 2021, p. 13) especially in suburbs and rural areas. Same applies to infrastructure. In the opinion of The Greens (2021, p. 35), all plans for the construction of new roads and highways shall be critically revised to reduce the expansion of the road system to a minimum and focus instead on renovating existing streets and modernising more sustainable means of transport.

To make sustainable mobility more attractive, public transport is supposed to become more accessible and affordable for all (The Greens, 2021, p. 30). That way, The Greens want to support their target “to double public transport passenger numbers by 2030” (The Greens, 2021, p. 31). Carbon pricing with increasing rates shall help guide consumers away from carbon intensive means of transport towards more sustainable ones according to The Greens (2021, pp. 19–20), though the party stresses that carbon pricing alone is not the solution. It wants both social justice and “an economy in which the most sustainable products are also the cheapest (...) achieved through a smart mix of CO₂ prices, incentives and support, as well as regulatory law and the dismantling of environmentally harmful subsidies”⁵⁴ (The Greens, 2021, p. 19). Hence, national carbon pricing, which The Greens help introduce in 2021 (The Greens, 2021, pp. 19–20; SPD, 2021, p. 10), shall guide the market while compensating the ones suffering the most under the policy’s financial effects (The Greens, 2021). That way, the party wants to support “a strong shift from road and air traffic to rail”⁵⁵ (The Greens, 2021, p. 30).

All in all, The Greens (2021) present an ambitious plan in its election manifesto aiming to make environmental protection and climate action a political focus, while also standing up for social justice, peace and equality. The party wants a transition towards more sustainable, affordable, inclusive and efficient mobility, combining innovative technologies, an uptake in infrastructure investments and policy measures guiding the market to reflect the GHG emissions of the means of transport (The Greens, 2021).

3.2.3 FDP 2021

The *Freie Demokratische Partei* (FDP); which translates to Free Democratic Party, “stands for political liberalism and wants to strengthen freedom, self-determination and responsibility of the individual within the framework of the social market economy”⁵⁶ (bpb, 2021, para. 10). The party’s principle of protecting the individual freedom can be found in its aversion to prohibitions and its devotion to creating a free market to support innovation, start-ups and individual growth (FDP, 2021). In its 67-page-long election

manifesto, the party asserts individual freedom and wants "that the value of freedom is given its proper importance in every political decision"⁵⁷ (FDP, 2021, p. 5). They aim at becoming part of the government even though they have previously been in the opposition (bpb, 2021).

When it comes to climate and environmental protection, the FDP (2021, p. 45) states clearly that it supports the Paris Agreement and to reach climate neutrality in Germany. It wants to achieve this without prohibitions and ideology but with innovation, supporting new ideas and using the competitive market (FDP, 2021, p. 46). This is also valid for the mobility sector as the FDP (2021) opposes a general driving ban for certain areas to improve air quality or prohibiting the combustion engines for vehicles. Instead, they want innovative ideas and technology-neutrality, for example, when it comes to "climate-friendly synthetic fuels (...) that can be used in conventional combustion engines without technical conversion"⁵⁸ (FDP, 2021, pp. 46–47). To further boost the free competition, the party wants to remove "expensive subsidies such as the purchase premium for e-cars"⁵⁹ (FDP, 2021, p. 24). The FDP demands an "extension of European CO₂ emissions trading to the entire transport sector (...) to [end] the existing (...) bans, subsidies and support measures (...) [which lead] to rising costs and a distortion of the market"⁶⁰ (FDP, 2021, p. 24). It seems to be convinced that the free market will be the most efficient tool to solve environmental problems and modernize the transport sector (FDP, 2021).

Regarding the separate means of transport, the FDP (2021, p. 24) promises more safety for cyclist and pedestrians. Furthermore, it wants to create a future-proof aviation sector; following its liberal mentality, the party "wants to abolish the aviation tax, (..) and prevent an expansion of night flight bans"⁶¹ (FDP, 2021, p. 23). The railroad sector shall benefit from increased competition through a privatisation of the railroad operation, according to the FDP (2021, p. 22). More specifically, the party "wants to separate the infrastructure and operations in the case of railroads (...) [using] more competition, more digitization and lower track access charges"⁶² (FDP, 2021, p. 22) to increase passenger numbers while having the government focus on improving the infrastructure.

Social aspects are also given some consideration in the 2021 FDP election manifesto, though rather in a passive way as the FDP (2021) claims that consumers benefit from competition in form of low prices. For example, regarding the railroad sector, "customers benefit from lower prices, better service and a wider range of rail services"⁶³ (FDP, 2021, p. 22) through a more competitive railroad sector. Furthermore, the party advocates for more accessibility in the mobility sector (FDP, 2021, p. 25).

The FDP is pro-Europe and supports the EU, even wanting to expand the EU competence (FDP, 2021, p. 48). Regarding mobility, the FDP envisions to better connect

European cities through "a holistic infrastructure strategy for Europe and the expansion of trans-European transport networks (...) [including the] rail network (...), airports and highways"⁶⁴ (FDP, 2021, p. 24).

3.2.4 Coalition Agreement of SPD, BÜNDNIS 90/DIE GRÜNEN and FDP 2021

In order to form a government, SPD, The Greens and FDP (2021) elaborate on their vision for the 2021 legislative period in a 178-page-long coalition agreement. They highlight that the 2020s shall be used for modernizing Germany and accelerating a social-ecological transition (SPD, The Greens and FDP, 2021, p. 4). Being three parties with different traditions and focal points, they want to unite their strengths to execute the change needed (SPD, The Greens and FDP, 2021, p. 4). The coalition promises to "tak[e] responsibility at a time when the Corona pandemic continues to weigh heavily on the country"⁶⁵ (SPD, The Greens and FDP, 2021, p. 4) aiming at sustainably rebuilding the German economy (SPD, The Greens and FDP, 2021, p. 24).

The three parties see the "[m]an-made climate change [a]s one of the greatest challenges of our time (...) [aiming to] align [their] climate, energy and economic policies (...) with the 1.5-degree path and (...) the Paris Agreement"⁶⁶ (SPD, The Greens and FDP, 2021, pp. 54–55). The coalition intends to use "[t]he United Nations' 17 Global Sustainable Development Goals (SDGs) [as a guideline](...) protect[ing] the freedom and opportunities of current and future generations"⁶⁷ (SPD, The Greens and FDP, 2021, p. 36). Hence, the coalition agreement includes a separate chapter on "Climate protection in a social-ecological market economy"⁶⁸ (SPD, The Greens and FDP, 2021, p. 24) mentioning how effects of climate change are already noticeable in Germany, for example in German forest and weather extremes. In that context, the SPD, The Greens and FDP (2021) refer to the flood disaster in 2021 promising "a precautionary climate adaptation strategy(...) [w]ith a Climate Adaptation Act (...) [and] sufficient financial resources"⁶⁹ (SPD, The Greens and FDP, 2021, p. 40).

As a market-based instrument to include environmental externalities, the coalition sees "an increasing CO₂ price as an important instrument, combined with strong social compensation"⁷⁰ (SPD, The Greens and FDP, 2021, p. 62) as the coalition highlights. However, recognizing that climate protection cannot be entirely regulated by market economy but requires a legal background, the three parties plan to "continue to systematically develop the Climate Protection Act (...) [to have all] sectors (...) contribut[ing]"⁷¹ (SPD, The Greens and FDP, 2021, p. 55), including the transport sector.

The transport sector is seen as a crucial component to reaching Germany's climate protection goals and should be modernised to be able to play that role (SPD, The Greens and FDP, 2021, p. 48). To do so, investments in Germany's infrastructure are foreseen,

aiming to invest in the railroad than road sector and favouring renovation over new constructions (SPD, The Greens and FDP, 2021, p. 48). Improving infrastructure and strengthening different means of transport in rural and urban areas alike is equally important as developing a mobility system which is "sustainable, efficient, barrier-free, intelligent, innovative (...) [and] affordable for all"⁷² (SPD, The Greens and FDP, 2021, p. 48). This includes improving public transport and making it more attractive through having more frequent connections, which shall lead to increased passenger numbers (SPD, The Greens and FDP, 2021, p. 50).

Regarding long-distance travel, the railroad sector is supposed to become more reliable and the coalition aims to support the so-called Deutschlandtakt which the SPD (2021, p. 11) and The Greens (2021, pp. 29–30) already declared in their election manifestos. The SPD, The Greens and FDP (2021, p. 49) seek an expansion of international train connections and night trains. That is also supposed to help reduce the number of short-distance flights (SPD, The Greens and FDP, 2021, pp. 53–54). Flights, that cannot be replaced, shall be embedded in a more sustainable aviation sector, including research for CO₂-neutral aviation and ticket prices which the coalition envisions to reflect the real cost and, hence, cannot be sold at dumping prices "below taxes, surcharges, fees and charges"⁷³ (SPD, The Greens and FDP, 2021, p. 54).

Historically, "[t]he automotive industry is the largest industrial sector in Germany" (Prince and Dellheim, 2018, p. 23) creating a lot of revenue and many jobs. Especially in rural areas, many people still depend on their vehicles as public transport does not yet create a sufficient alternative (The Greens, 2021, p. 36). The coalition, hence, envisions to transform the automotive industry, decarbonizing it and aiming for Germany to be "the lead market for electromobility with at least 15 million electric cars by 2030"⁷⁴ (SPD, The Greens and FDP, 2021, p. 51). In order to support the industry's transition and infrastructure projects for all means of transport, the three parties want to reduce bureaucracy and accelerate processes to support- for the mobility sector but also in general- "[n]ew business models and technologies [which] can create climate-neutral prosperity"⁷⁵ (SPD, The Greens and FDP, 2021, p. 64).

3.3 Minutes of Debates in the German Parliament 2017-2022

Election manifestos and coalition agreements show the intention of the party, the utopian ideal of what the upcoming election period could look like. However, the actual minutes of the debates in the German parliament draw a more accurate picture of the prioritisation of policies and the compromises made with respect to positions on paper. Here, members of the governing parties as well as of the parties forming the opposition discuss the issues at stake.

3.3.1 Free Public Transport

During the summer of 2022, the German government temporarily introduced a transport ticket allowing the use of nation-wide all public means of transport, except for high-speed trains, for a price of €9 per months between June and August 2022, the so-called 9-Euro-Ticket^{xi} (Deutscher Bundestag, 2022a, para. 4). This was part of a package of measures meant to mitigate the high financial burden on German citizens caused by high energy prices which triggered an unusual high inflation (Deutscher Bundestag, 2022a).

During June and August 2022, 52 million 9-Euro-Ticket were sold in addition to the 10 million with a ticket subscription also profiting from reduced fares (Deutscher Bundestag, 2022l, p. 6937). While this low-priced ticket in summer 2022 resonated in a quite positive response according to passenger surveys, with 89% satisfied passengers (Deutscher Bundestag, 2022j, p. 5159), the German "government has failed to prevent the expiry of the 9-Euro-Ticket and to launch a direct successor scheme"⁷⁶ (Deutscher Bundestag, 2022k, p. 5269) as The Left^{xii} criticised. Already in early May before the 9-Euro-Ticket was passed, The Left put forward a motion to extend the period for the 9-Euro-Ticket until December (Deutscher Bundestag, 2022g, p. 3197). The Left has urged its fellow parties to introduce free public transport for years (Deutscher Bundestag, 2018a, p. 1171); yet, they are not the only German party considers abolishing fares for busses and trains.

As a matter of fact, the idea of low-priced or even free public transport is not completely new among the political and societal sphere in Germany. According to Prince and Dellheim (2018, p. 153), a debate about free public transport sparked for the first time in Germany as early as 50 years ago and was resumed several times since then. For example, in early 2018, the German government presented the idea of introducing fare-free public transport in five major cities (Prince and Dellheim, 2018, p. 151). This idea was pitched in a letter to the EU as an attempt "to avert EU sanctions over the high pollution rates in German cities" (Prince and Dellheim, 2018, p. 151). However, this was later declared to simply have been an idea and no action followed; yet it got international attention, and it indicates that this idea was already popular back then as Prince and Dellheim (2018, pp. 151–152) declare. However, the government was highly criticised by the opposition for its behaviour in this regard and their general misbehaviour regarding

^{xi} The original name was meant to be "9-für-90-Ticket" (Deutscher Bundestag, 2022g, p. 3198), which translates to '9-for-90-ticket', but quite quickly the ticket was only referred to as 9-Euro-Ticket so that is the name used in this thesis.

^{xii} For the sake of simplicity, it is assumed that statements from a member of one of the political parties in parliament reflect the general opinion of that party. Instead of mentioning the name of the member of parliament giving the speech quoted, it will be referred to the political party he or she belongs to. This is not meant to generalize or indicate that a general opinion of a political party is concurrent with every single statement of their members, but it is meant to reduce the wordiness of this chapter and facilitate a more general analysis.

the high air pollution and the breach of EU legislation (Deutscher Bundestag, 2018a, p. 1166).

There is basically no party in the German Parliament opposing affordable public transport, though there are some parties giving it higher importance than others (Deutscher Bundestag, 2022g). The CDU/CSU points out that regarding this topic, "there are two political schools of thought that are in competition with each other. One is in favour of making tickets cheaper, the other is in favour of improving the timetable"⁷⁷ (Deutscher Bundestag, 2022g, p. 3198). The AfD and CDU/CSU argued that low-priced or fare-free tickets are of little use in rural Germany where bus and train connection are often not very frequent (Deutscher Bundestag, 2022j). This is a crucial factor to consider as around 60% of the German population lives in rural areas, as the CDU/CSU point out (Deutscher Bundestag, 2022h, p. 3654). Consequentially, CDU/CSU and AfD emphasize that tax money is of better use for infrastructure investments to establish "[public transport with] a better service, especially denser intervals in rural areas"⁷⁸ (Deutscher Bundestag, 2022h, p. 3650). However, the current Federal Minister for Digital and Transport, Volker Wissing, stressed as a response to the claims of CDU/CSU and AfD that the rural areas especially profit from a nation-wide uniform and reduced tariff as ticket fares in rural areas are often higher than in urban ones (Deutscher Bundestag, 2022l, p. 6946). He emphasized that "people can also use this ticket intermodally (...) [not] hav[ing] to leave your home by public transport if you use this ticket; you can also travel one stage with the ticket"⁷⁹ (Deutscher Bundestag, 2022l, p. 6946). Hence, free or reduced public transport can be beneficial for both urban and rural areas.

