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The Green Menace: Unraveling Russia's elite discourse on enabling and constraining factors of renewable energy policies

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ABSTRACT

Against the background of a global energy transition, resource-rich Russia embarked on renewable energy policies (REPs). Having set a renewable goal of 4.5% in the electricity mix (2009), Russia's government introduced support schemes on the wholesale (2013) and retail (2015) electricity markets. This raises the question of how Russia's elite explain this rollout of REPs, as a global shift towards renewables may threaten hydrocarbon exports. Common drivers – security of supply and ecological considerations – seem unconvincing given Russia's substantial fossil fuel reserves and limited implementation of international climate change agreements.

Building on a self-compiled database of 395 Russian texts dealing with renewable energy, this article maps Russia's elite discourse through argument comparison between actors, audiences and over time. By doing so it critically assesses resource-geographic, financial, institutional and ecological enabling and constraining factors.

The article concludes that the main elite arguments for REPs are as an attempt to avert the green menace by establishing a Russia-based RE industry. This would ensure that the country catches up with global technological development and allows Russia to remain an important energy power through diversification towards RE exports. Climate change arguments are mainly used abroad in order to demonstrate Russia's efforts in meeting international obligations.

> *"Frankly speaking, in the field of innovative renewable energy technologies, we are lagging behind states that have an education level far below ours. Far below ours !"* (Former president Medvedev, 2014) [1]

1. Introduction[1]

Many import-dependent countries, including EU member states and China, have developed renewable energy support schemes during the last two decades ([2]: 402–404). Politicians of these countries often argue in favor of renewable energy policies (REPs) on the basis of security of supply and ecological considerations [3,4]. Expanding indigenous renewable energy sources may not only reduce import dependence [5], but also greenhouse gas (GHG) emissions [6].

In 2009, late adopter Russia joined this global shift towards renewable energy sources (RES) by setting a targeted 4.5% share of electricity production and consumption originating from RES by 2020 [7].[2] In 2013, the Government launched a capacity-based support scheme (CRESS) with regard to solar, wind and small hydro power plants in order to achieve this quantitative goal [8]. In 2015, an additional support scheme in the retail electricity market has been set up [9]. Russia's energy elite, however, face difficulties in framing REPs given Russia's limited energy import dependence [10] and interest-based approach to the Kyoto Protocol, resulting in flawed climate policy implementation [11,12]. The modest goal also reflects the many hurdles REPs face, ranging from inexpensive electricity prices to the vested business interests of the traditional energy sector [13]. This lack of obvious drivers and serious obstacles raises the question of how policy makers of an energy-endowed country as Russia explain why they pursue REPs on electricity markets.[3]

In order to obtain an exhaustive overview of plausible enabling and constraining factors, a self-compiled database of speeches by Russia's

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[1] Abbreviations used: REP: Renewable Energy Policy; RES: Renewable Energy Sources; UPS: United Power System; CRESS: Capacity-based Renewable Energy Support Scheme; GHG: greenhouse gas; IEA: International Energy Agency; IRENA: International Renewable Energy Agency; MNRE: Ministry of Natural Resources and Ecology;

[2] As compared to the current share of RES (wind, solar PV, small hydro) being less than one percent.

[3] Although biomass, biogas and wood pellets in particular are significant industries, this research focuses exclusively on Russia's electricity markets. The reason for this choice is the centrality of the first quantitative RE goal that is specifically tied to the electricity markets, and the fact that the two main instruments in promoting RES are located on the wholesale and retail electricity markets. Further reading: Proskurina [101]. The wood pellet business in Russia with the role of North-West Rusian regions: Present trends and future challenges. Renewable and Sustainable Energy Reviews 51, 730–740.

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energy elite has been systematically scrutinized on the basis of an interdisciplinary coding scheme. The social structurationist approach to energy studies [14] offers such an interdisciplinary model by looking into resource-geographic, financial, institutional and ecological enabling and constraining factors of energy policies. A critical discourse analysis (CDA) is applied to this set of documents [15] in order to weigh factors by frequency of appearance and test them on consistency between actors, audiences and over time. A fifth control factor to probe for credibility of a particular argument is the juxtaposition of discourse with actual policy. This comparative approach results not only in identifying factors, but also filters out the most credible ones, *i.e.* frequently articulated arguments that are widely shared amongst elite actors and communicated consistently across different audiences and over time. In doing so, the comparative analysis reveals underlying power structures in favor of politicians and business actors who are able to push their interests thanks to preferential access to policy making.

This comparative methodological design contributes to the theoretical understanding of the conditions under which certain factors are more likely to be articulated. The article further develops the social structurationist approach that looks beyond the state as a unitary actor. Avoiding the trap of overemphasizing the president's role, the CDA looks into a broader set of political and business actors: the most relevant actors in identifying policy explanations depend on the policy field.

