Patterns of Climate Policy Performance

Or: Exactly how bad is Canadian climate policy?

by Sebastian Sewerin

PATTERNS OF CLIMATE POLICY PERFORMANCE

Or: Exactly how bad is Canadian climate policy?

by Sebastian Sewerin
Postdoctoral Visiting Scholar

The Challenge of Climate Change

5th Assessment Report IPCC (2014):

"no ambiguity in the message"; carbon emissions must be cut sharply and rapidly

To limit climate change (+2°) carbon emissions ultimately will have to fall to zero. Goal for 2050: 80% emission reductions (base year 1990).

Canada and Climate Change

Resurgent interest in efforts of nation-states:

Vital actors in organising political solutions to climate change.

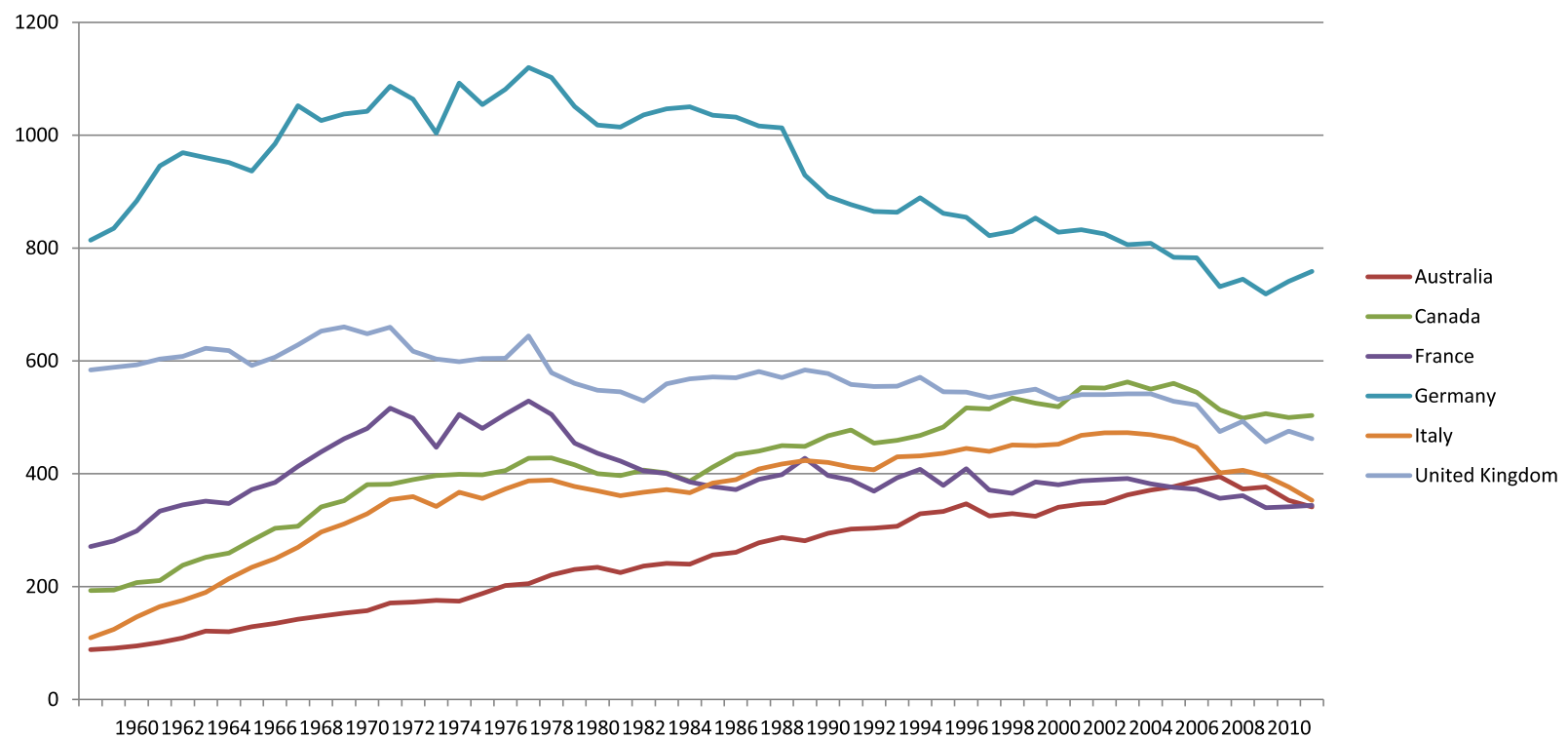Crucial in designing and implementing (sectoral) policies addressing climate change.

So, what about Canada?

Some Basic Observations: CO$_2$ Emissions, Mt (territ.)

Canada

Some Basic Observations: CO_2 Emissions, Mt (territ.)

