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Europeanization of National Renewable Energy Policies: Longitudinal Case Studies in the UK and Germany

Introduction:

The recent decade has witnessed a major transformation of the EU level energy policy, one of its sources being the ambitious goals of strengthening of security of energy supply and sustainable development, captured in a body of pieces of legislation. At the same time, it has been widely acknowledged that the formation of domestic renewable energy policies is to a significant extent a function of EU-emanating influence in the same or related policy fields, such as electricity market liberalisation and community guidelines for environmental state aid. The Europeanization of this policy sector as well as of any other can be impelled by more than one mechanism, e.g. anticipation of EU-level tendencies or the EU-induced reconfiguration of leverage amongst domestic actors, apart from the direct imposition of European legislation.

However, in order to filter the net effect of the EU, one has, firstly, to account for the initial mark of a member state on the decision-making process at the EU-level. Secondly, the purely domestic sources in national decision-making have to be distinguished from the EU-emanating ones. This research endeavour is approached by resorting to the conceptualization of Europeanization that accounts for the different forms it can take, offered by Knill and Lehmkuhl (2002). Apart from investigation of the top-down process of Europeanization, it can equally help to understand national interest-formation represented in the Council, and subsequently cast light on the larger picture of the long-term process of Europeanization of a policy field. To account for these development, in the UK and Germany in their interrelationship with the EU level, this paper is structured as follows: first, the theoretical framework adopted is discussed in the context of the strand of the Europeanization literature. Second, the evolution of legislative renewable energy frameworks in the UK and Germany are given an overview. They are then evaluated against interaction with the EU-level legislation under application of selected theoretical approaches.

Europeanization – evolution of the strand of literature:

The popularity of the term ‘Europeanization’ has increased significantly in the 2000s as the number of articles published with reference to Europeanization increased approximately by ten times in comparison with 1980s. This trend has been confirmed more recently by data on publication in European Studies which illustrates further proliferation of Europeanization research (Featherstone 2003: 5-9). The attention paid to the phenomenon of Europeanization and its theoretical conceptualisation has yielded a number of approaches and definitions, a development was followed up by disputes on the conceptual boundaries in their relation to

research design and methodology and conceptual stretching. More specifically, these concept-focused debates revolve around the traditional split of Europeanization literature in bottom-up, top-down and horizontal Europeanization, the former of those being currently neglected in terms of research design (McCauley, 2011, p. 1019-1020). The different perspectives within the current Europeanization debates can be best understood in the context of the evolution of the body of literature outlined below.

The inception of Europeanization literature can be viewed as being attributable to the rather old question of the interaction between the EU and the national level which is of scholarly concern in political science and international relations since the existence of the first European Community institutions. Europeanization studies that have developed as a consequence of examination of this relationship, underwent as a research line two phases, the first of which was dominated by the interest in rather broad consequences of European integration, such as new opportunities of interest intermediation of domestic actors and changing role of states in the EU (Bulmer 2007: 49). According to this research focus, until 1990s Europeanization was conceptualised predominantly as a 'bottom-up' process of European integration. In accordance with the prevalent theoretical perspectives during this period, two alternative paradigms of European integration dominated the theoretical discourse. The intergovernmentalists approaches interpreted the bottom-up process of Europeanization as being driven by member states and their governments that are guided in their decision-making by geopolitical interests and economic concerns that they face at the domestic level. Neofunctionalists, assuming a contrasting position assigned the dynamics of integration to mainly non-governmental actors. The scholarly recognition that European integration was more than one way process came first 1990s which has led to the new research focus on the 'top-down' dynamic of integration. The logic of this approach followed the reversed argumentation of its bottom-up counterpart recognizing the increasing national level influence of the EU. Acknowledging the two perspectives the third group of scholars has countered that the zero-sum game conception of the relationship between the EU and its member states in which one level was to be empowered at the expense of the other cannot be substantiated. Instead they suggest a new concept in which the different levels of government become increasingly dependent on each other. As a consequence, European integration is neither strengthening nor weakening, but is transforming member states by fostering cooperative relationships between state and non-state actors at the various levels of government (Börzel, 2005).