In the end, the decision was passed to have a ticket called "Deutschlandticket"^{xiii} (...) [for] 49 euros per month"⁸⁰ (BMDV, 2023, para. 1) as a successor of the 9-Euro-Ticket. A monthly subscription of €49 per month is far from free; too far if one believes The Left (Deutscher Bundestag, 2022k, p. 5270), but one argument raised over and over again is that Germany cannot afford free public transport (Deutscher Bundestag, 2022g, p. 3196). It was already said more than five years ago when the former government shared the idea of abolishing fares in five selected cities that "unrestricted free public transport cannot be financed"⁸¹ (Deutscher Bundestag, 2018a, p. 1167), and it was still the same argument when the 9-Euro-Ticket and its successor were discussed: free public transport is said to be "too expensive"⁸² (Deutscher Bundestag, 2022j, p. 5159).

All parties in the German parliament agree that Germany urgently needs to invest in its mobility infrastructure but some argue that Germany does not have the financial means

^{xiii} The so-called '*Deutschlandticket*' (Germany Ticket) was referred to as '49-Euro-Ticket' in debates in the German parliament prior to the final decision to introduce it (BMDV, 09.02.2023). The original German name, *Deutschlandticket*, is mainly used throughout this thesis, but 49-Euro-Ticket can be used interchangeably. As *Deutschlandticket* is a proper name, it will not be written in italics even though it is not an English-language term.

for both, subsidising public transport tickets and investing in infrastructure (Deutscher Bundestag, 2022j, p. 5161) which will be further discussed in the next subchapter. Especially the CDU/CSU emphasise over and over again "that the two demands (...), namely cheap tickets and simultaneous expansion, simply do not go together"⁸³ (Deutscher Bundestag, 2022j, p. 5161). They stressed that the whole debate about the successor of the 9-Euro-Ticket regards the question on what to spend the financial means foreseen for the mobility sector and they imply that a price higher than €9 would leave more means for other transport-related investments:

What are we actually arguing (...) [a]nd we come to the conclusion: in the end, it is the price [of the ticket]. Because the price concerns the question of how funds are spent (...) [and] of how it is financed in the end.⁸⁴ (Deutscher Bundestag, 2022j, p. 5169)

While this chapter focuses on the financial advantage fare-free and hence ticket-free public transport can provide passengers, it was shown that the low price was not the only advantage of 9-Euro-Ticket when surveying passengers in Germany during the period when the ticket was available (Deutscher Bundestag, 2022j, p. 5169). The official survey of the Association of German Transport Companies (*Verband Deutscher Verkehrsunternehmen e. V.*, [VDV]), Deutsche Bahn AG (DB AG) and Deutsche Bahn Regio AG (DB Regio AG) (2022) has shown that, with 69%, "[t]he favourable price is consistently the most frequently mentioned reason for purchas[ing the 9-Euro-Ticket]"⁸⁵ (VDV, DB AG and DB Regio AG, 2022, p. 148). However, the survey also revealed that "'[a]voiding car journeys' and 'flexibility of use' are behind [the price] in second place at 40%"⁸⁶ (VDV, DB AG and DB Regio AG, 2022, p. 114) for the reason for purchase. While the vast majority (90%) name the price as the factor that increased the attractiveness of the 9-Euro-Ticket the most, almost three-quarters (74%) of the surveyed people valued that "[t]he 9-Euro-Ticket (...) is clear and easy to understand in its terms and conditions"⁸⁷ (VDV, DB AG and DB Regio AG, 2022, p. 162). Those clear terms and conditions refer mainly to the nation-wide validity as normally "complicated tariff structures"⁸⁸ (Deutscher Bundestag, 2022l, p. 6937) which normally risk confusing potential passengers according to federal minister Wissing. Hence, even though the new Deutschlandticket is more expensive than the previous 9-Euro-Ticket, it is expected to convince with its simplicity, mainly through its simple, nation-wide validity (VDV, DB AG and DB Regio AG, 2022, p. 9).

While there was a lot of discussion around the 9- and 49-Euro-Ticket in the German parliament, one important point that cannot be neglected is the fact that the national government does not have the competence to decide such an incremental change of the German public transport system alone (Deutscher Bundestag, 2022j, p. 5171). Germany is a federal republic with 16 federal states or *Bundesländer* (bpb, 2021), and the transport

system lies mainly within the responsibilities of each individual federal state (Deutscher Bundestag, 2022l, p. 6946). However, the national government can support and guide the federal states, especially as the aim is a nation-wide uniform solution (BMDV, 2023, para. 12).

Another aspect, which shall not be neglected, is that the Deutschlandticket is only valid in local means of transport such as, e.g., busses, metros, trams and regional trains (BMDV, 2023). This is a point which has been criticised by some mobility experts in Germany, for example Prof. Dr. Andreas Knie, who "is head of the research group Digital Mobility and Social Differentiation at the Social Science Research Center Berlin (WZB)"⁸⁹ (ZDF, 2022, para. 5). He advocates a nation-wide ticket which "would also have to apply to long-distance transport"⁹⁰ (ZDF, 2022, para. 1). This is already the case for the fare-free public transport in Luxembourg (DW, 2020) as well as for Austria's *Klimaticket* (climate ticket) (KlimaTicket, 2022), in both cases highspeed trains are included in the offer. This seems to have been neglected in the discussion in the German parliament.

3.3.2 Infrastructure Improvements and Deutschlandtakt

As elaborated in the previous sub-chapter, the main discussion in the German Parliament seems to be on how to best invest in the mobility sector: prioritizing subsidies for affordable tickets or investments in transport infrastructure (Deutscher Bundestag, 2022j, p. 5161). (Allianz pro Schiene, 2020). Some even argue that both is needed for Germany to fulfil its intergenerational responsibility (Deutscher Bundestag, 2022j, p. 5160). However, the plan of carrying out major investments in transport infrastructure appears to unite the parties forming in government in both legislative periods at stake (CDU/CSU and SPD, 2018, p. 14; SPD, The Greens and FDP, 2021, p. 48). The previous CDU/CSU-based governments are said by the former opposition to have "neglected public transport for decades [expanding highways while thinning out] (...) bus and rail services"⁹¹ (Deutscher Bundestag, 2022h, p. 3653). However, the CDU/CSU itself already declared in 2019 to have "[begun] to increase funding for investments in rail infrastructure in the last legislative period (...) [and to be] currently investing more money in rail than ever before"⁹² (Deutscher Bundestag, 2019a, p. 11621), which adds up to "€10.7 billion on rail infrastructure [in 2019] (...) [which] is 1.3 billion euros more than in 2018"⁹³ (Deutscher Bundestag, 2019a, p. 11624).

However, some parties of the opposition in 2019 said the investments undertaken were not high enough (Deutscher Bundestag, 2019a). The Left highlighted, together with The Greens, the deterioration of railroad infrastructure in Germany and its much needed maintenance (Deutscher Bundestag, 2019a, p. 11621). As a matter of fact, German investments in railroad infrastructure are among some of the lowest compared to other European countries as Germany's annual per capita investments in railroad

infrastructure in 2020 were equivalent to roughly 20% of the average investments of the top three countries (ZDFheute, 2022). The current government seems to be eager to change that (SPD, The Greens and FDP, 2021, p. 48); however, the questions at stake are whether those investments will be high enough and where it is smartest to invest to get the highest benefits for the railroad network and system.

Another contentious issue regarding possible investments is making debts (Deutscher Bundestag, 2022d, p. 924). The FDP (2021), in particular, seems to have made the avoidance of new debts its personal duty. While the FDP (2021, p. 8) argues that making new debts is also harming intergenerational justice as then future generations need to repay today's debts, others like The Greens stress that Germany cannot afford to not massively increase investments for climate change mitigation and supporting the transport sector even if that means making new debts (Deutscher Bundestag, 2022d, p. 929). The current government wants to invest but describes the financial situation as difficult after Corona and has the general strategy of not further indebting itself (SPD, The Greens and FDP, 2021, p. 158). The German government responded to other crises, like the Corona crisis or Russia's invasion of the Ukraine, by making new debts to finance an "[extensive aid packages] to mitigate the consequences of the pandemic"⁹⁴ (Deutscher Bundestag, 2020b, p. 25059) and a "special fund"⁹⁵ (Deutscher Bundestag, 2022f, p. 2665) for the German army. Yet, when it comes to the climate crisis, the FDP is strictly against taking new loans to notch up investments (Deutscher Bundestag, 2022d).

One of the most important infrastructure projects is, as mentioned before the Deutschlandtakt was already supported by the coalition of CDU/CSU and SPD (2018, p. 79) and has the support of the current government (SPD, The Greens and FDP, 2021, p. 49). Having been first presented in 2017, the Deutschlandtakt stands for an infrastructure concept of "coordinat[ing] local and long-distance transport by 2030 in order to create common arrival and departure times for all connections"⁹⁶ (ZDFheute, 2022, para. 36). This shall lead to a customer-oriented master plan which aligns connections throughout all of Germany to optimise transition times and reduce waiting and, hence, travel time as the association Pro Rail Alliance (Allianz pro Schiene, 2020, para. 17-19) elaborates. The association explains that considering the railroad infrastructure as a whole helps to identify where investments and infrastructure improvements are most efficient for improving the entire network (Allianz pro Schiene, 2020).

Another important point is the duration of application for infrastructure improvements as bureaucracy very often slows down the whole process even before being able to start the construction, which is why already the former government in 2018 foresaw "to

simplify procedures and digitalise planning and construction"⁹⁷ (CDU/CSU and SPD, 2018, p. 14). This goal still remains active as the current Federal Minister for Transport and Digital, Volker Wissing, demanded only last year in the German parliament that Germany "need[s] to become faster in planning, approving and building (...) [and that the government] will speed up the procedures and conclude a pact with the federal states"⁹⁸ (Deutscher Bundestag, 2022c, p. 664) to collaborate on this matter.

Which touches upon the next point: Germany as a federal republic needs to find a compromise between the national and federal governments to determine who is responsible for which kind of modernization and investment. It is often a balancing act to determine but also to make best use of the competences of the different polity levels as "according to [the] constitutional order, (...) the federal states are responsible for the financing and organisation of local transport. Nevertheless, the federal government supports the federal states in this task with funding"⁹⁹ (Deutscher Bundestag, 2019a, p. 11622) as once a member of the CDU/CSU fraction stressed in a parliamentary debate.

Night trains can provide an attractive alternative to carbon-intensive means of transport for long-distance journeys (500-1000 km) (Rüger and Matausch, 2020; EC, 2021b; BMK, 2022). Yet, in 2016, the German rail company DB "closed its City Night Line network of domestic and cross-border night trains" (EC, 2021b, p. 1) which led to a major decline of night trains in Europe according to the EC (2021b). This can be seen as a problem for Germany's planned decarbonization and in particular for sector-specific targets as, according to "[Andreas Scheuer, former German Federal Minister for Transport and Digital Infrastructure,] we cannot reach our climate targets [without a stronger role for trains]" (Council of the EU, 2020, para. 2). In that sense, Germany can learn a lot from its neighbor Austria whose national railroad company ÖBB is leading the European market when it comes to night trains (EC, 2021b, p. 21). At an opening ceremony for the new generation of its Nightjet train fleet, Austria's Climate Protection Minister Leonore Gewessler highlighted that "[c]ompared to a plane, a journey on the Nightjet is around 50 times more climate-friendly"¹⁰⁰ (BMK, 2022, para. 3) due to the CO₂ emission reduction.

When the DB shut down its night train network in 2016, this was not due to a lack of demand; the majority of trains were well booked and some even sold out (EC, 2021b, p. 144). According to the European Commission (2021b, p. 144), economic viability was named as one of the main reason for DB closing its City Night Line. However, Austria's ÖBB replaced some of the night train connections, which DB closed in 2016, and "which ÖBB has taken an active decision to operate on a commercial basis" (EC, 2021b, p. 21).

In Germany, night trains do not seem to be a prominent topic in the parliament or amongst the individual political parties. During the 19th legislative period, night trains were barely ever mentioned; the government did not completely rule out the idea of supporting the reintroduction of night trains run by German train operators but named as a "[prerequisite] an economically viable service arrangement"¹⁰¹ (Deutscher Bundestag, 2020a, p. 17421). During the election campaign for the current parliament, (The Greens) and the SPD mentioned night trains in connection with making "[r]ail travel within Europe (...) cheaper and more attractive than flying"¹⁰² (SPD, 2021, p. 11) to eventually "make [short-haul flights] superfluous by 2030 (...) ensuring fair competitive conditions between modes of transport that reflect ecological costs"¹⁰³ (The Greens, 2021, p. 37). This is also reflected in the coalition agreement where the current government targeted "to strengthen cross-border transport and develop night train services with the EU and its member states"¹⁰⁴ (SPD, The Greens and FDP, 2021, p. 49). This process could be seen to have started considering that one connection of the European Commission's selected "proposals for cross-border pilot services (...) [including a] new night train service Stockholm – Copenhagen – Berlin" (EC, 2023a, para. 1-3). However, this night train is run by the Swedish train operator SJ and DB is merely supporting the project as co-operator (EC, 2023a). Hence, there is still a lot that can be done to re-develop a German night train network.