Legend:
- Australia
- Canada
- France
- Germany
- Italy
- United Kingdom
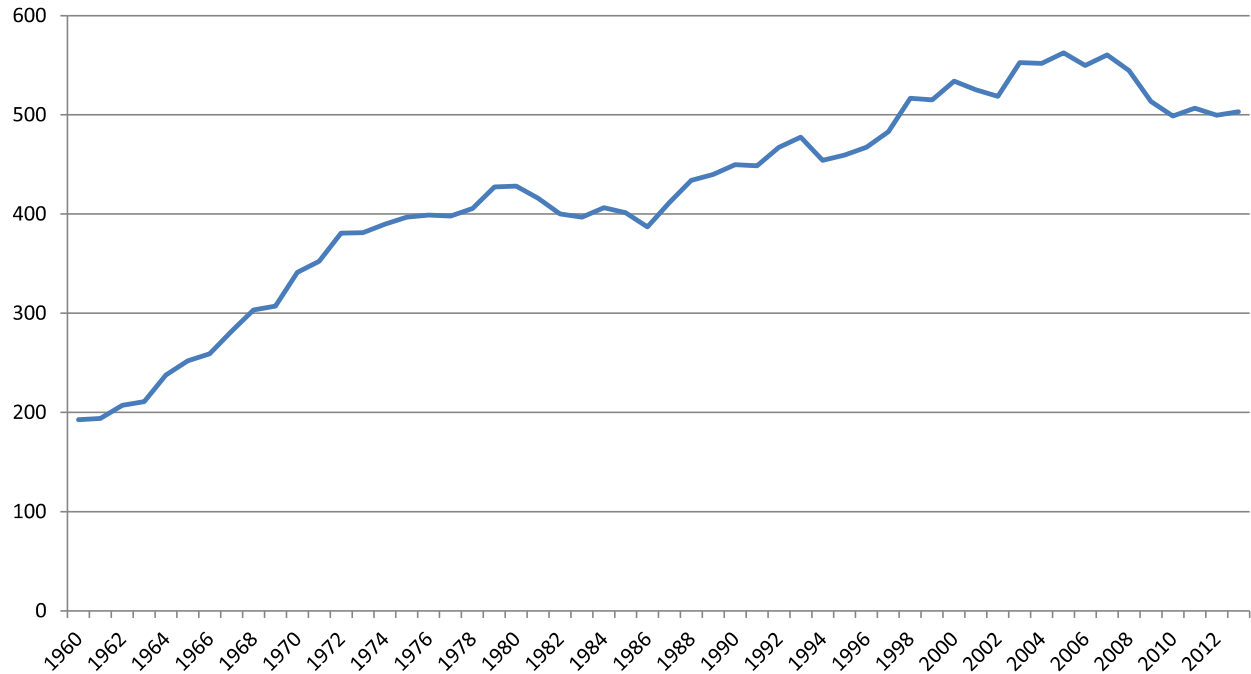
Some Basic Observations: CO_2 Emissions, in t per person
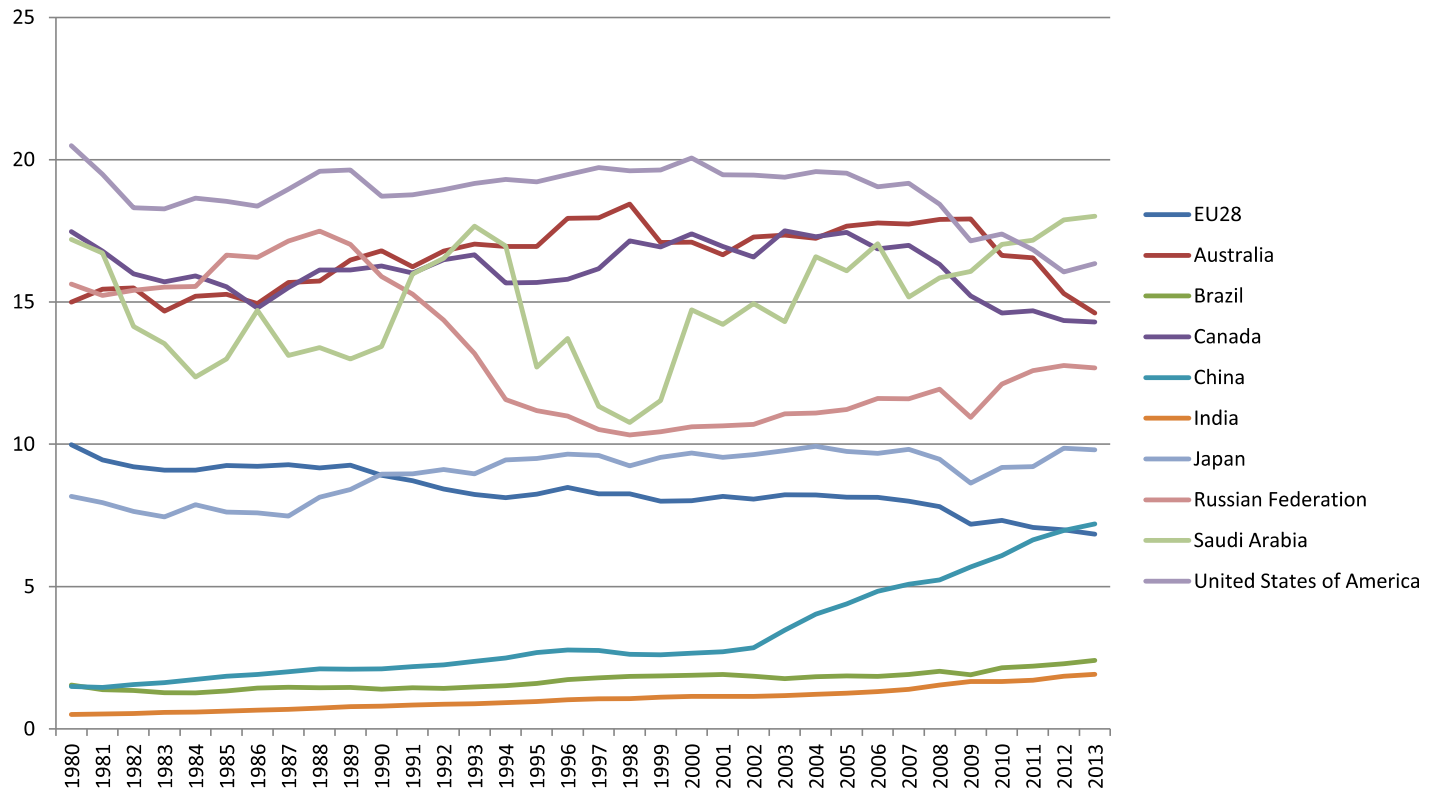
Perceptions of Canadian Climate Policy