The more recent and broader in scope strand of Europeanization literature describes the phenomenon it studies also as a circular process which goes in two directions and in which bottom-up and top-down dynamics are mutually reinforcing and structuring. This literature is also preoccupied with questions of modification of the domestic level policies, institutions and party politics under the impact of ongoing EU level integration which requires continuous reassessment of the problem of methods, research design and the empirical concerns about measurement and causality. Being preoccupied with these issues in causal analysis, one of the major focus of the literature lay in deeper understanding of mechanisms of top-down Europeanization (Quaglia and Radaelli, 2007).

Furthermore, the top-down literature has undergone a rapid evolution in recent years by developing new approaches to European level governance in its effect on the member state (one of which is put empirically to the test in this paper). Despite the growing wealth of approaches, most studies recognize that member state responses to Europeanization cannot be accounted for with just one approach since member states react to the EU-impact differently according to policy sectors, institutions, and time. Moreover, it is similarly widely agreed on that top-down dimension of Europeanization covers only one part of the EU-member state relationship in the integration process and that constitutes a ‘two-way street’. Yet, this bi-directional and circular conceptualisation of Europeanization in which EU influence is filtered through member states and feed back into EU institutions and policy processes is rarely finding empirical application (Hofmann and Boerzel, 2008, p. 4). This paper, by contrast, attempts to draw on the state of the art in Europeanization research by combining the top-down and bottom-up concepts of it to the EU policy area of renewable energy in a theoretical framework elaborated on below.

2.1 Theorizing European RES policy-making

Disregarding the fact that Europeanization has been given a range of to some extent overlapping and even contradictory definitions (Howell, 2004), as already mentioned, most commonly the term refers to institutional adaption in the process of European integration, the same way as it is understood in this study. This type of the process can be perceived as both pressure emanating directly or indirectly from EU membership and materialising through affecting both actors and institutions at the national and the EU level (Featherstone and Radaelli, 2003). More specifically, in this paper, Europeanization is adopted to account for two types of reciprocal national and EU level impact – (1) the formation of governmental positions defended in the negotiations in the Council, and (2) the effect of the EU level renewable energy and related legislation on domestic level in the same policy areas.

First, the formation of the member state stances is assessed by applying the bottom-up Europeanization concept - the concept of ‘uploading’ as a mechanism of bottom-up Europeanization, adopted conventionally to environmental policy analyses (e.g. Boerzel and Hoffmann 2005). This Europeanization mechanism is based on the assumption that member states’ interests brought to the Council reflect the domestically established modes of policy sector regulations which states attempt at uploading at the EU level to avoid costs of policy adaptation. Besides, it is argued that the uploading mechanism for the bottom-up Europeanization is applicable to the analyses of the renewable energy sector due to its capacity to account for distinctive national administrative and institutional regulative approaches in the renewable energy sector, which have been evolving in member states over decades, yielding idiosyncratic national policy frameworks and institutional settings which are costly to modify.

The top-down dynamics of Europeanization are conceptualised in this paper under the application of the concept by Knill and Lehmkuhl (1999) which distinguishes three different modes of Europeanization – positive, negative and framing. The positive mode of Europeanization accounts for the EU adaptation pressure stemming from misfit between the given and the imposed institutional model. The negative mode of Europeanization subsumes the EU-induced alteration of domestic opportunity structures amongst domestic groups of actors and this way to redistribute power and resources between those actors. The power re-allocation permits actors to reshape the national policy sector that at a later point in time can feed back in the EU policy-making process. Finally, the weakest type of Europeanization termed ‘framing’ materialises thorough the domestic actors’ perceptions of future EU trajectories which results in adjusted interests and decisions with regard to the national policy sector (Knill and Lehmkuhl 1999, pp. 4-11).

Applied to the policy sector of renewable energy, the first type of Europeanization is not likely to play a role in this analyses due to lack of any particular institutional model imposed by the EU on member states in the RES policy area, but instead substantial space left to member states to decide how to reach the goals set by the EU. The negative type of Europeanization, which is understood as resultant from the abolition of trade barriers between member states with the aim of completion of a common European market, is taken into account in this study as mean to better grasp the implications of harmonisation of the European electricity market. Regarding the mechanism of framing, it promises to help gauge the domestic decision making regarding RES legislation and potentially finds its expression directly in alteration of domestic legislation. It can be operationalized by means of finding reference to EU level in the in national pieces of legislation.