3.3.3 Carbon Pricing

According to the Organisation for Economic Co-operation and Development (2008a, p. 32), pricing unwanted externalities can help to reflect the true cost of transport on a social and environmental scale. The OECD argues that carbon pricing in form of taxes or emissions trading is amongst the prioritised actions for governments to respond to climate change as those policies "can provide a dynamic incentive for innovation, technological change and driving private finance towards low-carbon, climate resilient investments (...) [while] generat[ing] revenues to ease tight government budgets and potentially provide new sources of public funds" (OECD, 2012, p. 74).

In chapter 2.3.1.1 Fiscal Measures and Carbon Pricing, a carbon tax and namely Sweden as the worldwide first country to introduce a CO₂ tax in 1991, which they raised over time to around €120 per ton CO₂ (Deutscher Bundestag, 2019c, p. 17038), was taken as a good practice example. The German government decided to implement carbon pricing in form of an emissions trading system which started in 2021 (Bundesregierung, 2020, para. 1; OECD, 2023). However, the discussion about carbon pricing in Germany already started earlier (Deutscher Bundestag, 2018b; 2019b; 2020b) and has still continued even after its implementation in 2021 (Deutscher Bundestag, 2021; 2022e).

Even though a carbon tax was taken as a good practice example for carbon pricing in this thesis, there is nothing wrong with Germany opting for an ETS as, according to the International Monetary Fund (2012), "[t]he choice between carbon taxes and cap-and-trade systems is less important than implementing one of them and getting the design details right" (IMF, 2012, p. 21). Germany's emissions trading starts with an illimited number of certificates at the price of €25 and after the initiation period, the number of certificates will be limited and further decreased year by year (Bundesregierung, 2020). That way, consumers and industries will be protected from price increases in the beginning and later on, the price per certificate will be determined through auction and the respective demand as explained on the official government website (Bundesregierung, 2020).

One of the criteria for a proper implementation which the IMF mentions, namely "comprehensive coverage of emissions" (IMF, 2012, p. 21), is not met by the German ETS as German carbon pricing only applies to "the heating and transport sectors"¹⁰⁵ (Bundesregierung, 2020, para. 1). The different political parties in the German parliament also indicate that there is still room for improvement. The FDP is worried that the carbon pricing could disturb competition and, therefore, advocates a stronger cooperation with the EU and the World Trade Organisation (WTO) to internationally keep a level playing field (FDP, 2021, p. 46). A similar argument followed the former government as it stated in its coalition agreement that it targets a "CO₂ pricing system which is globally oriented if possible, but in any case includes the G20 countries"¹⁰⁶ (CDU/CSU and SPD, 2018, p. 143). The AfD accuses the government of wanting to enrich itself with the revenue from CO₂ pricing (Deutscher Bundestag, 2019b, p. 11781), while the SPD stresses that a carbon tax needs to compensate the once suffering most under its consequences and to increase social acceptance (Deutscher Bundestag, 2019b, p. 11784). Hence, carbon pricing faced a lot of criticism prior to its introduction and continues to be questioned, one way or the other, by all parties in the German parliament.

The Greens' (2021) criticism, on the other hand, goes in another direction. The party argues that according to the German Federal Environment Agency, the CO₂ price needs to be increased as "the costs of the damage caused by the emission of one tonne of CO₂ are only very poorly priced in (...) [as] the emission of one tonne of CO₂ causes damages of around 195 euros"¹⁰⁷ (The Greens, 2021, p. 19). Thus, The Greens (2021) demand the carbon price to be increased. This demand did not make its way into the coalition agreement as there, the increased energy prices, which are a consequence to the war in the Ukraine (Deutscher Bundestag, 2022g, p. 3195), were taken as an excuse to "adhere to the previous BEHG^{xiv} price path for social reasons"¹⁰⁸ (SPD, The Greens and

^{xiv} Fuel Emissions Trading Act (*Brennstoffemissionshandelsgesetz*)

FDP, 2021, p. 63). The Swedish carbon price also underwent an increase over time to keep the tax socially acceptable (Government Offices of Sweden, 2023). The same is recommended by the OECD (2012, p. 74). Thus, this might indicate that Germany is on a good path. However, it seems to be difficult to find the right balance between social acceptance and effective climate protection (SPD, The Greens and FDP, 2021, p. 63).

3.4 Overall Analysis

Politics is always a trade-off between different issues and interests (Scorse, 2010, p. 69). Sometimes, the most pressing issue often wins, but often, it is the issue with the loudest lobby which receives politicians' attention; this is often the case for environmental harmful groups (Scorse, 2010, p. 70). For example, it is little surprising that cars play such an important role in Germany as it was invented there (Staples, 2019) and has been its most important industry for decades according to Prince and Dellheim (2018, p. 23). It was one of the industries which helped Germany to recover economically after the World Wars (ntv, 2019) and is still Germany's "largest industrial sector (...) list[ing] (...) around 20% of total German industry revenue [as of 2016]" (Prince and Dellheim, 2018, p. 23). It helps generate a lot of tax revenue and many jobs depend on it, more than 800,000 employees (Prince and Dellheim, 2018, p. 23; Deutscher Bundestag, 2022c, p. 665). Hence, for a long time, it was not perceived a problem that so many Germans, especially in rural areas where 60% of the population live, depend on their cars to stay mobile (Mont, Lehner and Heiskanen, 2014, p. 54; Deutscher Bundestag, 2022h, p. 3654; 2022j, p. 5161). This can also explain why some politicians prefer to see new technologies to replace combustion engine cars instead of reducing or completely abolishing the dependence on cars in Germany, seen as that way the jobs and tax revenue could be directly replaced (Deutscher Bundestag, 2022c, p. 665; 2022i, p. 4940).

As politicians and political parties are always worried about the next election or their possible re-election, short-term problems are often prioritised over long-term crisis (OECD, 2008a, p. 36). Other times, it can be a new crisis covering up already existing ones. When the Corona pandemic came up in 2020 (Deutscher Bundestag, 2020b), when Russia invaded the Ukraine in February 2022 (Deutscher Bundestag, 2022g, p. 3195), or when Germany struggles with hyper-inflation as a consequence on reliance on fossil fuels over decades (tagesschau, 2023, para. 1-3), then issues like climate change and a needed transformation of the transport sector might be relegated to the sidelines (Deutscher Bundestag, 2022g, p. 3196). That problem is further augmented by the imperceptibility of climate change. Greenhouse gases are translucent gases and while the consequences of climate change like heat waves, floods and storms can be noticed, it is difficult to say whether they are directly connected to climate change or just

a weather abnormality for most people even if science draws a clear picture (New, 2019). Hence, with climate change not being tangible and being a rather long-term problem, it traditionally has not gotten the attention and action needed to avoid the life-threatening effects scientists predict (OECD, 2008a, p. 36).

While some people tend to 'forget' the climate crisis due to its lack of tangibility, some simply neglect that there is a climate crisis. The AfD repeatedly questioned the existence of climate change openly stating that acknowledging climate change makes people "belong to a strange end-time sect that believes that the earth and the climate will soon perish"¹⁰⁹ (Deutscher Bundestag, 2019c, p. 17014), therefore, being seen as "climate deniers"¹¹⁰ (Deutscher Bundestag, 2022e, p. 1312) by other parties. The AfD openly stated that "it may be getting warmer, the sun is shining - that puts us all in a good mood - but we don't have a problem with it at all"¹¹¹ (Deutscher Bundestag, 2022e, p. 1312) in one of their parliamentary motions. Furthermore, they described themselves as wanting "to save the German taxpayer and not the world's climate"¹¹² (Deutscher Bundestag, 2022e, p. 1278). The party described the German climate policy as "interest politics in the proven panic mode"¹¹³ (Deutscher Bundestag, 2022e, p. 1262) and "ideological education of the people"¹¹⁴ (Deutscher Bundestag, 2022e, p. 1262). While the share of seats of the AfD in the German parliament is not high enough to block policies (bpb, 2021, para. 9) such statements from officially elected members of parliament can cause confusion among some voters.

For the 2021 election of the German Parliament, for the first time in history, "there were more eligible voters over the age of 50 than under the age of 50"¹¹⁵ (bpb, 2021, para. 1). As the effects of climate change are already starting to be noticeable (SPD, The Greens and FDP, 2021, pp. 39–40), also older generations are affected by the climate crises. However, they tend to perceive other long-term issues as less urgent as they will most likely not be there to live through two, three or even more degrees Celsius of average global warming. Hence, explanation of intergenerational or global justice are targeted to call upon their conscience for example by social movements like Fridays for Future, but social change tends to be very slow and climate protection still loses often when it comes to political trade-offs or voter decisions (OECD, 2008a, p. 36; BMUV, 2022, p. 47).

With Germany being a federal republic constituted of 16 federal states (bpb, 2021; deutschland.de, 2018, para. 1), there needs to be found a consensus between the federal and national government to solve certain issues. As the organisation of transport lies within the competences of the federal states, the German parliament cannot single-handedly decide to change something as drastic as, e.g. introducing a nation-wide Deutschlandticket (Deutscher Bundestag, 2022I). Hence, the Conference of Transport Ministers (*Verkehrsministerkonferenz*) had to discuss the issue at stake and a

compromise had to be found (Deutscher Bundestag, 2022l, p. 6946). The SPD once explained in the parliament how the decision-making power is contributed for the transport sector:

We must not forget that ticket prices are not a matter for the German Bundestag. In our federalism, things are regulated differently. A great deal of responsibility for this area lies with the federal states. I believe that this is why the pact with the federal states and the transport associations is important, (...) [as t]his is not just a matter for the German Bundestag, the German Chancellor or even the transport ministers.¹¹⁶ (Deutscher Bundestag, 2022j, p. 5171)

However, while the responsibility to plan the transport system lies with the competences of the federal states, the German national government is still expected to financially support the federal states which tends to lead to disagreements about the share the national government should contribute and what amount the federal states pay from their own budget (Deutscher Bundestag, 2019a). This has slowed down the negotiation for the successor of the 9-Euro-Ticket as "clarify financing issues"¹¹⁷ (Deutscher Bundestag, 2022l, p. 6946) takes several months.

4. Conclusion

4.1 Main Findings

Aiming at answering the question how the German government could make sustainable passenger transportation choices more attractive, this thesis collected good practice examples from other countries and then analysed what was discussed in the German Parliament between roughly 2018 and 2022. It can be said that there are already some promising initiatives within all three areas analysed. A combination of different measures is said to have the strongest affects and help with acceptance (OECD, 2008a, p. 34; OECD, 2008c, p. 49). This reflects also in the measures analysed in the previous chapter as none of them could provide an improvement for all three main factors influencing consumers' choice of mean of transport which are time, price and comfort (Lassen, 2010, p. 738; Zucchini, 2021, pp. 30–31; Berneiser, Becker and Loy, 2022, p. 7; Zimmer *et al.*, 2022, p. 90). The price can be improved in absolute terms through the Deutschlandticket and in relative terms through carbon pricing. Travel time and frequency benefit from infrastructure investments and the planned Deutschlandtakt. Comfort can be improved through the simplicity and nation-wide validity of the Deutschlandticket and improve frequency and reliability through the Deutschlandtakt and infrastructure investments.

Neither 9-Euro-Ticket nor the Deutschlandticket can be considered fare-free public transport (BMDV, 2023, para. 9) and there are members of parliament criticising €49 as too expensive (Deutscher Bundestag, 2022k, p. 5270), yet, it is a start and can potentially lead to completely abolishing fares in the future. The vast majority of Germans support the idea of introducing affordable or free public transport (BMUV, 2022; VDV, DB AG

and DB Regio AG, 2022), but there are also examples like public transport in Vienna indicating that factors other than price are at least as if not more important (Civity, 2019). The Deutschlandticket could lead to improvements for the factors price and comfort as it provides reduced fares and is nation-wide valid which increases simplicity and hence comfort as passengers do not have to worry about buying the right ticket.

Investments for infrastructure improvements in general and the ones supporting the introduction of the Deutschlandtakt can improve travel time and increase comfort as connections might be offered more frequently and more reliably which is perceived as positive (Deutschlandtakt, 2020; BMUV, 2022; VDV, DB AG and DB Regio AG, 2022). The frequency and the range of public transport connections are important steps to make sustainable means of transport like public transport more attractive (Civity, 2019). The German government is generally willing to do both (SPD, The Greens and FDP, 2021), but investment in railroad infrastructure have been relatively low compared to many other countries in Europe (ZDFheute, 2022; Deutscher Bundestag, 2022j). Major investments, especially in connection to the Deutschlandtakt, are demanded (Allianz pro Schiene, 2020, para. 22-25) and promised (SPD, The Greens and FDP, 2021, p. 48). Still, it is questionable whether it will be enough, in particular considering that Germany must catch up on missed opportunities due to low investment rates in the past (Deutscher Bundestag, 2022j, p. 5164).

The in 2021 introduced carbon pricing in Germany is too low to reflect the true cost which negative externalities of GHG emissions cause (HBS and VCD, 2019, p. 30; OECD, 2023). Carbon pricing only works "if the financial stimulus is strong enough" (OECD, 2008c, p. 13). The CO₂ pricing is only for few sectors (Bundesregierung, 2020) and contrary to what the IMF (2012, p. 21) recommends. The government struggles between keeping the burden on consumers reasonable and increasing the carbon price to a level which shows an effect especially considering the already high energy prices (SPD, The Greens and FDP, 2021, p. 63).

If the German government really wants to boost sustainable transport choices, it has to act. If other crises receive special financial means which includes making new debts (Deutscher Bundestag, 2020b, p. 25059; 2022f, p. 2665), then the same could be expected to be done to mitigate climate change. Especially as it is possible to carry out the promised support for the public transport system and the climate change mitigation without necessarily making new governmental debts. Instead, financial means currently used to subsidize the aviation sector and diesel amongst other harmful subsidies could be used for supporting public transport (HBS and VCD, 2019, p. 31; Deutscher Bundestag, 2022j, pp. 5162–5163). Doing what they promised, but implementing those

measures correctly by "getting the design details right" (IMF, 2012, p. 21) could already be a great start. Especially as around nine out of ten Germans agree that "urgent measures must be taken to adapt to the consequences" (BMUV, 2022, p. 14) of climate change.