Rankings

THINK TANK & RESEARCH

The Climate Change Performance Index

Results 2014

Jan Burck, Franziska Marten, Christoph Bals

CLIMATE CHANGE PERFORMANCE index 2014

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CAN
Europe

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Table 2

Rank		Country	Score**	
1*	–	–	–	
2*	–	–	–	
3*	–	–	–	
4	–	Denmark	75.23	
5	▲	United Kingdom	69.66	
6	▲	Portugal	68.38	
7	▼	Sweden	68.10	
8	▼	Switzerland	66.17	
9	▲	Malta	66.05	
10	▲	France	65.90	
11	–	Hungary	65.17	
12	▼	Ireland	65.01	
13	▲	Iceland	64.89	
14	▼	Belgium	64.65	
15	▲	Morocco	63.99	
16	▲	Romania	63.73	
17	–	Slovak Republic	63.17	
18	▲	Italy	62.90	
19	▼	Germany	61.90	
20	▼	Mexico	61.50	
21	▲	Lithuania	60.94	
22	▲	Spain	60.37	
23	▲	Luxembourg	60.27	
24	▲	Norway	59.32	
25	▼	Slovenia	59.19	
26	▲	Egypt	59.00	
27	▲	Latvia	58.73	
28	▼	Cyprus	57.61	
29	▲	Austria	57.19	
30	▼	India	57.16	
31	▲	Netherlands	56.99	

comparison with previous year

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Rank		Country	Score**	
32	▲	Finland	56.57	
33	▼	Belarus	56.48	
34	▲	Indonesia	56.24	
35	▼	Ukraine	56.04	
36	▼	Brazil	55.53	
37	▲	Bulgaria	54.87	
38	▼	Thailand	54.51	
39	–	South Africa	54.04	
40	▼	Czech Republic	53.93	
41	▲	Argentina	53.60	
42	▼	New Zealand	53.49	
43	–	United States	52.93	
44	▼	Croatia	52.79	
45	▲	Poland	52.69	
46	▲	China	52.41	
47	–	Greece	51.50	
48	▲	Singapore	50.32	
49	▼	Algeria	49.92	
50	▼	Japan	47.21	
51	▲	Malaysia	47.06	
52	–	Chinese Taipei	46.81	
53	▼	Korea	46.66	
54	▲	Turkey	46.47	
55	▲	Estonia	45.52	
56	▼	Russian Federation	43.64	
57	▼	Australia	41.53	
58	–	Canada	40.39	
59	▲	Islamic Rep. of Iran	37.81	
60	▼	Kazakhstan	37.64	
61	–	Saudi Arabia	25.17	

comparison with previous year

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Index Categories

- **Emissions Level** (30% weighting)
- **Emissions Development** (30% weighting)
- **Renewable Energy** (10% weighting)
- **Efficiency** (10% weighting)
- **Policy** (20% weighting)