Renewable energy legislation of Germany:

The first British measures for development of renewable energy constituted R&D programmes for RES technologies from mid-70s onwards, the incentive for which was given by the first oil crisis. After the second oil crisis a governmental review of potential of RES technologies has concluded that since the majority of those is non-competitive, British RES growth is restricted, market maturity being one of primary criteria for a RES technology to qualify as support worthy. As a result of this position, during 1970s and 1980s the R&D programmes concentrated exclusively on large plants – wind power plants and some biomass technologies. A further restriction to RES promotion came in 1979 with the privatisation and liberalisation of public utilities by the newly elected Conservative government. The liberalisation of electricity market was conducted by means of an attempt to reduce monopoly in the electricity production and supply without prior unbundling between the network and commercial activities. Disregarding latter efforts to remedy this shortcoming,

regional electricity companies remained vertically integrated until 2000 with more recent trend of generation and supply integration, which has had a negative effect on the overall competition on the market and in particular on the competitiveness of RES installations, especially the ones still lacking market parity. Despite the fact that RES was supported by the regulation obliging the purchase of electricity from decentralised generators, they have been paid on average 30% less than their centralised competitors (Lovinfosse, 2008, pp. 231-236). However, the regional electricity companies were required to ensure that a certain percentage of their electricity comes from non-fossil fuel sources. This Non-Fossil Fuel Obligations (NFFO) was a measure to channel financial support to renewable energy technologies with good chances of becoming relatively soon commercially viable. The funds of NFFO came from a Fossil Fuel Levy that was charged for electricity consumption from fossil fuels, payable by electricity consumers (Brennand, 2004).

The NFFO was designed in first place as a support mechanism for nuclear energy. Its position in the energy market was weakened after privatisation took place, from which it was excluded. Thereafter it struggled to compete with energy from fossil fuels, hence higher prices were ensured by NFFO. The fact that NFFO served primarily this function can be demonstrated at the distribution of its budget in that only between 1% and 8.6% were allocated to RES until 1996 the rest being spend on nuclear. Consequently, the goal of the policy measure – 1,500MW of new RES generating capacity in the UK by 2000 – was missed by 25%. The underperformance of the programme is also owed to NFFO operating as a bidding system that granted premium prices for 15 years only to the energy generators that has won the bidding competition offering lower bids than their competitors. As a result, some of the RES projects have encountered problems of achieving their targets my means of a slim budget. Some of them were additionally refused planning permission by local authorities, and were never constructed (Lovinfosse, 2008, pp. 238-239).

A significant change in the UK energy policies came in 1997 after Labour has won general elections. In its manifesto of 1997 it expresses its commitment to 10% of electricity supply from RES by 2010 this way substantially strengthening the RES goal of the country, the former being 3% RES of total electricity supply. Despite its concern with environmental and social issues, the new government saw market based instruments and low level of intervention in the energy sector as the right approach in pursuit of its objectives. The Labour government has first undertaken several energy reviews which have laid the foundation of the 1998 energy White Paper with its environmental and social goals and at the same time retention of a competitive energy market, however protecting the domestic coal industry. The paper was followed up with the Utilities Act of 2000, lending to it many of its principles. The act's impact on RES promotion comes from the stipulation of legal unbundling of distribution and supply, thus breaking up of regional electricity companies, and the replacement of NFFO though Renewable Obligations (RO) (Lovinfosse, 2008, pp. 240-242). The RO has replaced the NFFO in April 2002. It stipulates that an increasing percentage of the energy supply by licensed electricity suppliers has to come from renewable sources. The certification this type of source comes from Renewables Obligation Certificates

that state that a megawatt hour has been generated from a qualifying renewable source and that can be acquired from a generator or a trader, or replaced by purchasing “Buy-out Certificates” from a corresponding government authority. In addition to RO, the less viable technologies have been supported by capital grants. Of these, wind has been allocated up to £ 64 million and bio-energy £ 66 million. (Brennand, 2004, p. 90; Hain et al., 2005, p. 1200); Mitchell et al., 2006, p. 302).