Germany can profit a lot from the lessons learned from transport initiatives of its neighbours. However, one takeaway of this thesis is also that it can differ a lot from country to country what shows effect and which measures fail to achieve the intended outcome. The example of Tallinn and Vienna show that infrastructure improvement and modernization efforts can sometimes be enough to increase passenger numbers as in Vienna's case (Civity, 2019), while sometimes, the price needs to be adjusted or even put to zero to attract passengers as it was the case for Tallinn (Prince and Dellheim, 2018, p. 92). Therefore, Germany needs to find its own individual way. The next few years are crucial for climate change mitigation and the transport sector plays an essential role to stay in line with climate targets (IPCC, 2021). The current German government seems to acknowledge the urgency and has ambitious goals, but only time will show whether they keep their promises. However, time to act seems to be very limited according to the German Federal Minister for Digital and Transport, Volker Wissing, who said that "sustainable mobility must be easy, convenient and affordable, for everyone. (...) The important thing is that our investments have an effect quickly. One thing we do not have: time"¹¹⁸ (Deutscher Bundestag, 2022c, p. 664).

4.2 Limitations of the Thesis

Due to the scope of the thesis and the rather general research question, this thesis faced some limitation. Asking how the German government could make sustainable passenger transportation choices more attractive and analysing measures discussed and hurdles to their implementation opens a broad field of possibilities. On the one hand, measures that could be undertaken to boost sustainable transport are basically endless as there are many already existing good practice examples. Besides measures directly effecting the transport sectors, there are also indirect measures like carbon pricing or unconditional basic income or the so-called "climate money"¹¹⁹ (SPD, The Greens and FDP, 2021, p. 63) proposed by the three political parties currently forming the government. On the other hand, there is also the possibility of new technologies entering the market which would provide completely new ways of sustainable transport which is impossible to be predicted (FDP, 2021, p. 22).

An alternative to generally asking about possible government actions and measures would have been to ask about the very next necessary step to have a more precise research question. However, that is a question which is equally difficult to answer as

there are too many factors and future developments included to be able to provide a satisfying answer.

This thesis used minutes from parliamentary discussion as a method to discover hurdles to the implementation of measures to increase the attractiveness of sustainable means of transport. However, a huge portion of negotiations is done in committees which discuss all advantages and disadvantages as well as further details (Deutscher Bundestag, 2022I, p. 6946). This leads to the parliamentary minutes not being a very holistic source. Further research could include the consideration of other sources and political institutions to answer the same or a similar research question.

4.3 Opportunities for Further Research

One possibility for further research would be to consider different institutions beside the German parliament for answering the question what measures could be beneficial and what hinders their implementation. This could include analysing minutes, reports and recommendations from working groups like the “Conference of the Ministers of Transport”¹²⁰ (Deutscher Bundestag, 2022I, p. 6946), as well as committees like the “Committee on Transport and Digital Infrastructure (...) [, the] Committee on Food and Agriculture Committee on Environment, Nature Conservation and Nuclear Safety [or the] Committee on Tourism”¹²¹ (Deutscher Bundestag, 2019a, p. 11620).

Further research could also be done on the effects of federalism regarding measures for the transport sector and in general for climate action. Researching advantages and disadvantages of this decentralised system could give valuable insights about possible improvements.

Last but not least, the Deutschlandtakt aiming at modernising train infrastructure and time tables (Deutschlandtakt, 2020; Allianz pro Schiene, 2020) as well as the Deutschlandticket which will provide nation-wide local public transport for €49 per month (BMDV, 2023) will provide a lot of potential for further research. Questions to ask regarding those two initiatives could be on their effects on mobility behaviour of passengers in Germany and whether they cause or accompany a shift towards more sustainable means of transport.

5 References

Allianz pro Schiene, 2020. *Der Deutschlandtakt - Ein neues Eisenbahn-Zeitalter*. [online] Available at: <<https://www.allianz-pro-schiene.de/themen/infrastruktur/deutschlandtakt/>> [Accessed 4 January 2023].

Bakker, B.N., Hopmann, D.N., and Persson, M., 2015. Personality traits and party identification over time. *European Journal of Political Research*, [e-journal] 54(2), pp. 197–215. 10.1111/1475-6765.12070.

Berneiser, J. M., Becker, A. C. and Loy, L. S. (2022): Give Up Flights? Psychological Predictors of Intentions and Policy Support to Reduce Air Travel. *Front. Psychol.*, [e-journal] 13, pp. 1–18. <https://doi.org/10.3389/fpsyg.2022.926639>.

Bingler, J. A., 2022. *Climate risks, uncertainty and information failures in the low-carbon transition*. ScD. ETH Zurich. <https://doi.org/10.3929/ethz-b-000549469>.

Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie (BMK), 2022. *Ab 2023 im Einsatz: Interieur der neuen ÖBB-Nightjets präsentiert*. [online] Available at: <<https://infothek.bmk.gv.at/neue-generation-der-oebb-nightjets-praesentiert/>> [Accessed 17 November 2022].

Bundesministerium für Umwelt, Naturschutz, nukleare Sicherheit und Verbraucherschutz (BMUV), 2022. *Umweltbewusstsein in Deutschland 2020: Ergebnisse einer repräsentativen Bevölkerungsumfrage*. [pdf] Berlin: BMUV. Available at: <https://www.umweltbundesamt.de/sites/default/files/medien/479/publikationen/ubs_2020_0.pdf> [Accessed 25 April 2022].

Bundeszentrale für politische Bildung (bpb), 2021. *Die Bundestagswahl 2021*. [online] Available at: <<https://www.bpb.de/kurz-knapp/hintergrund-aktuell/340714/die-bundestagswahl-2021/>> [Accessed 15 March 2023].

Bundesregierung, 2020. *Grundlage für CO₂-Preis steht: Einstieg in CO₂-Bepreisung*. [online] Available at: <<https://www.bundesregierung.de/breg-de/themen/klimaschutz/nationaler-emissionshandel-1684508>> [Accessed 28 March 2023].

BÜNDNIS 90 / DIE GRÜNEN (The Greens), 2021. *Deutschland. Alles ist drin: Bundestagswahlprogramm 2021*. [pdf] BÜNDNIS 90 / DIE GRÜNEN. Available at: <https://cms.gruene.de/uploads/documents/Wahlprogramm-DIE-GRUENEN-Bundestagswahl-2021_barrierefrei.pdf> [Accessed 11 November 2022].

Christlich Demokratische Union (CDU), 2022. *Geschichte der CDU*. [online] Available at: <<https://www.cdu.de/ueber-uns/geschichte-der-cdu/geschichte>> [Accessed 15 December 2022].

Christlich Demokratische Union/ Christlich-Soziale Union (CDU/CSU), 2017. *Für ein Deutschland, in dem wir gut und gerne leben: Regierungsprogramm 2017 – 2021*. [pdf] Available at: <<https://archiv.cdu.de/system/tdf/media/dokumente/170703regierungsprogramm2017.pdf>> [Accessed 11 November 2022].

Christlich Demokratische Union/ Christlich-Soziale Union (CDU/CSU) and Sozialdemokratische Partei Deutschlands (SPD), 2018. *Ein neuer Aufbruch für Europa – Eine neue Dynamik für Deutschland – Ein neuer Zusammenhalt für unser Land: Koalitionsvertrag zwischen CDU, CSU und SPD – 19. Legislaturperiode*. [pdf] Berlin: Bundesregierung. Available at: <<https://www.bundesregierung.de/resource/blob/974430/847984/5b8bc23590d4cb2892b31c987ad672b7/2018-03-14-koalitionsvertrag-data.pdf?download=1>> [Accessed 26 December 2022]

Civity, 2019. *Das beste Angebot ist nicht der Preis*. [online] Available at: <<https://civity.de/de/news/2019/07/die-365-euro-jahreskarte-sorgt-nicht-f%C3%BCr-mehr-fahrg%C3%A4ste/>> [Accessed 29 March 2023].

Climate Action, 2015. *UNFCCC COP 21 Paris France - 2015 Paris Climate Conference*. [online] Available at: <<https://www.cop21paris.org/about/cop21>> [Accessed 19 March 2023].

Commission Regulation 2021/1119/EC of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').

Council of the European Union (Council of the EU), 2020. *European Year of Rail 2021 – Council seals designation*. [online] Available at: <<https://www.consilium.europa.eu/en/press/press-releases/2020/12/17/european-year-of-rail-2021-council-seals-designation/>> [Accessed 1 February 2023].

DeepL, 2023. *DeepL Translate – Der präziseste Übersetzer der Welt*. [online] Available at: <<https://www.deepl.com/translator>> [Accessed 7 March 2023].

Deutscher Bundestag, 2018a. *Plenarprotokoll 19/14: Stenografischer Bericht 14. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19014.pdf>> [Accessed 25 March 2023].

Deutscher Bundestag, 2018b. *Plenarprotokoll 19/28: Stenografischer Bericht 28. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19028.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2019a. *Plenarprotokoll 19/96: Stenografischer Bericht 96. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19096.pdf>> [9 March 2023].

Deutscher Bundestag, 2019b. *Plenarprotokoll 19/98: Stenografischer Bericht 98. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19098.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2019c. *Plenarprotokoll 19/136: Stenografischer Bericht 136. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19136.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2020a. *Plenarprotokoll 19/139: Stenografischer Bericht 139. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19139.pdf>> [Accessed 26 March 2023].

Deutscher Bundestag, 2020b. *Plenarprotokoll 19/199: Stenografischer Bericht 199. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19199.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2021. *Plenarprotokoll 19/208: Stenografischer Bericht 208. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/19/19208.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2022a. *Bundestag beschließt das Neun-Euro-Ticket*. [online] Available at: <<https://www.bundestag.de/dokumente/textarchiv/2022/kw20-de-neun-euro-ticket-894660>> [Accessed 19 March 2023].

Deutscher Bundestag, 2022b. *Dokumentations- und Informationssystem für Parlamentsmaterialien (DIP)*. [online] Available at: <https://dip.bundestag.de/suche?f.wahlperiode=20&f.wahlperiode=19&f.typ=Dokument&f.herausgeber_dokumentart=Bundestag-Plenarprotokoll&rows=25&sort=datum_auf> [Accessed 14 November 2022].

Deutscher Bundestag, 2022c. *Plenarprotokoll 20/11: Stenografischer Bericht 11. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20011.pdf>> [Accessed 11 March 2023].

Deutscher Bundestag, 2022d. *Plenarprotokoll 20/14: Stenografischer Bericht 14. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20014.pdf>> [Accessed 13 March 2023].

Deutscher Bundestag, 2022e. *Plenarprotokoll 20/18: Stenografischer Bericht 18. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20018.pdf>> [Accessed 28 March 2023].

Deutscher Bundestag, 2022f. *Plenarprotokoll 20/30: Stenografischer Bericht 30. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20030.pdf>> [Accessed 29 March 2023].

Deutscher Bundestag, 2022g. *Plenarprotokoll 20/34: Stenografischer Bericht 34. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20034.pdf>> [Accessed 18 March 2023].

Deutscher Bundestag, 2022h. *Plenarprotokoll 20/37: Stenografischer Bericht 37. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20037.pdf>> [Accessed 18 March 2023].

Deutscher Bundestag, 2022i. *Plenarprotokoll 20/47 Stenografischer Bericht 47. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20047.pdf>> [22 March 2023].

Deutscher Bundestag, 2022j. *Plenarprotokoll 20/48: Stenografischer Bericht 48. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20048.pdf>> [22 March 2023].

Deutscher Bundestag, 2022k. *Plenarprotokoll 20/49: Stenografischer Bericht 49. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20049.pdf>> [22 March 2023].

Deutscher Bundestag, 2022l. *Plenarprotokoll 20/62: Stenografischer Bericht 62. Sitzung*. [pdf] Berlin: Deutscher Bundestag. Available at: <<https://dserver.bundestag.de/btp/20/20062.pdf>> [Accessed 23 March 2023].

deutschland.de, 2018. *Federal Republic of Germany*. [online] Available at: <<https://www.deutschland.de/en/topic/politics/federal-republic-of-germany>> [Accessed 29 March 2023].

Deutschlandtakt, 2020. *Konzept zum Deutschlandtakt: Erst der Fahrplan, dann die Infrastruktur*. [online] Available at: <<https://www.deutschlandtakt.de/konzept/>> [Accessed 23 March 2023].

DIE LINKE, n.d. *Welcome: DIE LINKE. English pages*. [online] Available at: <<https://en.die-linke.de/welcome/>> [Accessed 24 March 2023].

Deutsche Welle (DW), 2020. *Luxembourg makes public transport free*. [online] Available at: <<https://www.dw.com/en/luxembourg-makes-public-transport-free/a-52582998>> [Accessed 9 March 2023].

European Commission (EC), 2019. *A Sustainable Europe by 2030*. [online] Available at: <https://ec.europa.eu/info/publications/reflection-paper-towards-sustainable-europe-2030_en> [Accessed 16 September 2022].

European Commission (EC), 2021a. *Boosting long-distance and cross-border passenger rail*. [pdf] Luxembourg. Available at: <https://ec.europa.eu/commission/presscorner/detail/en/fs_21_6778> [Accessed 1 February 2023].

European Commission (EC), 2021b. *Long-distance cross-border passenger rail services: final report*. [online] Luxembourg: Publications Office of the European Union. <https://data.europa.eu/doi/10.2832/019365>.

European Commission (EC), 2023a. *Connecting Europe by train: 10 EU pilot services to boost cross-border rail*. [online] Available at: <https://transport.ec.europa.eu/news/connecting-europe-train-10-eu-pilot-services-boost-cross-border-rail-2023-01-31_en> [Accessed 1 February 2023].

