



The Green Menace : Russia's elite explanations of Renewable Energy Policies

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Research question

- Why would Russia's elite want to develop renewable energy policies (REPs)?
 - Energy-endowed
 - Not dependent on foreign energy imports
 - Relatively inexpensive fuel and electricity prices
 - Limited international ecological engagement
 - No active GHG reduction policy (base year 1990)
 - Did not commit to Kyoto's second commitment period
 - Green menace
 - Global renewable energy development may threaten Russia's energy exports (Main export markets : EU, China)

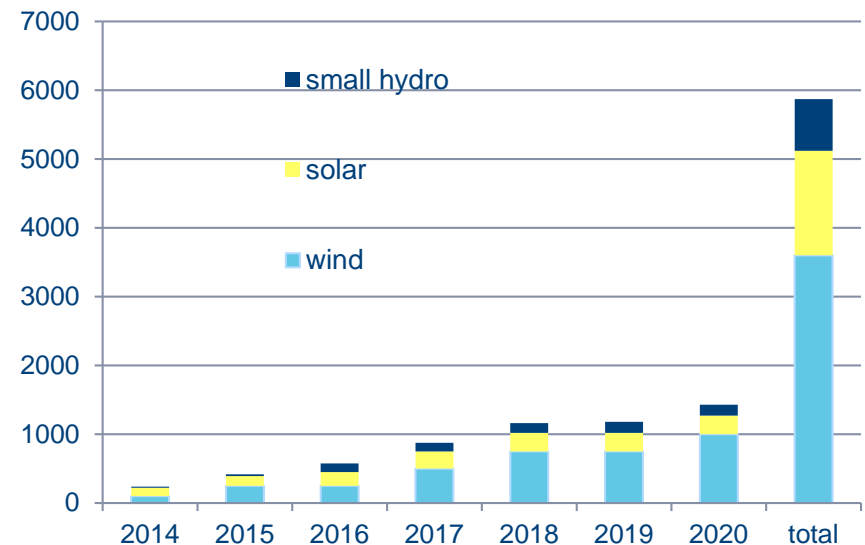
➔ How do Russia's elite explain their REPs ?

Russia's renewable energy policies

- Quantitative target : **4.5%** electricity consumption from RES by 2020
- Market-based Support schemes (consumer contributions)
 - Wholesale market (14% ROI ; 15 y ; > 5MW)
 - **3600 MW wind** capacity
 - **1520 MW solar PV** capacity
 - **741 MW small hydro** capacity
 - Retail market
 - Regions responsible
 - Should reduce electricity prices



Planned new RE capacity (MW)



Analytical Framework : Aalto's Social Structurationist Approach

- How do Russia's energy elite explain their renewable energy policies ?
- Interdisciplinary approach to energy
 - **Resource-geographic dimension**
 - **Financial dimension**
 - **Institutional dimension**
 - **Ecological dimension**
- Gauge for credibility of their arguments
 - Is there a difference among actors ?
 - Is there a difference among audiences ?
 - Is there a difference over time ?

Methodology and data description

- 396 primary political texts that mention renewable energy
 - 104 presidential
 - 132 governmental (prime-minister & vice-prime minister)
 - 119 Ministry of Energy
 - 41 Ministry of Natural Resources and Ecology
- Critical discourse analysis with Nvivo®
 - Inductive manual coding of statements explaining REPs
 - Aggregated into four analytical energy dimensions (Aalto)
 - Resource-geographic; Financial; Institutional; Ecological

Why would Russia want to develop REPs?

- Resource-geographic
 - Vast territory with a wide variety of **available** renewable resources
 - Improve **security of supply** of energy deficit and isolated regions
 - **Diversification of energy mix** (reduce gas consumption)
 - Development of **production facilities**
 - **Technologic catch-up**
- Financial
 - **Reduce transport and fuel costs** (Severnyj Zavoz)
 - **Diversification of export products** as to decrease sensitivity to oil price fluctuations : innovation economy
 - **Reduce energy intensity** through efficiency gains
 - **Job creation**

Why would Russia want to develop REPs?