A further contribution of RES promotion (of about 50 million pounds) is made by revenue from the Climate Change Levy that constitutes an energy tax. It came into force in 2000 equally building on the 1998 White Paper that sets a target of 20% CO₂ emission reduction by 2010. An additional positive impact on the RES development by the levy stems from RES, apart from hydro > 10MW and specific waste incineration, is exempted from it (Lovinfosse, 2008, pp.41-42).

The Energy White Paper of 2003 “Our Energy Future -Creating a Low Carbon Economy” of 2003 is a further document illustrating the government’s attitude to supporting renewable energy in the UK. One of its four key goals is to maintain reliability of supplies (in addition to the UK’s carbon emissions reduction by 60 % by about 2050; the promotion of competitive markets in the UK and beyond; adequately and affordably heated homes) and RES as well as other smaller-scale, distributed energy sources are referred to as a remedy. Besides, by acknowledging the fact that the indigenous conventional energy sources will be depleted – economically viable domestic coal by 2013, gas returning to net importation by 2006, and oil by 2010 – a substitutions in form of other energy sources is endorsed. Based on that consideration, the White Paper describes an energy scenario for 2020, which ascribed a market-based grid the role of the framework for the delivery of energy services, for a balanced supply of large power stations. A part of these will be made up by intermittent large offshore plants, while local generation will have to become far more wide spread (Brennand, 2004, p. 91).

Following up the White Paper’s endorsement of RES, government has, firstly, allocated between 2002 and 2006 the total of 250million pounds to RES. Secondly, the support for R&D on new RES technologies has found a substantial expansion since 2002, with a further increase of Research Council’s budget specifically for RES to 2006. And, thirdly, the attainment of new RES objectives was accompanied by improvement in local planning permission for RES installations through updating of the Planning Policy Statement on Renewable Energy, stipulating new principles to be complied with by regional and local planning authorities (Lovinfosse, 2008, pp. 247-248).

The most recent changes in the UK RES policy has been associated with the strong criticism regarding the underperformance of the RO. Other points of critic relate to the instrument being too expensive and to the fact that the future price of ROCs and hence the future price of electricity is perceived as too unpredictable by the investors implying greater risk taking by comparison to feed-in-tariffs. Mainly for these reasons, the Government’s Energy Review in 2006 came up with the conclusion that the policy instrument is reform-ready. The British

Conservative Party showed itself confirm with that conclusion calling for feed-in tariffs to support small decentralised energy sources (Toke, 2007, p. 682)

The decision to suspend the RO was taken in 2009. Against the background of the old policy goals for 2010, 2015 and 2020 which were retained, the government has recognised a need for a more effective RES promotion instrument. The main features of the new RES promotion framework are: the support for microgeneration is provided small-scale feed-in tariffs (FIT) from the 1 April 2010; microgenerators of 50kW and below for anaerobic digestion, hydro, solar PV and technologies will be equally allocated FIT support; small generators of between 450kW and 5MW declared net capacity will be regulated by RO, or can also apply for FIT on the condition that the application took place before 15 July 2009. After a transfer to FIT a generator cannot switch to RO again. FIT is, apart from that, not applicable to generators with capacity of less than 50kW and more 45MW that will be further promoted by RO (Wood and Dow, 2011, p. 2234-2235).

Renewable energy legislation of Germany:

Being today one of the European leaders in promotion of RES, Germany owes this frontrunner role to the early beginnings and diverse approaches of its RES policy. The growth in renewables has continued since the 1970s being particularly pronounced in the energy sources from wind, biomass and solar technology. This development is owed to various government subsidies without which RES would not be able to compete with fossil fuel energy sources despite periods of relatively high oil and gas prices (Park and Eissel, 2010, p. 332).

From the start, the RES promoting measures comprised the four main policy instruments - □(direct) investment subsidies, soft loans, tax allowances, and subsidies for the operational costs/feed-in tariffs which have been applied also in combination. Thereby, the first effort at promotion of RES in Germany were made the field of research and development from 1974 onwards, when the Federal Ministry of Education and Research (BMBF) began testing the possibilities of the use of wind energy to increase the economic efficiency of energy supply (Bechberger and Reiche, 2004, p. 49).