European Commission (EC), 2023b. *Providing efficient, safe and environmentally friendly transport*. [online] Available at: <https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/transport-and-green-deal_en> [Accessed 1 February 2023].

European Environment Agency (EEA), 2021. *Transport and environment report 2020: Train or plane?* [online] Available at: <<https://www.eea.europa.eu/publications/transport-and-environment-report-2020>> [Accessed 25 January 2023].

Eurostat, 2022. *GDP per capita, consumption per capita and price level indices*. [online] Available at: <https://ec.europa.eu/eurostat/statistics-explained/index.php?title=GDP_per_capita,_consumption_per_capita_and_price_level_indices> [Accessed 16 March 2023].

Eurostat, United Nations Economic Commission for Europe (UNECE) and International Transport Forum (ITF), 2019. *Glossar für die Verkehrsstatistik*. [e-book] Luxembourg: Publications Office of the European Union. Available at: <<https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-GQ-19-004?inheritRedirect=true&redirect=%2Feurostat%2Fpublications%2Fmanuals-and-guidelines>> [Accessed 29 March 2023].

Freie Demokratische Partei (FDP), 2021. *Nie gab es mehr zu tun: Wahlprogramm der Freien Demokraten*. [pdf] Berlin: Freie Demokraten. Available at: <https://www.fdp.de/sites/default/files/2021-08/FDP_BTW2021_Wahlprogramm_1.pdf> [Accessed 11 November 2022].

Government Offices of Sweden, 2023. *Sweden's carbon tax*. [online] Available at: <<https://www.government.se/government-policy/swedens-carbon-tax/swedens-carbon-tax/>> [Accessed 28 March 2023].

Hagedorn, G., Loew, T., Seneviratne, S. I., Lucht, W., Beck, M., Hesse, J., Knutti, R., Quaschnig, V., Schleimer, J., Mattauch, L., Breyer, C., Hübener, H., Kirchengast, G., Chodura, A., Clausen, J., Creutzig, F., Darbi, M., Daub, C., Ekardt, F., Göpel, M., Hardt, J. N., Hertin, J., Hickler, T., Köhncke, A., Köster, S., Krohmer, J., Kromp-Kolb, H., Leinfelder, R., Mederake, L., Neuhaus, M., Rahmstorf, S., Schmidt, C., Schneider, C., Schneider, G., Seppelt, R., Spindler, U., Springmann, M., Staab, K., Stocker, T. F., Steininger, K., Hirschhausen, E. von, Winter, S., Wittau, M.; Zens, J., 2019. The concerns of the young protesters are justified: A statement by Scientists for Future concerning the protests for more climate protection. *GAIA - Ecological Perspectives for Science and Society*, [e-journal] 28(2), pp. 79-87. <https://doi.org/10.14512/gaia.28.2.3>.

Hamann, K., Baumann, A. and Löschinger, D., 2016. *Psychologie im Umweltschutz: Handbuch zur Förderung nachhaltigen Handelns*. [e-book] Munich: oekom verlag. Available through: Rhein-Waal University Library <<https://content-select-com.ezproxy2.hsrw.eu/de/portal/media/view/56d6acd4-8ac8-4bb9-ac57-76b8b0dd2d03>> [Accessed 18 May 2022].

Hansen, J., Kharecha, P., Sato, M., Masson-Delmotte, V., Ackerman, F., Beerling, D. J., Hearty, P. J., Hoegh-Guldberg, O., Hsu, S., Parmesan, C., Rockstrom, J., Rohling, E. J., Sachs, J., Smith, P., Steffen, K., Van Susteren, L., von Schuckmann, K., Zachos, J. C., 2013. Assessing 'Dangerous Climate Change': Required Reduction of Carbon Emissions to Protect Young People, Future Generations and Nature. *PLoS ONE*, [e-journal] 8(12), pp. 1-26. <https://doi.org/10.1371/journal.pone.0081648>.

Heinrich Böll Stiftung (HBS) and Verkehrsclub Deutschland e.V. (VCD), 2019. *Mobilitätsatlas 2019 - Daten und Fakten für die Verkehrswende*. [pdf] Berlin: Atlas Manufaktur. Available at: <https://www.boell.de/sites/default/files/2022-01/Boell_Mobilitaetsatlas2019_II_V01_kommentierbar.pdf> [Accessed 13 November 2022].

Intergovernmental Panel on Climate Change (IPCC), 2021. *Climate Change 2021: The Physical Science Basis*. [pdf] Cambridge: Cambridge University Press. Available at: <https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf> [Accessed 21 September 2022].

International Monetary Fund (IMF), 2012. *Fiscal policy to mitigate climate change: a guide for policymakers*. [e-book] Washington, D.C.: International Monetary Fund. Available through: Rhine-Waal University of Applied Science <<http://ebookcentral.proquest.com/lib/hrw/detail.action?docID=1606691>> [Accessed 20 April 2022].

KlimaTicket, 2022. *Welcome to the mobility of the future*. [online] Available at: <<https://www.klimaticket.at/en/#wann-kommt-das-klimaticket>> [Accessed 18 November 2022].

Landes, X., Unger, C., Andsbjerg, K., Frank, K. and Wiking, M. eds., 2015. *Sustainable Happiness. Why Waste Prevention May Lead to an Increase in Quality of Life*. [pdf] Copenhagen: The Happiness Research Institute. Available at: <https://www.happinessresearchinstitute.com/_files/ugd/928487_786775b3635a4b9cb7a359459019b6c8.pdf> [Accessed 16 September 2022].

Lassen, C., 2010. Environmentalist in Business Class: An Analysis of Air Travel and Environmental Attitude. *Transport Reviews*, [e-journal] 30 (6), pp. 733–751. <https://doi.org/10.1080/01441641003736556>.

Liimatainen, H., Pöllänen, M., and Viri, R., 2018. CO₂ reduction costs and benefits in transport: socio-technical scenarios. *European Journal of Futures Research*, [e-journal] 6(1), pp. 1–12. <https://doi.org/10.1186/s40309-018-0151-y>.

Mankiw, N. G., 2008. *Principles of Microeconomics*. 5th ed. Mason, OH: South-Western Cengage Learning.

Michalek, G.; Meran, G.; Schwarze, R.; Yildiz, Ö., 2016. Nudging as a new "soft" policy tool: An assessment of the definitional scope of nudges, practical implementation possibilities and their effectiveness. [e-journal] *Economics Discussion Papers*, No. 2016-18. Kiel: Kiel Institute for the World Economy (IfW). Available at: <http://hdl.handle.net/10419/130749> [Accessed 4 April 2023].

Mickwitz, P., 2003. A framework for evaluating environmental policy instruments: context and key concepts. [e-journal] *Evaluation*, 9(4), pp. 415–436. <https://doi.org/10.1177/135638900300900404>

Mont, O., Lehner, M., and Heiskanen, E., 2014. *Nudging. A tool for sustainable behaviour?* [online] Stockholm: Swedish Environmental Protection Agency. Available at: https://www.researchgate.net/publication/271211332_Nudging_A_tool_for_sustainable_behaviour [Accessed 18 October 2022].

New, M., 2019. *How much of climate change is natural? How much is man-made?* [online] Phys.org. Available at: <https://phys.org/news/2019-09-climate-natural-man-made.html> [Accessed 4 April 2023].

Nationale Plattform Zukunft der Mobilität (NPM), 2020. *Schwerpunkt-Roadmap Nachhaltige Mobilität. Standards und Normen*. [pdf] Berlin: Bundesministerium für Verkehr und digitale Infrastruktur. Available at: <https://www.plattform-zukunft-mobilitaet.de/wp-content/uploads/2020/10/20201020-NPM-Bericht-AG6-RoadmapNachhaltigeMobilitaet-V2-wrz.pdf> [Accessed 9 January 2023].

ntv, 2019. *70 Jahre Bundesrepublik: Wie Autos das Wirtschaftswunder in Fahrt brachten*. [online] Available at: <https://www.n-tv.de/auto/Wie-Autos-das-Wirtschaftswunder-in-Fahrt-brachten-article21023696.html> [Accessed 4 April 2023].

Organisation for Economic Co-operation and Development (OECD), 2008a. *OECD Environmental Outlook to 2030*. [e-book] Paris: OECD Publishing. Available through: Rhine-Waal University of Applied Science <https://doi-org.ezproxy2.hsrw.eu/10.1787/9789264040519-en> [Accessed 3 February 2023].

Organisation for Economic Co-operation and Development (OECD), 2008b. *OECD Glossary of Statistical Terms*. [e-book] Paris: OECD Publishing. <https://doi.org/10.1787/9789264055087-en>

Organisation for Economic Co-operation and Development (OECD), 2008c. *Promoting Sustainable Consumption: Good Practices in OECD Countries*. [pdf] OECD. Available at: <https://www.oecd.org/greengrowth/40317373.pdf> [Accessed 8 October 2022].

Organisation for Economic Co-operation and Development (OECD), 2012. *OECD environmental outlook to 2050: The consequences of inaction*. [e-book] Paris: OECD Publishing. <https://doi.org/10.1787/1999155x>.

Organisation for Economic Co-operation and Development (OECD), 2023. *OECD Inventory of Support Measures for Fossil Fuels: Country Notes*. [online] Paris: OECD Publishing. Available at: <<https://www.oecd-ilibrary.org/content/publication/5a3efe65-en>> [Accessed 12 March 2023].

Prince, J. and Dellheim, J., 2018. *Free Public Transit: And Why We Don't Pay to Ride Elevators*. [e-book] Montreal: Black Rose Books. Available through: Rhine-Waal University of Applied Science <<http://ebookcentral.proquest.com/lib/hrw/detail.action?docID=6520016>> [Accessed 9 March 2023].

Prisner, E., 2018. An Attempt to Position the German Political Parties on a Tree for 2013 and 2017. *Statistics, Politics and Policy*, [e-journal] 9(1), pp.31–56. <https://doi.org/10.1515/spp-2018-0001>.

Rüger, B., and Matausch, P., 2020. High-Speed Overnight Trains-Potential Opportunities and Customer Requirements. In: M. Marinov and J. Piip, eds. 2020. *Sustainable Rail Transport*. Cham: Springer, pp. 257–273. <https://doi.org/10.1007/978-3-030-19519-9>.

Sanneh, E. S., 2018. Systems thinking for sustainable development. Climate change and the environment. [e-book] Cham: Springer International Publishing AG. Available through: Rhine-Waal University of Applied Sciences <<https://link.springer.com.ezproxy2.hsrw.eu/content/pdf/10.1007/978-3-319-70585-9.pdf>> [Accessed 21 September 2022].

Scorse, J., 2010. *What Environmentalists Need to Know About Economics*. [e-book] New York: Palgrave Macmillan. <https://doi.org/10.1057/9780230114043>.

Sozialdemokratische Partei Deutschlands (SPD), 2017. *Zeit für mehr Gerechtigkeit: Unser Regierungsprogramm für Deutschland*. [pdf] Berlin: SPD-Parteivorstand. Available at: <https://www.spd.de/fileadmin/Dokumente/Regierungsprogramm/SPD_Regierungsprogramm_BTW_2017_A5_RZ_WEB.pdf> [Accessed 22 December 2022].

Sozialdemokratische Partei Deutschlands (SPD), 2021. *Aus Respekt vor deiner Zukunft: Das Zukunftsprogramm der SPD*. [pdf] SPD-Parteivorstand. Available at: <<https://www.spd.de/fileadmin/Dokumente/Beschluesse/Programm/SPD-Zukunftsprogramm.pdf>> [Accessed 11 November 2022].

Sozialdemokratischen Partei Deutschlands (SPD), BÜNDNIS 90 / DIE GRÜNEN (The Greens) and Freien Demokraten (FDP), 2021. *Mehr Fortschritt wagen: Bündnis für Freiheit, Gerechtigkeit und Nachhaltigkeit*. [pdf] Die Bundesregierung. Available at: <<https://www.bundesregierung.de/resource/blob/974430/1990812/04221173eef9a6720059cc353d759a2b/2021-12-10-koav2021-data.pdf?download=1>> [Accessed 11 November 2022].

Staples, S., 2019. *How Germany became the country of cars*. [online] Available at: <<https://www.bbc.com/travel/article/20190821-how-germany-became-the-country-of-cars>> [Accessed 4 April 2023].

Switzerland Tourism, 2022. *Public transport: facts about the grand tour of Switzerland*. [online] Available at: <<https://www.myswitzerland.com/en/experiences/experience-tour/grand-tour-of-switzerland/facts-about-the-grand-tour-of-switzerland/public-transport/>> [Accessed 16 December 2022].

tagesschau, 2023. *Inflationsrate sinkt im Dezember auf 8,6 Prozent*. [online]. Available at: <<https://www.tagesschau.de/wirtschaft/inflation-statistikamt-101.html>> [Accessed 4 February 2023].

United Nations (UN), n.d. *The Paris Agreement*. [online] Available at: <<https://www.un.org/en/climatechange/paris-agreement>> [Accessed 19 March 2023].

United Nations (UN), 1997. *Glossary of environment statistics*. [pdf] New York: United Nations publications. Available at: <https://unstats.un.org/unsd/publication/SeriesF/SeriesF_67E.pdf> [Accessed 16 September 2022].

Verkehrsclub Deutschland e.V. (VCD), 2021. *Verkehrswende oder Mobilitätswende – was ist der Unterschied?* [online] Available at: <<https://www.vcd.org/artikel/verkehrswende-definition/>> [Accessed 29 March 2023].

Verband Deutscher Verkehrsunternehmen e. V. (VDV), Deutsche Bahn AG (DB AG) and Deutsche Bahn Regio AG (DB Regio AG), 2022. *Deutschland steigt ein: Abschlussbericht zur bundesweiten Marktforschung*. [pdf] VDV and DB. Available at: <https://www.vdv.de/deutsche-bahn_vdv_9-euro-ticket-abschlussbericht.pdf?forced=true> [Accessed 26 March 2022].