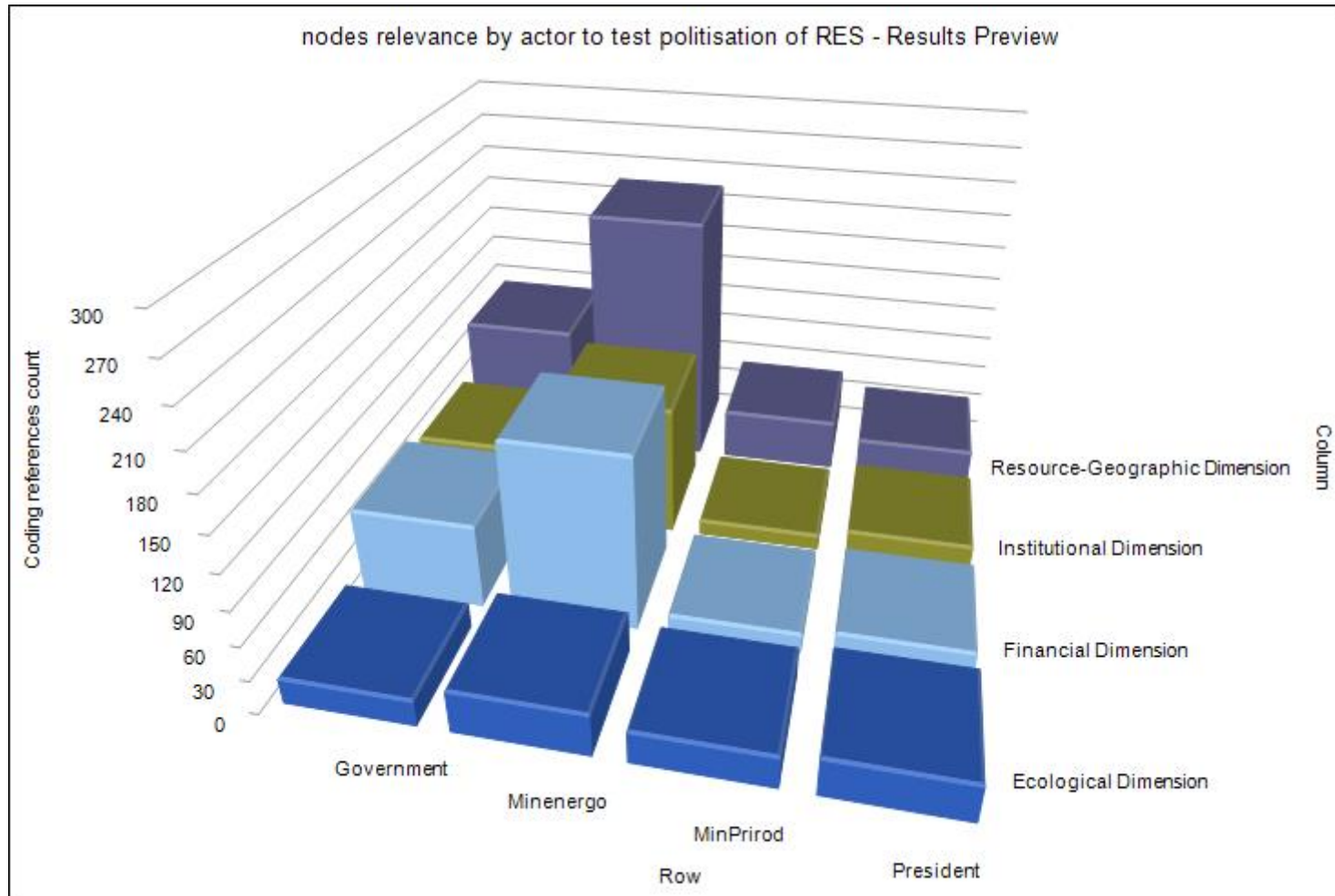
- Institutional dimension
 - Remain a **leading energy power** : international cooperation
 - Influence **international rule making** (IRENA membership)
 - Institutionalize **modernization**
 - Commission on Strategic Development of the Fuel and Energy Sector and Ecological Safety, (2012)
- Ecological dimension
 - Improve **air quality & increase health/standard of living**
 - Sustain **biodiversity**
 - Meet international obligations in combating **climate change**