The most prominent albeit largely unsuccessful examples of this era of RES research is the large-scale wind plant project with a multimegawatt turbine, GROWIAN, which has traced the development of a second generation of smaller wind plants was from the mid-1980s (Carlioz and Naseem 2007, 33-36). Overall, between 1980 and 1998, the research into RES was funded by DM 4 billion (□2.05 billion euro) and thereafter, between 1999 and 2001 stayed in the region of between euro 89 million (1999) and euro 103 million (2001) (Bechberger and Reiche, 2004, p. 49).

The programme initially titled '100 MW Mass Testing Programme' and subsequently expanded to 250 MW in 1991, was running from 1989 until 1995 is an instance of subsidies to operational costs through feed-in tariffs (FIT). Its purpose was to test the capacity of wind plants to operate at economic scales and to be increased in terms of a higher number of installations by means of subsidy. It has played a substantial role in allowing the wind power sector to reach a market breakthrough. Ultimately, this result is attributable to the combination of the wind programme with the additional promotion of wind through the Act on Supplying Electricity from Renewables (Stromeinspeisegesetz, StrEG) which came into force in 1991 and is considered the most important promotion instrument for wind energy in Germany during the 1990s. The act, with its aim to promote the range of electricity sources consisting of solar and wind energy, hydro power, sewage, biomass and landfill gas on a yearly fixed basis, has offered wind and solar remuneration of 90% of the average revenues of the public utilities for each kWh sold to the end-users. (Bechberger and Reiche, 2004, p. 49). Furthermore, between 1990 and 1998, nearly DM 6 billion (≈ 3.1 billion euro) was granted to wind development in the form of soft loans by the state-owned Deutsche Ausgleichsbank (DtA) (Carlioz and Naseem 2007, p. 36).

Less successful in achieving market entry was the 1000 Roofs Photovoltaic Programme of the federal and state governments, enforced between 1991 and 1995. Despite the installation of more than 2,000 photovoltaic plants with an overall capacity of 4 MW throughout the course of the programme, it was not followed up by further promotional measures which has leading to the relocation of the largest German solar collector manufacturers to countries with more competitive advantages (Bechberger and Reiche, 2004, p. 49).

After the Social Democratic-Green federal government in 1998 has replaced the Liberal-Conservative one after its four legislative terms of 16 years, the first policy of a new government was the 100,000 Roofs Programme for photovoltaic systems (100.000-Dächer-Programm, HTDP). As the title implies, the initial policy goal was the installation of 100,000 new photovoltaic plants (of 3 kW each), to be raised from the resulting 50 MW in 1998 to 350 MW in 2003. The programme's industry-political outlook targeted at the same time the stimulation of the domestic market and the stronger foothold of German solar manufacturers globally. The programme pursued specifically the promotion of installation and the extension of PV plants with over 1 kW output, by granting support to such market payers as private persons, foundations, associations, housing associations and small and medium-sized enterprises by means of long-term soft loans of 20 years with very low interest rates (Bechberger and Reiche, 2004, p. 50).

The Market Incentive Programme (MAP) was launch in 1999 and thus replaced its policy predecessor the '100 Million DM Promotion Programme for RES, which started in 1994. The change in policy measures resulted in the increase of budget (from DM 20 million or ≈ 10

million Euro to 230 million euro in 2003) allocated specifically to the promotion of heat-producing renewable energy technologies. Those comprise solar thermal systems, biogas, small hydro power and geothermal plants installations for the combustion of solid biomass, and for photovoltaic installations at schools which are financially supported through direct investment subsidies and soft loans, the former being made primarily available for development of small plants, while the latter is usually allocated to support projects with high investment costs. The successful start of the policy measure has led to subsequent financial cuts in it, which seemed necessary since otherwise the budgetary means for 2001 would be overstretched. However, the prospect of negative consequence of the cuts for the launched process of diffusion of targeted RES sources in Germany had the reversed effect of financial backup in the support conditions first in 2002 and then 2003. The originally planned life-cycle of this measure with its provisional end in 2003 was expended in the same year until 2006. The new goal of the policy constituted the 10 million m² of solar collector area in Germany by 2006 (Bechberger and Reiche, 2004, p. 50).