Vedung, E., 1998. Policy Instruments: Typologies and Theories. In: M.L. Bemelmans-Videc, R.C. Rist, and E. Vedung, eds. 1998. *Carrots, Sticks and Sermons: Policy Instruments and Their Evaluation*. New Brunswick, NJ: Transaction Publishers, pp. 21–58.

Yılmaz, D., and Çetin, I., 2017. Infrastructure and Growth: Comparing Latin America and East Asia. In: R.C. Das, ed. 2017. *Handbook of research on economic, financial, and industrial impacts on infrastructure development*. Hershey, PA: IGI Global Business Science Reference, pp. 114–142. 10.4018/978-1-5225-2361-1.ch006.

Zweites Deutsches Fernsehen (ZDF), 2022. *Interview Verkehrsexperte Andreas Knie: Was kommt nach dem 9-Euro-Ticket?* [online] Available at: <<https://www.zdf.de/nachrichten/wirtschaft/9-euro-ticket-nachfolge-andreas-knie-verkehr-bahn-100.html>> [Accessed 27 March 2023].

Zweites Deutsches Fernsehen heute (ZDFheute), 2022. *Verkehrswende mit Verspätung: Warum es im Bahnverkehr stockt*. [online] Available at: <<https://zdfheute-stories-scroll.zdf.de/bahn-verspaetung-fernverkehr/index.html#>> [Accessed 27 March 2023].

Zimmer, K., Ferschke, V., Keck, E., Scheiber, N. and Woll, J., 2022. Klimaschutz und Luftverkehr – Bewusstsein, Flugkonsum und Kompensationsbereitschaft der Generationen Y und Z. *Zeitschrift für Tourismuswissenschaft*, [e-journal] 14(1), pp. 88–103. <https://doi.org/10.1515/tw-2021-0034>.

Zucchini, E., 2021. *Students' holiday air travel behaviors: a flyer's dilemma*, Master of Science, Uppsala Universitet. Available at: <<https://uu.diva-portal.org/smash/get/diva2:1561989/FULLTEXT01.pdf>> [Accessed 9 October 2022].

6 Annex

Original quotes in German which were translated to English throughout the thesis:

¹ Translated on p. 2: "*Der menschengemachte Klimawandel ist eine der größten Herausforderungen unserer Zeit*" (SPD, The Greens and FDP, 2021, p. 54).

² Translated on p. 2: "*Wir haben in den vergangenen Jahren mit Hitzesommern, Waldsterben, Überschwemmungen und Dürren die Klimakrise bereits zu spüren bekommen*" (The Greens, 2021, p. 12).

³ Translated on p. 3: "*Der Verkehr ist inzwischen für rund ein Fünftel der deutschen Treibhausgasemissionen verantwortlich, über 90 Prozent davon kommen aus dem Straßenverkehr. Im Gegensatz zu den anderen Sektoren sind die Emissionen des Verkehrs seit 1990 praktisch nicht gesunken*" (VCD, 2021, para. 1).

⁴ Translated on p. 4: "STEUERN IN DIE FALSCHER RICHTUNG
Jährliche umweltschädliche Subventionen in Deutschland, Milliarden Euro
keine Energiesteuer auf Kerosin 7,1
keine Mehrwertsteuer auf internationale Flüge 4,8
niedrige Besteuerung von Diesel 7,4
Entfernungspauschale 5,1
Steuervorteile bei privat genutzten Dienstwagen 3,1
Subvention von Biokraftstoffen, sonstiges 1,2" (HBS and VCD, 2019, p. 31).

⁵ Translated on p. 8: "*Also statt, wie bisher üblich, bei einer Strecke erst die Weichen auszutauschen, in einem halben Jahr die Oberleitung zu erneuern, im folgenden Jahr die Schwellen und dann am Bahnhof zu arbeiten, soll künftig alles auf einmal erledigt werden, in einem einzigen Zeitfenster, inklusive Modernisierung der Stellwerke*" (Deutscher Bundestag, 2022, p. 6937).

⁶ Translated on p. 8: "*Vor vier Jahren zog die Alternative für Deutschland (AfD) erstmals in den deutschen Bundestag ein – und wurde mit 12,6 Prozent drittstärkste Kraft. Laut dem vorläufigen amtlichen Endergebnis liegt sie nun bei 10,3 Prozent. (...) Über Kritik an der Asyl- und Flüchtlingspolitik hat sie sich zunehmend als rechtspopulistische Protestpartei profiliert*" (bpb, 2021, para. 9).

⁷ Translated on p. 9: "*Im März 2020 stufte das Bundesamt für Verfassungsschutz die innerparteiliche, laut AfD mittlerweile aufgelöste Bewegung 'Der Flügel' als 'erwiesen rechtsextremistische Bestrebung' ein*" (bpb, 2021, para. 9).

⁸ Translated on p. 9: "*Bei den übrigen vier Gruppen werden alle Maßnahmen von einer breiten Mehrheit als eher oder sehr wichtig angesehen*" (BMUV, 2022, p. 61).

⁹ Translated on p. 9: "*Klimapolitische Maßnahmen werden von den Ablehnenden generell als weniger wichtig angesehen, was vermutlich im Sinne einer mangelnden Akzeptanz gesehen werden kann*" (BMUV, 2022, p. 61).

¹⁰ Translated on p. 10: "*Insbesondere betrifft dies Maßnahmen, die mit Kosten oder Einschränkungen verbunden sind (Produkte verbieten, Anforderungen erhöhen, Produkte verteuern). Die Skeptischen stufen die Wichtigkeit bei allen Maßnahmen am zweitniedrigsten ein. Auch sie bewerten insbesondere Maßnahmen, die mit Kosten oder Einschränkungen verbunden sind, häufiger als (eher) unwichtig*" (BMUV, 2022, p. 61).

¹¹ Translated on p. 10: "*Für die notwendigen Veränderungsprozesse werben wir um Akzeptanz und werden unsere Ziele dialogorientiert umsetzen und die Maßnahmen regelmäßig überprüfen*" (SPD, The Greens and FDP, 2021, p. 48).

¹² Translated on p. 12: "*Diese Arbeit zeigt, dass drei grundlegende Voraussetzungen erfüllt sein müssen, damit Preissignale funktionieren: Relevante Informationen müssen (1) verfügbar, (2) verständlich und (3) verarbeitet sein*" (Bingler, 2022, p. VIII).

¹³ Translated on p. 12: "*Die Klimakosten des Verkehrs betragen 2017 in Deutschland rund 27 Milliarden Euro. Die zugrunde liegenden Schäden vor allem durch die Erderwärmung werden ebenfalls auf der Basis von Kostensätzen in Geld umgerechnet. Grundlage ist hier die 'Methodenkonvention zur Schätzung von Umweltkosten' des Umweltbundesamtes. Für Klimafolgeschäden empfiehlt sie pro Tonne CO₂-Äquivalent einen Schadenskostensatz von 180 Euro*" (HBS and VCD, 2019, p. 30).

¹⁴ Translated on p. 15: "*Nachtzüge sind in ganz Europa im Aufwind, denn sie sind die klimafreundliche Alternative zum Kurzstreckenflug*" (BMK, 2022, para. 3).

¹⁵ Translated on p. 17: "*Für eine ‚regionale Mobilitätsgarantie‘ ist die Schweiz ein gutes Vorbild*" (HBS and VCD, 2019, p. 20).

¹⁶ Translated on p. 17: "*Dabei wird deutlich: Die wesentlichen Treiber des verkehrspolitischen Erfolgs des 'Wiener Weges' liegen in einer [Öffentlicher Verkehr (ÖV)]-freundlichen Siedlungsstruktur, einem sehr attraktiven [Öffentlicher Personennahverkehr (ÖPNV)]-Angebot und einer restriktiven Parkraumbewirtschaftung. Neben den Einnahmen aus dieser Parkraumbewirtschaftung trägt auch eine gesonderte Arbeitgeberabgabe einen signifikanten Anteil zur Finanzierung der ‚Ö s‘ in Wien bei*" (Civity, 2019, para. 2).

¹⁷ Translated on p. 17: "*Es wurde deutlich, dass Aspekte wie Preis, Reisezeit und Reisekomfort eine wichtigere Rolle als Umweltschutz spielen (Zucchini 2021, S. 27; Lassen 2010, S. 738)*" (Zimmer et al., 2022, p. 90).

¹⁸ Translated on p. 18: "*Damit die Menschen ein so vielfältiges Mobilitätsangebot annehmen, müssen sie so viel wie möglich darüber erfahren, was es bietet und wie man es nutzen kann*" (HBS and VCD, 2019, p. 14).

¹⁹ Translated on p. 19: "*Deutschland setzt sich gemäß dem Pariser Klimaschutzabkommen dafür ein, die Erderwärmung auf deutlich unter zwei Grad Celsius und möglichst auf 1,5 Grad Celsius zu begrenzen und spätestens in der zweiten Hälfte des Jahrhunderts weltweit weitgehende Treibhausgasneutralität zu erreichen*" (CDU/CSU and SPD, 2018, p. 142).

²⁰ Translated on p. 19: "*Vor diesem Hintergrund entstand überall in Deutschland eine neue christliche Partei: die Christlich Demokratische Union*" (CDU, 2022, para. 1).

²¹ Translated on p. 19: "*Die bayerische Schwesterpartei Christlich-Soziale Union (CSU) ist seit 1949 mit der CDU im Deutschen Bundestag in einer Fraktionsgemeinschaft verbunden*" (CDU, 2022, para. 9).

²² Translated on p. 19: "*Unsere Wurzeln sind christlich-sozial, liberal und konservativ*" (CDU/CSU, 2017, p. 7).

²³ Translated on p. 19: "*Sicherheit und Stabilität sind Voraussetzung für jede Art von gutem Leben und wirtschaftlichen Erfolg*" (CDU/CSU, 2017, pp. 6–7).

²⁴ Translated on p. 19: "*Gutes Klima auch für morgen*" (CDU/CSU, 2017, p. 67).

²⁵ Translated on p. 20: "*Individuelle Mobilität muss genauso verfügbar sein wie die Nutzung des Öffentlichen Personennahverkehrs oder der Bahn*" (CDU/CSU, 2017, p. 46).

²⁶ Translated on p. 20: "*Die Sozialdemokratische Partei Deutschlands (SPD) hat die Union als stärkste Fraktion im Bundestag abgelöst*" (bpb, 2021, para. 8).

²⁷ Translated on p. 20: "*Es ist Zeit für mehr Gerechtigkeit!*" (SPD, 2017, p. 6).

²⁸ Translated on p. 20: "*Mobilität muss bezahlbar und umweltfreundlich sein*" (SPD, 2017, p. 58).

²⁹ Translated on p. 21: "*Hiervon wird abhängen, ob wir auch in Zukunft die gesamte Wertschöpfung des Automobils abdecken können*" (SPD, 2017, p. 29).

³⁰ Translated on p. 21: "*Gleichzeitig ist die Modernisierung des Verkehrs entscheidend dafür, dass Deutschland seine Klimaemissionsziele erreicht*" (SPD, 2017, p. 58).

³¹ Translated on p. 21: "*Für uns steht dabei nicht die Maximierung des Gewinns, sondern die Maximierung des Schienenverkehrs in Deutschland im Vordergrund*" (SPD, 2017, p. 59).

- ³² Translated on p. 21: "*Pünktlichkeit, guter Service und hohe Qualität müssen das Markenzeichen der Eisenbahnen sein. Die Deutsche Bahn muss im Interesse der Kundinnen und Kunden geführt werden*" (SPD, 2017, p. 59).
- ³³ Translated on p. 21: "*Unser Ziel ist ein nachhaltiges und inklusives Wachstum, dessen Erträge allen zugutekommen*" (CDU/CSU and SPD, 2018, p. 4).
- ³⁴ Translated on p. 21: "*Damit schaffen wir die Grundlagen dafür, dass die Sektorziele 2030 erreicht werden*" (CDU/CSU and SPD, 2018, p. 143).
- ³⁵ Translated on p. 21: "*Wir wollen die Klimaziele von Paris erreichen und dabei soziale Belange berücksichtigen, die Wettbewerbsfähigkeit der Industrie gewährleisten und bezahlbare Mobilität sicherstellen*" (CDU/CSU and SPD, 2018, p. 75).
- ³⁶ Translated on p. 21: "*Wir wollen deshalb für alle Menschen in Deutschland eine moderne, saubere, barrierefreie und bezahlbare Mobilität organisieren und dabei die gesellschaftlichen Herausforderungen, wie den demografischen Wandel, die Urbanisierung, Anbindung ländlicher Räume und Globalisierung, meistern*" (CDU/CSU and SPD, 2018, p. 74).
- ³⁷ Translated on p. 22: "*Stärkung Schiene mit Schienenpakt 2030 und Elektrifizierung von 70 Prozent des Schienennetzes bis 2025*" (CDU/CSU and SPD, 2018, p. 14).
- ³⁸ Translated on p. 22: "*Pünktlichkeit, guter Service und hohe Qualität müssen das Markenzeichen der Eisenbahnen in Deutschland sein*" (CDU/CSU and SPD, 2018, p. 77; SPD, 2017, p. 59).
- ³⁹ Translated on p. 22: "*Dazu gehören die Umsetzung des Luftverkehrskonzeptes, die Entlastung unserer Flughäfen und Luftfahrtunternehmen von einseitigen nationalen Kosten*" (CDU/CSU and SPD, 2018, p. 80).
- ⁴⁰ Translated on p. 22: "*Wir übernehmen Verantwortung in einer Zeit, in der die Corona-Pandemie das Land weiter stark belastet. Sie bedeutet für viele großes Leid, geht einher mit existenziellen Sorgen und verlangt allen erhebliche Einschränkungen ab*" (SPD, The Greens and FDP, 2021, p. 4) .
- ⁴¹ Translated on p. 23: "*Gerade im Wald werden die Folgen der Klimakrise sichtbar. (...) Wir erarbeiten eine vorsorgende Klimaanpassungsstrategie, insbesondere auch vor dem Hintergrund der Flutkatastrophe 2021*" (SPD, The Greens and FDP, 2021, pp. 39–40) .
- ⁴² Translated on p. 23: "*Daher benennen wir vier Zukunftsmissionen, die für uns eine zentrale Bedeutung haben*" (SPD, 2021, p. 8).