Four-dimensional Mapping of RE-Discourse

Resource-Geographic Dimension		Financial Dimension			Ecological Dimension	
Establish a Russian renewable energy industry	Resource type confusion	Attract RE investments	Cost of RE facilities	Social factor	Improve energy efficiency	Combat or cultivate climate change
	Diversify energy mix		Threat of global RE revolution			
Improve Security of Supply		Exploit Russia's geographic potential	Institutional Dimension			Set RE goals
	Develop support schemes		Stimulate international RE cooperation	Neopatri-monial network	Reduce air, soil & water pollution	

Name	Sources	References
Ecologic Dimension		125 198
Financial Dimension		202 421
Institutional Dimension		171 371
Resource-Geographic Dimension		264 763

Difference between actors : absolute number of references counted on each dimension by actor



	A : Government ▾	B : Minenergo ▾	C : MinPrirod ▾	D : President ▾
1 : Ecological Dimension ▾	24	38	29	34
2 : Financial Dimension ▾	74	152	18	24
3 : Institutional Dimension ▾	62	115	14	22
4 : Resource-Geographi... ▾	109	222	46	32

Difference between actors : ecological dimension

Assessments of ecological characteristics of renewable energy by actor
(Absolute number of coding references)

	CONSTRAINING FACTORS	ENABLING FACTORS	DIFFERENCE SCORE (E-C)
PUTIN	15	10	-5
MEDVEDEV	7	15	+8
NOVAK & SHMATKO & TEKSLER (MINENERGY)	7	19	+12
DONSKOY & TRUTNEV (MNRE)	4	12	+8

Ecological characteristics of wind energy questioned

“Между тем в каждой из них, за исключением, может быть, солнечной энергии, есть свои плюсы и минусы. Скажем эти **ветряки**, которые очень распространены во многих европейских странах. Казалось бы, это совсем уж чистый, экологичный вид энергии. **А это и не так оказывается: они птиц убивают. Там такая вибрация, даже червяки на поверхность вылезают, я уже не говорю про всяких кротов. Это реальная экологическая проблема.**”

*“**Wind generators**, which are so widespread in many European countries seem to be an environmentally friendly kind of energy, but in fact they **kill birds**. Vibration there is such that worms come out of the ground, not to mention moles. This is a **real environmental problem**.”*

(Putin, 2010, <http://archive.government.ru/docs/13223/>)

Difference between audiences : ecological explanations of REPs

Dimension	Enabling and constraining factors	Number of references	Domestic audience	Foreign audience
Ecological dimension	Climate Change	77	25	52
	Reduce ecological footprint	67	44	23
	Reduce air, soil, water pollution	15	8	7
	Dimension Total	159	77	82

Audience	Domestic	Western	non-Western
RES may combat CC	17 (68%)	30 (64%)	3 (60%)
RES may not combat CC	8 (32%)	17 (36%)	2 (40%)
Total	25	47	5

Changes over time : Race to the bottom

	2009	2013	2016
QUANTITATIVE RENEWABLE ENERGY TARGET	4.5% of total electricity produced and consumed	2.5% of electricity mix - 6.2 GW	2.5% of electricity mix - 5.9 GW
TARGET DATE	2020	2020	2024
INTERMEDIATE GOALS	1.5% - 2010 2.5% - 2015	-	-
MENTIONED CURRENT SHARE OF RES	0.5%	0.8%	0.9%

Changes over time : foreign cooperation

- International cooperation in the field of REPs
 - Attract Foreign Direct Investments
 - Access to know-how and technologies

	Number of RES references	Of which < 2.2014	Of which > 2.2014
EU MEMBER STATES	54	43	11
CHINA	16	3	13

RES partners < March 2014	RES partners > March 2014
Germany	China
Denmark	South-Korea
France	Argentina
Italy	

Conclusions

- Main explanations are Resource-Geographic and Financial
 - Develop Russian RE technologies in order to catch-up with the West
 - Establish Russian-based production facilities & RE power plants
 - Reduce electricity prices in isolated areas
- Frame selection differs by actor, audience and over time
 - A minor, yet influential part of Russia's elite criticizes RES
 - The Ministry of Energy most often explains REPs, and does so on the basis of R-G and Financial grounds
 - Ecological framings differ between domestic and foreign audiences
 - A shift towards Asia is observed in RE cooperation after 2014