Two other programmes - the Environment and Energy Conservation Programme (EECP) and the Environment Programme (EP) - in their combination are primary measures for wind energy development in Germany since wind energy is not covered the MAP. Both programmes are geared towards small and medium-sized enterprises, freelancers, local or municipal companies and public-private partnerships, offering soft loans of up to 50 % of investment costs, or up to 75 % in combination (which as amounted to nearly 10 billion euro between 1990 and 2002) (Bechberger and Reiche, 2004, p. 52).

As to RES-E, the most important measures adopted were the 100,000 roof programme for photovoltaics and above all the Renewable Energy Sources Act (RESA) adopted in 2000 and substantially amended in 2004. It was however the EEG (Erneuerbare-Energien-Gesetz), that has proved decisive in accelerating the demand for PV after coming into force in April 2000. The previously sluggish demand was invigorated due to the increase in the remuneration for PV electricity (from 8.2 to 50.62 euro ct/kWh) and as a result the target of 300 MWp newly installed PV capacity was attained already in 2003, which was much earlier than expected (Bechberger and Reiche, 2004, p. 52).

Enacted in 2000, Renewable Energy Sources Act (EEG) builds on the StrEG of 1991. In its initial shape the EEG (2000) carries the task of a doubling of RES share in the electricity market from 5 to 10 per cent by 2010 (Park and Eissel, 2010, p. 332). In addition to setting higher targets, the measure at the same time is adjusting for the older measure (StrEG) shortcomings by amongst others incorporation onto its ambit the geothermal energy and pit gas." The power limit for hydro plants and installations using sewage or landfill gas of 5 MW fixed in the StrEG now also applies to installations based on pit gas or solar energy (Bechberger and Reiche, 2004, p. 52). The targets of EEG were however substantially altered twice, first on 1 August 2004, with the most recently amended version coming into force on 1 January 2009 (Büsgen and Dürschmidt, 2009, p. 2536).

The EEG obliges utilities to buy energy from RES power from independent producers against technology-specific remuneration or feed-in tariffs what are set higher than the production cost (Frondel et al., 2010, p. 4049). The remuneration paid under the EEG is at the same time regressive. Furthermore, three specific aspects of EEG are aimed explicitly at compatibility of the measure with the European law on state aid. The first of it foresees a report to be submitted by 30 June every two years after the entry into force of the law on the subject of market introduction of RES, the change in costs required for installations of RES power generation, and possible suggestions for adjustments of the remuneration rates to account for technological progress and market developments. The second provision concerns the remuneration for wind power according to the different quality of plant sites, thus being in compliance with the ‘reference yield model’ meaning that the minimum wind power remuneration of 9.1 euro ct/kWh for a period of five years shall be at least 6.19 euro ct/kWh if during this period an installation achieves 150 % of the reference yield . In other cases, the higher initial remuneration rate of 9.1 euro ct/kWh will be extended by two months for every 0.75 % of the yield that is below 150 % of the reference yield. Both provisions are needed to ensure compensation rates do not exceed the cost-effective operation of a RES installation. In addition, they should incentivise installation of onshore wind inland sites, (while for offshore wind plants, due to their higher investment costs, the initial remuneration rate is higher and payable for nine years if commissioned before the end of 2006). Similarly, the third aspect pertains to the remuneration scheme for PV power in compliance with the European law on state aid. Thus, remuneration to PV systems falling the scope of the EEG shall be stopped after 31 December of the year following the year in which PV systems grow to a total installed capacity of 350 MW (Bechberger and Reiche, 2004, p. 52).