⁴³ Translated on p. 23: "*Den Klimawandel zu stoppen, ist eine Menschheitsaufgabe. Unsere Politik richtet sich nach dem Klimaabkommen von Paris: Wir müssen die globale Erderwärmung auf möglichst 1,5 Grad Celsius begrenzen. Darum haben wir uns zum Ziel gesetzt, in Deutschland bis spätestens 2045 komplett klimaneutral zu sein*" (SPD, 2021, p. 8).

⁴⁴ Translated on p. 23: "*Dafür denken wir Mobilität neu: Nachhaltig, bezahlbar, barrierefrei und verlässlich*" (SPD, 2021, p. 11).

⁴⁵ Translated on p. 23: "*Und immer mehr Bürger*innen steigen auf Bus, Bahn oder das Rad um. Dennoch bleibt das Auto für viele Menschen wichtig. Aber der Schadstoffausstoß wird auf null reduziert sein*" (SPD, 2021, p. 11).

⁴⁶ Translated on p. 23: "*Bahnfahren soll innereuropäisch günstiger und attraktiver als Fliegen sein*" (SPD, 2021, p. 11).

⁴⁷ Translated on p. 24: "*Modelle wie das 365-Euro-Ticket oder Modellprojekte für einen ticketfreien Nahverkehr unterstützen wir. (...) Vor allem werden wir die Attraktivität des Nahverkehrs verbessern, durch Investitionen in das Angebot und die Qualität von Zügen und Bussen und durch die Reaktivierung alter Bahnstrecken. Wir werden engere, verlässliche Taktungen, komfortablere Züge mit flächendeckendem W-LAN und eine Reservierungsmöglichkeit für Sitzplätze ermöglichen*" (SPD, 2021, p. 11).

⁴⁸ Translated on p. 24: "*Erstmals in der Geschichte der Bundesrepublik kämpfen wir, BÜNDNIS 90/DIE GRÜNEN, um die politische Führung in diesem Land, inhaltlich und personell*" (The Greens, 2021, p. 11).

⁴⁹ Translated on p. 24: "*Das verlangt Können, Mut und Machen. Wir stellen in einer künftigen Regierung das Pariser Klimaabkommen in den Mittelpunkt und richten das Handeln aller Ministerien danach aus. Wir lenken all unsere Kraft darauf, Maßnahmen auf den Weg zu bringen, die uns auf den 1,5-Grad-Pfad führen*" (The Greens, 2021, p. 12).

⁵⁰ Translated on p. 24: "*Wenn wir zu Beginn dieses Jahrzehnts konsequent handeln und die sozial-ökologische Transformation einläuten, können wir die Klimakatastrophe noch verhindern und zu einer klimagerechten Welt beitragen. Klimaneutralität ist dabei eine große Chance für höhere Lebensqualität, mehr soziale Gerechtigkeit und einen klimagerechten Wohlstand*" (The Greens, 2021, p. 12).

⁵¹ Translated on p. 24: "*Zusammen mit den Ländern werden wir eine Zukunfts- und Ausbauoffensive starten, durch eine Mobilitätsgarantie flächendeckende Anbindungen schaffen, Investitionen in Fahrzeuge und das ÖPNV-Netz erhöhen und*

Finanzierungsinstrumente wie das Gemeindeverkehrsfinanzierungsgesetz und die Regionalisierungsmittel für diese Ziele ausbauen" (The Greens, 2021, p. 31).

⁵² Translated on pp. 24/25: *"Statt wie seit Jahrzehnten einen Verkehrsträger einseitig zu bevorzugen, sorgen wir für eine faire Balance – mit einer starken Bahn, einem modernen ÖPNV und besten Bedingungen für Radfahrer*innen und Fußgänger*innen" (The Greens, 2021, p. 29).*

⁵³ Translated on p. 25: *"Mehr Angebote an klima- und umweltfreundlichen Verkehrsmitteln, zum Beispiel Rufbussen oder Carsharing, erleichtern zu pendeln und befördern ein gutes Leben auf dem Land" (The Greens, 2021, p. 13).*

⁵⁴ Translated on p. 25: *"Unser Ziel ist eine Wirtschaft, in der die nachhaltigsten Produkte auch die günstigsten sind. Das wollen wir durch einen klugen Mix aus CO₂ -Preisen, Anreizen und Förderung sowie Ordnungsrecht und Abbau von umweltschädlichen Subventionen ändern" (The Greens, 2021, p. 19).*

⁵⁵ Translated on p. 25: *"Wir setzen auf starke Verlagerungen von Straßen- und Flugverkehr auf die Schiene" (The Greens, 2021, p. 30).*

⁵⁶ Translated on p. 25: *"Die FDP steht für den politischen Liberalismus und will Freiheit, Selbstbestimmung und Verantwortung der Einzelnen im Rahmen der Sozialen Marktwirtschaft stärken" (bpb, 2021, para. 10).*

⁵⁷ Translated on p. 26: *"Wir wollen so stark werden, dass keine seriöse Bundesregierung ohne die Freien Demokraten gebildet werden kann, damit der Wert der Freiheit bei jeder politischen Entscheidung seine angemessene Bedeutung erhält" (FDP, 2021, p. 5).*

⁵⁸ Translated on p. 26: *"Klimafreundliche synthetische Kraftstoffe sind eine bereits heute verfügbare Alternative für alle Verkehrsarten, die ohne technische Umrüstung in herkömmlichen Verbrennungsmotoren verwendet werden können" (FDP, 2021, pp. 46–47).*

⁵⁹ Translated on p. 26: *"Auf teure Subventionen wie die Kaufprämie für E-Autos wollen wir verzichten" (FDP, 2021, p. 24).*

⁶⁰ Translated on p. 26: *"Wir Freie Demokraten fordern die Ausweitung des Europäischen CO₂-Emissionshandels auf den gesamten Verkehrssektor. Dadurch können die bestehenden Maßnahmen zur CO₂-Reduktion im Verkehr beendet werden. Viele der beschlossenen Verbote, Subventionen und Fördermaßnahmen zur Senkung des CO₂-Ausstoßes im Verkehr führen nicht zu einer Reduktion, sondern lediglich zu steigenden Kosten und einer Marktverzerrung" (FDP, 2021, p. 24).*

⁶¹ Translated on p. 26: "*Wir Freie Demokraten wollen die Luftverkehrssteuer abschaffen, die Luftsicherheitsgebühren neu ordnen und eine Ausweitung von Nachtflugverboten verhindern*" (FDP, 2021, p. 23).

⁶² Translated on p. 26: "*Wir Freie Demokraten wollen die Infrastruktur und den Bahnbetrieb bei der Schiene trennen und den Betrieb privatisieren. Das Netz soll im Eigentum des Bundes bleiben. Ziel ist es, mehr Personen und Güter auf der Schiene zu transportieren. Das gelingt aber nicht mit einer Staatsbahn, sondern nur mit mehr Wettbewerb, mehr Digitalisierung und niedrigeren Trassenpreisen für die Nutzung der Schienenwege*" (FDP, 2021, p. 22)

⁶³ Translated on p. 26: "*Auf der Schiene können Bahnunternehmen wiederum in Wettbewerb miteinander treten. Kundinnen und Kunden profitieren so von niedrigeren Preisen, besserem Service und mehr Angebot im Bahnverkehr*" (FDP, 2021, p. 22).

⁶⁴ Translated on p. 27: "*Wir Freie Demokraten fordern eine ganzheitliche Infrastrukturstrategie für Europa und den Ausbau transeuropäischer Transportnetze. Ein gut ausgebautes (Hochgeschwindigkeits-) Schienennetz gehört genauso dazu wie leistungsstarke Hafenanlagen, Flugplätze und Fernstraßen. Ziel ist die noch engere Verknüpfung europäischer Metropolen und Warenumsschlagplätze*" (FDP, 2021, p. 24).

⁶⁵ Translated on p. 27: "*Wir übernehmen Verantwortung in einer Zeit, in der die Corona-Pandemie das Land weiter stark belastet*" (SPD, The Greens and FDP, 2021, p. 4).

⁶⁶ Translated on p. 27: "*Der menschengemachte Klimawandel ist eine der größten Herausforderungen unserer Zeit. (...) Wir werden national, in Europa und international unsere Klima-, Energie- und Wirtschaftspolitik auf den 1,5-Grad-Pfad ausrichten und die Potenziale auf allen staatlichen Ebenen aktivieren. Um dies zu erreichen, werden wir unsere Ziele ambitioniert aus dem gemeinsamen Beitrag ableiten, zu dem sich die Europäische Union im Rahmen des Pariser Abkommens verpflichtet hat*" (SPD, The Greens and FDP, 2021, pp. 54–55).

⁶⁷ Translated on p. 27: "*Die 17 Globalen Nachhaltigkeitsziele der Vereinten Nationen (SDG) sind Richtschnur unserer Politik. Damit schützen wir die Freiheit und Chancen jetziger und kommender Generationen*" (SPD, The Greens and FDP, 2021, p. 36).

⁶⁸ Translated on p. 27: "*III. Klimaschutz in einer sozial-ökologischen Marktwirtschaft*" (SPD, The Greens and FDP, 2021, p. 24).

⁶⁹ Translated on p. 27: "*Wir erarbeiten eine vorsorgende Klimaanpassungsstrategie, insbesondere auch vor dem Hintergrund der Flutkatastrophe 2021. Mit einem Klimaanpassungsgesetz schaffen wir einen Rahmen, um gemeinsam mit den Ländern eine nationale Klimaanpassungsstrategie mit messbaren Zielen etwa in den*

Handlungsfeldern Hitzevorsorge, Gesundheits- und Allergieprävention und Wasserinfrastruktur umzusetzen und rechtzeitig nachsteuern zu können. Erste dringliche Maßnahmen werden wir zudem mit einem Sofortprogramm sehr schnell auf den Weg bringen. Wir streben eine Verankerung der gemeinsamen Finanzierung von Bund und Ländern zur Klimavorsorge und Klimaanpassung an und wollen sie mit ausreichend finanziellen Mitteln ausstatten" (SPD, The Greens and FDP, 2021, p. 40).

⁷⁰ Translated on p. 27: *"Wir setzen auf einen steigenden CO2-Preis als wichtiges Instrument, verbunden mit einem starken sozialen Ausgleich und werden dabei insbesondere Menschen mit geringeren Einkommen unterstützen" (SPD, The Greens and FDP, 2021, p. 62).*

⁷¹ Translated on p. 27: *"Wir werden das Klimaschutzgesetz noch im Jahr 2022 konsequent weiterentwickeln und ein Klimaschutz-Sofortprogramm mit allen notwendigen Gesetzen, Verordnungen und Maßnahmen auf den Weg bringen. (...) Alle Sektoren werden einen Beitrag leisten müssen: Verkehr, Bauen und Wohnen, Stromerzeugung, Industrie und Landwirtschaft" (SPD, The Greens and FDP, 2021, p. 55).*

⁷² Translated on p. 28: *"Wir wollen die 2020er Jahre zu einem Aufbruch in der Mobilitätspolitik nutzen und eine nachhaltige, effiziente, barrierefreie, intelligente, innovative und für alle bezahlbare Mobilität ermöglichen" (SPD, The Greens and FDP, 2021, p. 48).*

⁷³ Translated on p. 28: *"Wir werden uns bei der Europäischen Union dafür einsetzen, dass Flugtickets nicht zu einem Preis unterhalb der Steuern, Zuschläge, Entgelte und Gebühren verkauft werden dürfen" (SPD, The Greens and FDP, 2021, p. 54).*

⁷⁴ Translated on p. 28: *"Rahmenbedingungen und Fördermaßnahmen werden wir darauf ausrichten, dass Deutschland Leitmarkt für Elektromobilität mit mindestens 15 Millionen Elektro-Pkw im Jahr 2030 ist" (SPD, The Greens and FDP, 2021, p. 51).*

⁷⁵ Translated on p. 28: *"Darin liegen auch große Chancen für unser Land und den Industriestandort Deutschland: Neue Geschäftsmodelle und Technologien können klimaneutralen Wohlstand und gute Arbeit schaffen" (SPD, The Greens and FDP, 2021, p. 64).*

⁷⁶ Translated on p. 29: *"Die Regierung hat es nicht geschafft, das Auslaufen des 9-Euro-Tickets zu verhindern und eine direkte Nachfolgeregelung auf den Weg zu bringen" (Deutscher Bundestag, 2022k, p. 5269).*

⁷⁷ Translated on p. 30: "*Um dieses Ziel zu erreichen, gibt es zwei politische Denkschulen, die im Wettstreit miteinander liegen. Die einen sind für die Verbilligung von Tickets, die anderen sind für die Verbesserung des Fahrplanangebotes*" (Deutscher Bundestag, 2022g, p. 3198).

⁷⁸ Translated on p. 30: "*Die öffentliche Anhörung hat klar gezeigt: Der Nahverkehr braucht ein besseres Angebot, insbesondere auch dichtere Takte auf dem Land*" (Deutscher Bundestag, 2022h, p. 3650).

⁷⁹ Translated on p. 30: "*Natürlich haben die Menschen den vollen Vereinfachungseffekt, und natürlich können die Menschen dieses Ticket auch intermodal nutzen. Man muss ja nicht mit dem ÖPNV von zu Hause losfahren, wenn man dieses Ticket nutzt; man kann ja auch eine Etappe mit dem Ticket fahren*" (Deutscher Bundestag, 2022i, p. 6946).