Empirically, exploring how Russia's elite justify REPs in a major energy consuming and exporting country contributes to the debate on differing drivers of import-dependent and energy-rich countries [16]. Moreover, identifying explanations of a late adopter sheds light on the time it takes for an energy transition to occur [17]: a major oil, gas and coal exporter that decided to launch REPs in spite of substantial hurdles might be considered a least-likely case of energy transition.

The remainder of the article is structured as follows: the next section delves into the literature on drivers of REPs in energy-endowed countries, followed by an introduction of the social structurationist model that is operationalized into a coding scheme. Section 4 elaborates on the CDA methodology. Section 5 maps Russia's elite discourse along the four structural dimensions, actors involved and audiences addressed, which is followed by a dimension-wise discussion of particular enabling and constraining factors as expressed by Russia's energy elite. The final section draws conclusions on the most credible enabling and constraining factors as expressed by Russia's energy elite, and their policy implications.

2. Literature review: enabling and constraining factors of REPs in energy-endowed countries

Much uncertainty remains regarding the enabling and constraining factors in energy-rich countries, including Russia. Some authors assume that factors similar to import-dependent countries, climate change and security of supply, drive Russia's REPs [18,19].

Nevertheless, the literature on energy-endowed countries questions why these countries would want to develop relatively more expensive renewable energy sources[4] [20,21] that may threaten their own oil and gas exports. Moreover, in contrast to countries relying on energy imports, they have fewer incentives to save energy [22,23] and develop indigenous renewable energy resources to decrease import dependence [3,4]. Environmental drivers may also carry less weight in oil-rich countries with vested business interests [24,25], limited institutional compliance with Kyoto [26], and OPEC's interest in obstructing international climate change negotiations [27]. International environmental regimes may, however, alter costs and benefits and create domestic support [28].

The scarce literature on Russia's REPs focuses on the legal breakdown of concrete REPs [29,8,9], the degree of implementation [30],[5] their risk reduction effect on investments [18] and limited impact on electricity prices [31] in order to explain Russia's REPs. Several resource-geographic and financial arguments in favor of REPs have been suggested [32,33], amongst others fuel-saving opportunities to seek financial gains from export markets [34,35]. Nonetheless, the question remains of how Russia's energy elite themselves explain why they would want to develop REPs in the first place. To fill this gap, this article extensively scrutinizes Russia's energy elite's discourse to identify proclaimed resource-geographic, financial, institutional and ecological enabling and constraining factors and their relative weight. This approach reveals differences within the elite, how they tailor their discourse to different audiences and how debates change over time.

3. Framing factors within four energy policy dimensions

In order to meaningfully map elite discourse on a wide range of factors enabling and constraining REPs, the social structurationist approach is most appropriate. The manner in which policy actors engage with structural dimensions takes place through cognitive framing. As Aalto ([36]: 15) puts it "*The model is built around the idea that energy policy actors (…) need to make sense of their policy environment in order to create viable policies. To do so they adopt different cognitive frames guiding their policy choices. With the help of these frames they assess the various dimensions of their policy environment: resource geographic, financial, institutional and ecological.*" This social structurationist model bridges the structure-agency debate by allowing actors to possess agency, while at the same time being limited by structural dimensions. This bounded agency concept is translated into the actor's freedom to frame enabling and constraining factors within one of the four dimensions ([14]: 7).

The resource-geographic dimension deals with the material characteristics, as well as the means of production and technology used to extract, develop and transport energy within a particular geographical environment ([14]: 8). The financial dimension comprises "*all financial transactions, incentives and constraints pertaining to energy*"; the institutional dimension ranges from informal norms and 'rules of the game' to formal sectoral interests and decision-making capacity ([14]: 9). Finally, the ecological dimension deals with environmental externalities of energy production, transport and use ([14]: 10).

The selection of this theoretical approach is underpinned by theoretical, empirical and methodological considerations. Theoretically, Aalto's model looks beyond the state as a unitary actor and attributes agency to the range of relevant actors. Moreover, the four structural dimensions facilitate operationalization of the theoretical question of frame selection [37]: identifying the conditions (actor, audience, time) under which Russia's elite select frames to make sense of the resource-geographic, financial, institutional or ecological dimensions. Empirically, the social structurationist approach has been developed to explain Russia's energy policies as a major energy consuming and exporting country, whereas competing analytical operationalizations such as the concept of energy security find their origin in energy-importing states [38].

An additional strength of the model concerns methodology. The energy literature is fragmented along disciplinary lines, and while this specialization has its merits, it risks missing out on relations and dialogue among disciplines. Aalto's model suggests an interdisciplinary approach, integrating material and ideational aspects, between energy engineering (resource-geographic), economics (financial), politics (institutional) and environmental studies (ecological). Especially regarding political discourse that draws upon data from different

[4] Relative to heavily subsidized domestic substitution goods: gas and nuclear electricity generation. This greatly reduces RE competitiveness on Russia's Unified Power System.

[5] Contrary to the referenced article that deals with what has been done through a policy analysis, this article focuses on what has been said on the basis of a discourse analysis.