Against this background Metz (2005) describes the progress of German electricity market liberalisation in the following way. “Reforming Germany’s electricity sector proved to be a difficult task. Most reform attempts were doomed to failure because of the political power of the German energy supply industry (ESI) which is one of the industrial pillars of Europe’s largest manufacturing economy. Already before unification it was partly privatised and later opened for foreign investors. The powerful ownership links between the ESI and major financial and industrial interests in Germany indicate that this industry is an integral part of what Shonfield (1968) termed German “alliance capitalism” to describe the corporate culture of German industry, dominated by alliances with banking and insurance capital for decades. In contrast to competitive capitalism, alliance capitalism is characterised by collaborative relationships between commercial entities, and success relies on the concerted orchestration of large resources for common goals. With its huge turnover, vast profits and monopoly status, the ESI grew into the major cash cow of the German economy. Its political status was consolidated by links to state bodies at all levels and, through revenue sharing, to German municipalities by way of generous concession fees.” The eventual breakthrough in vertical unbundling, did not diminish but further strengthened monopoly structures due to ensuing horizontal integration and remaining strong links between networks owners and generation/supply, which did not help to improve the market situation of RES.

Evaluation of the top-down and bottom-up Europeanization:

The directive 2001/77/EC represents the first EU-level directive and at the same time a piece of legislation to potentially affect RES policies at the national level. It carries the aim of expanding of the renewable electricity consumption in the EU 21% before 2010. Apart from stipulation of non-binding targets for member states, the directive reaches into area of national public policies by firstly, making mandatory a support system for RES in (art. 4), secondly, prescribing guarantee of origin of renewable electricity (art. 5), thirdly, obliging member states to evaluate the legislative framework in a report, the first of which shall be on domestic administrative adjustment in accordance with the directive to be submitted not later than 27 October 2003 (art.6), and a report to be published no later than 31 December 2005 and thereafter every five years on RES costs and national prospects of meeting indicative targets (art. 8), and finally, enforcing in member states guaranteed access to the network for renewable electricity (art. 7) (CEC, 2001).

The framework character of the directive prevents the Commission from application of its coercive power against member states in case those fail to comply. Hence, with regard to conceptualisation of these directive's impact on member states it can be concluded that 'framing' type of Europeanization can apply. Two other types, positive and negative Europeanization, can be discarded, the former due to inability to apply infringement procedure, and latter in general for the purpose of the present analysis since this Europeanization type would be only useful for understanding of creation of a common market in a given policy area. A common EU energy market is however still a remote goal, in particular during the timeframe under study (from the inception of national RES legislation to the RED directive of 2009).

The instance of an EU impact in form of negative Europeanization process can be possibly found in the area of liberalisation of EU energy market, propelled at the EU-level.

As the overview of the UK national legislation shows the major boost in RES promotion came in 2000 with the change in government, a year before the 2001 Directive was enacted. The target of 10% electricity supply from renewable sources was not altered by the EU directive as this prescribes UK the same goal. Further major policy revisions pertained to change in policy instrument for RES support in 1997 and 2009. Both as stated in the policy documents, however, were undertaken for the reasons of underperformance of the predecessor instrument and evaluated independently from the requirements of the EU in the process of national level political conflict. Apart from that, the EU capacity of changing the UK national preferences for a policy instrument were restricted since the 2001 directive left the question of most effective policy instrument open, allowing for a variety of instruments across member states. Its subsequent endorsement of market-based instruments could not have affected the UK's choice due to its longer-term preference for those – a traditional

approach to RES support that was altered to some degree first in 2009. Finally, the liberalisation of EU energy markets could not have impacted this policy area in the UK due to the member state's own commitment to liberalisation long in advance of the EU.

In Germany the situation is similar in so far as the newly elected Social-Democrats and Greens in 1998 have initiated ambitious RES policy framework prior to the signals emanating from the EU level and taking the shape of the first EU Renewable directive. Yet, the target of 10% stipulated by the EEG of 2000 is lower than the 12% indicated by the EU. The shape of German RES policy instrument remained similarly untouched by the Commission's bias for market-based instruments. However, the alteration of FIT towards regression of tariffs to stimulate competitiveness of RES technologies in accordance with the EU level provisions makes a case for Europeanization through framing mechanism (this EU requirement being non-binding). The lack of effective liberalisation of electricity market has prevented significant negative Europeanization from taking place.

The reverse national impact at the EU level is equally weak in the cases of both countries, due to the framing nature of the piece of legislation that does not carry a significant mark of domestic approaches of any of member states.

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