⁸⁰ Translated on p. 30: "*Das digitale Deutschlandticket kostet 49 Euro im Monat, das Abo ist monatlich kündbar*" (BMDV, 2023, para. 1).

⁸¹ Translated on p. 30: "*In der Realität kann ein uneingeschränkt kostenloser ÖPNV nicht finanziert werden und ist auch nicht beabsichtigt*" (Deutscher Bundestag, 2018a, p. 1167).

⁸² Translated on p. 30: "*[Verkehrsminister Wissing] und Finanzminister Lindner haben schon ausgeschlossen, dass das Ticket verlängert wird, und zwar mit der Begründung, es sei zu teuer, während man Mineralölkonzernen Extragewinne mit dem Tankrabatt zuschustert*" (Deutscher Bundestag, 2022j, p. 5159).

⁸³ Translated on p. 31: "*Denn jeder, der sich mit dem ÖPNV in Deutschland auskennt, weiß: Die beiden Forderungen in Ihrem Antrag, nämlich Billigtickets und gleichzeitiger Ausbau, passen einfach nicht zusammen.*" (Deutscher Bundestag, 2022j, p. 5161).

⁸⁴ Translated on p. 31: "*Worüber streiten wir uns eigentlich in diesem Haus? Und wir kommen zum Schluss: Am Ende ist es der Preis. Denn der Preis betrifft die Frage, wie Mittel aufgewendet werden. Der Preis betrifft die Fragen, wie es am Ende finanziert wird und was das Ganze kostet*" (Deutscher Bundestag, 2022j, p. 5169).

⁸⁵ Translated on p. 31: "*Der günstige Preis ist durchweg der meistgenannte Kaufgrund*" (VDV, DB AG and DB Regio AG, 2022, p. 148).

⁸⁶ Translated on p. 31: "*Der 'Verzicht auf Autofahrten' und die 'Flexibilität der Nutzung' liegen dahinter mit 40% auf Platz 2*" (VDV, DB AG and DB Regio AG, 2022, p. 114).

⁸⁷ Translated on p. 31: "*Das 9-Euro-Ticket (...) ist in seinen Bedingungen klar und einfach verständlich*" (VDV, DB AG and DB Regio AG, 2022, p. 162).

⁸⁸ Translated on p. 31: "*Einmal kaufen und dann losfahren, ohne nachdenken, ohne sich mit Waben und komplizierten Tarifstrukturen auseinandersetzen zu müssen*" (Deutscher Bundestag, 2022l, p. 6937).

⁸⁹ Translated on p. 32: "*Prof.Dr. Andreas Knie ist Leiter der Forschungsgruppe Digitale Mobilität und gesellschaftliche Differenzierung am Wissenschaftszentrum Berlin für Sozialforschung (WZB)*" (ZDF, 2022, para. 5).

⁹⁰ Translated on p. 32: "*Verkehrsforscher Knie fordert ein 29-Euro-Ticket. Es müsste aber auch für den Fernverkehr und die letzten Kilometer mit dem Taxi gelten*" (ZDF, 2022, para. 1).

⁹¹ Translated on p. 32: "*Die letzten Bundesregierungen haben den öffentlichen Nahverkehr jahrzehntelang vernachlässigt. Während Autobahnen immer mehr ausgebaut und trotzdem zu wenig gewartet wurden, wurden Bus- und Bahnverbindungen ausgedünnt*" (Deutscher Bundestag, 2022h, p. 3653).

⁹² Translated on p. 32: "*Aktuell investieren der Bund und die Bahn mehr Geld in die Schiene als jemals zuvor*" (Deutscher Bundestag, 2019a, p. 11621).

⁹³ Translated on p. 32: "*Insgesamt werden wir in diesem Jahr die Rekordsumme von 10,7 Milliarden Euro für die Schieneninfrastruktur ausgeben. Das sind 1,3 Milliarden Euro mehr als noch im Jahr 2018*" (Deutscher Bundestag, 2019a, p. 11624).

⁹⁴ Translated on p. 33: "*Wir haben hier im Hohen Haus alles unternommen, um die Folgen der Pandemie abzufedern. Wir haben umfangreiche Hilfspakete in einer nie dagewesenen Milliardenhöhe auf den Weg gebracht*" (Deutscher Bundestag, 2020b, p. 25059).

⁹⁵ Translated on p. 33: "*Erste Beratung des von der Bundesregierung eingebrachten Entwurfs eines Gesetzes zur Errichtung eines „Sondervermögens Bundeswehr“ (Bundeswehrsondervermögensgesetz – BwSVermG)*" (Deutscher Bundestag, 2022f, p. 2665).

⁹⁶ Translated on p. 33: "*Schon 2017 stellte das Bundesverkehrsministerium den sogenannten Deutschlandtakt vor, der auch unter der Ampel-Regierung weiterverfolgt wird. Mit ihm sollen bis 2030 der Nah- und Fernverkehr aufeinander abgestimmt werden, um an den Knotenpunkten gemeinsame Ankunfts- und Abfahrzeiten für alle Verbindungen zu schaffen*" (ZDFheute, 2022, para. 36).

⁹⁷ Translated on p. 34: "*Planungsbeschleunigungsgesetz, u. a. zur Vereinfachung von Verfahren und Digitalisierung von Planen und Bauen*" (CDU/CSU and SPD, 2018, p. 14).

⁹⁸ Translated on p. 34: "*Und wir müssen schneller werden beim Planen, Genehmigen und Bauen. Die A 45 zeigt uns gegenwärtig die Folgen mangelnder vorausschauender Planung. Deshalb werden wir die Verfahren beschleunigen und mit den Ländern einen Pakt schließen*" (Deutscher Bundestag, 2022c, p. 664).

⁹⁹ Translated on p. 34: "*Meine Damen und Herren, wie Sie wissen, sind doch nach unserer verfassungsgemäßen Ordnung, die vielleicht bei Ihnen eine nachgeordnete Rolle spielt, (Dr. Gesine Löttsch [DIE LINKE]: Na, na, na! Nicht frech werden!) die Länder für die Finanzierung und die Organisation des Nahverkehrs zuständig. Trotzdem unterstützt der Bund mit den Regionalisierungsmitteln die Länder bei dieser Aufgabe*" (Deutscher Bundestag, 2019a, p. 11622).

¹⁰⁰ Translated on p. 34: "*Wer mit dem Nachtzug unterwegs sei, wähle die entspannteste Form des Reisens und leiste einen wichtigen Beitrag zur Reduktion der CO₂-Emissionen. 'Im Vergleich zum Flugzeug ist eine Reise mit dem Nightjet rund 50 Mal klimafreundlicher', so die Ministerin*" (BMK, 2022, para. 3).

¹⁰¹ Translated on p. 35: "*Sie steht einer Ausweitung des Angebots für Nachtzugverkehre offen gegenüber. Voraussetzung ist eine wirtschaftlich tragfähige Gestaltung des Angebots*" (Deutscher Bundestag, 2020a, p. 17421).

¹⁰² Translated on p. 35: "*Bahnfahren soll innereuropäisch günstiger und attraktiver als Fliegen sein*" (SPD, 2021, p. 11).

¹⁰³ Translated on p. 35: "*Kurzstreckenflüge wollen wir ab sofort Zug um Zug verringern und bis 2030 überflüssig machen, indem wir massiv Bahnangebote – gerade Direkt- und Nachtzugverbindungen – ausweiten und für faire Wettbewerbsbedingungen zwischen den Verkehrsmitteln sorgen, die die ökologischen Kosten widerspiegeln*" (The Greens, 2021, p. 37).

¹⁰⁴ Translated on p. 35: "*Grenzüberschreitenden Verkehr wollen wir stärken und mit der EU sowie ihren Mitgliedstaaten Nachtzugangebote aufbauen*" (SPD, The Greens and FDP, 2021, p. 49) .

¹⁰⁵ Translated on p. 36: "*Die Bundesregierung wird ab 2021 eine CO₂-Bepreisung für die Bereiche Wärme und Verkehr einführen*" (Bundesregierung, 2020, para. 1).

¹⁰⁶ Translated on p. 36: "*Unser Ziel ist ein CO₂-Bepreisungssystem, das nach Möglichkeit global ausgerichtet ist, jedenfalls aber die G20-Staaten umfasst*" (CDU/CSU and SPD, 2018, p. 143).

¹⁰⁷ Translated on p. 36: "*Derzeit sind die Kosten der Schäden, die durch den Ausstoß einer Tonne CO2 entstehen, nur sehr gering eingepreist. Nach aktuellen Berechnungen des Umweltbundesamtes verursacht die Emission einer Tonne CO2 Schäden von rund 195 Euro*" (The Greens, 2021, p. 19).

¹⁰⁸ Translated on p. 37: "*Angesichts des derzeitigen Preisniveaus durch nicht CO2-Preisgetriebene Faktoren halten wir aus sozialen Gründen am bisherigen BEHG-Preispfad fest*" (SPD, The Greens and FDP, 2021, p. 63).

¹⁰⁹ Translated on p. 38: "*Wer einer komischen Endzeitsekte angehört, die glaubt, dass die Erde und das Klima bald untergehen, der kann die CO2-Steuer ja gerne bezahlen*" (Deutscher Bundestag, 2019c, p. 17014).

¹¹⁰ Translated on p. 38: "*[Die AfD macht] damit sehr deutlich, dass Sie nichts anderes sind als Klimaleugner, meine Damen und Herren*" (Deutscher Bundestag, 2022e, p. 1312).

¹¹¹ Translated on p. 38: "*Der zweite betrifft den Klimaschutz und lautet: Es wird zwar wärmer, die Sonne scheint – das macht uns allen gute Laune –, wir haben aber gar kein Problem damit. Wir finden das gut. Es handelt sich um eine sogenannte Klimaschutzpolitik; die hat aber gar keinen Nutzen, und am Ende ist sie überflüssig. – Das schreiben Sie in Ihrem Antrag*" (Deutscher Bundestag, 2022e, p. 1312).

¹¹² Translated on p. 38: "*Unser politischer Grundsatz ist die Rettung des deutschen Steuerzahlers und eben nicht die des Weltklimas*" (Deutscher Bundestag, 2022e, p. 1278)

¹¹³ Translated on p. 38: "*In nahezu allen Kardinalpunkten agiert sie als bloße Subunternehmerin globalisierter Interessenpolitik im bewährten Panikmodus von Klima und Corona*" (Deutscher Bundestag, 2022e, p. 1262).

¹¹⁴ Translated on p. 38: "*Der ideologischen Volkserziehung der jeweiligen Landes- oder Staatsregierung fügt sich die Kommission als weitere Mächtegerngouvernante hinzu*" (Deutscher Bundestag, 2022e, p. 1262).

¹¹⁵ Translated on p. 38: "*Bei der diesjährigen Wahl waren mehr Wahlberechtigte über 50 Jahre alt als unter 50 Jahre alt*" (bpb, 2021, para. 1).

¹¹⁶ Translated on p. 39: "*Wir dürfen nicht vergessen, dass die Ticketpreise keine Sache des Deutschen Bundestages sind. In unserem Föderalismus ist das anders geregelt. Sehr viel Verantwortung für diesen Bereich liegt bei den Ländern. Ich glaube, deshalb ist der Pakt mit den Bundesländern und den Verkehrsverbänden wichtig, und es ist wichtig, dass wir an dieser Stelle noch einmal Druck ausüben und sagen: Liebe Leute,*

wir müssen das im Sinne der Bürgerinnen und Bürger gemeinsam umsetzen! Das ist nicht allein Sache des Deutschen Bundestages, des deutschen Kanzlers oder auch der Verkehrsminister" (Deutscher Bundestag, 2022j, p. 5171).

¹¹⁷ Translated on p. 39: *"Zum Bundesrechnungshof sage ich, dass ich seinen Auftrag sehr ernst nehme und deshalb schon im Februar die Verkehrsministerkonferenz gebeten habe, eine Arbeitsgruppe einzusetzen, um die Finanzierungsfragen zu klären" (Deutscher Bundestag, 2022l, p. 6946).*

¹¹⁸ Translated on p. 41: *"Wir dürfen den Menschen das Leben nicht erschweren. Im Gegenteil: Nachhaltige Mobilität muss einfach sein, bequem und bezahlbar, und zwar für alle. (...) Wichtig ist, dass unsere Investitionen schnell Wirkung zeigen. Eines haben wir nicht: Zeit" (Deutscher Bundestag, 2022c, p. 664).*

¹¹⁹ Translated on p. 41: *"Um einen künftigen Preisanstieg zu kompensieren und die Akzeptanz des Marktsystems zu gewährleisten, werden wir einen sozialen Kompensationsmechanismus über die Abschaffung der EEG-Umlage hinaus entwickeln (Klimageld)" (SPD, The Greens and FDP, 2021, p. 63).*

¹²⁰ Translated on p. 42: *"Zur dritten Frage. Zum Bundesrechnungshof sage ich, dass ich seinen Auftrag sehr ernst nehme und deshalb schon im Februar die Verkehrsministerkonferenz gebeten habe, eine Arbeitsgruppe einzusetzen, um die Finanzierungsfragen zu klären. Das Zwischenergebnis dieser Arbeitsgruppe wurde jetzt innerhalb von wenigen Monaten vorgelegt (Deutscher Bundestag, 2022l, p. 6946).*

¹²¹ Translated on p. 42: *"Überweisungsvorschlag:
Ausschuss für Verkehr und digitale Infrastruktur (f)
Ausschuss für Wirtschaft und Energie
Ausschuss für Ernährung und Landwirtschaft Ausschuss für Umwelt, Naturschutz und nukleare Sicherheit
Ausschuss für Tourismus" (Deutscher Bundestag, 2019a, p. 11620).*

7 Declaration of Authenticity

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