Rating

- Very good
- Good
- Moderate
- Poor
- Very poor

Climate Change Performance Index 2014

Table 4: Climate Change Performance Index for OECD Member Countries

Rank	Country	Score	Rank	Country	Score	Rank	Country	Score
4	Denmark	75.23	17	Slovak Republic	63.17	40	Czech Republic	53.93
5	United Kingdom	69.66	18	Italy	62.90	42	New Zealand	53.49
6	Portugal	68.38	19	Germany	61.90	43	United States	52.93
7	Sweden	68.10	20	Mexico	61.50	45	Poland	52.69
8	Switzerland	66.17	22	Spain	60.37	47	Greece	51.50
10	France	65.90	23	Luxembourg	60.27	50	Japan	47.21
11	Hungary	65.17	24	Norway	59.32	53	Korea	46.66
12	Ireland	65.01	29	Austria	57.19	54	Turkey	46.47
13	Iceland	64.89	31	Netherlands	56.99	57	Australia	41.53
14	Belgium	64.65	32	Finland	56.57	58	Canada	40.39

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An Example of Composite Performance Indicators

Figure 1: Components of the CCPI
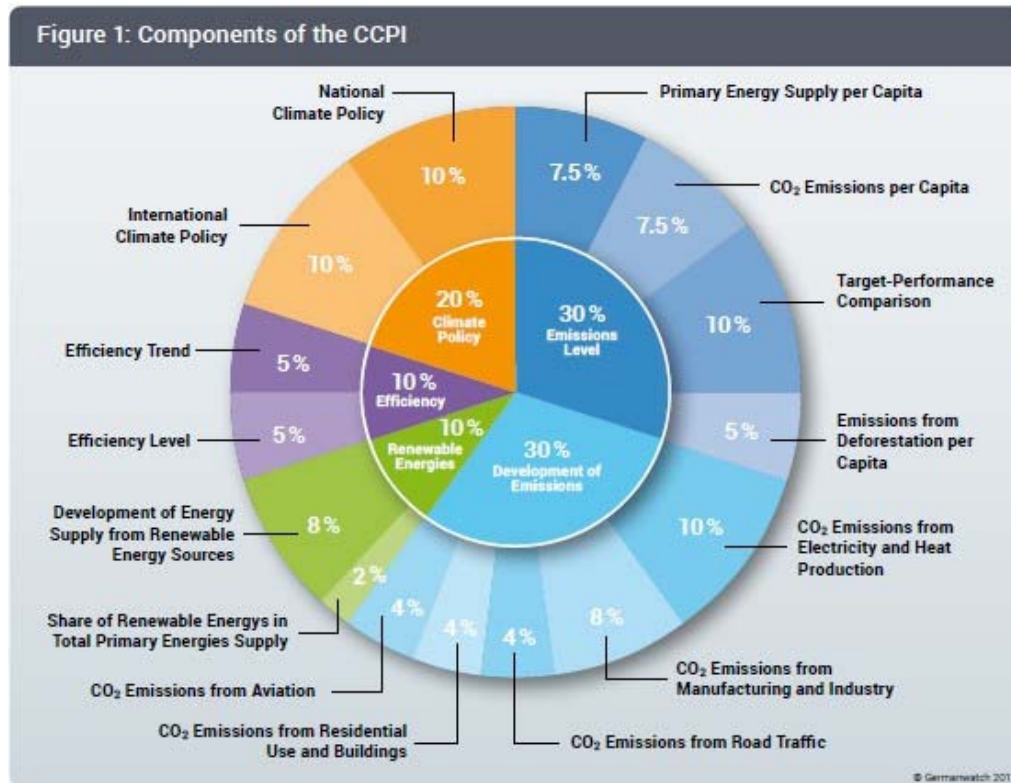
Assessing and Explaining Climate Policy Performance – The Challenge for Political Science

How to define climate (or environmental) policy performance?

How to measure climate policy performance?

How to explain differences in climate policy performance?

Two Perspectives on Performance: Outcome vs. Output

Outcomes: material results of political and socio-
economical action in the form of environmental
impacts (e.g. GHG emissions, share of renewables)

Output: policies adopted

Explaining Outcomes: a Broad Literature and Many Open Questions

Effect of Types of Democracy?

A. Lijphart: Consensus Democracy is Good for the Environment, Majoritarian ("Westminster") Democracy is Bad!

Effect of Specific Institutional Characteristics?

unitary vs. federal government?

presidential vs. parliamentary government?

political parties and party systems?

Democracy vs. Autocracy?

Figure 1: Rockström et al. 2009.
Table 2: Vis, Woldendorp, Keman 2012.

JOHNSON SHOYAMA GRADUATE SCHOOL OF PUBLIC POLICY

Research Project 1: An Ideal-Type Analysis

University of Regina · UNIVERSITY OF SASKATCHEWAN
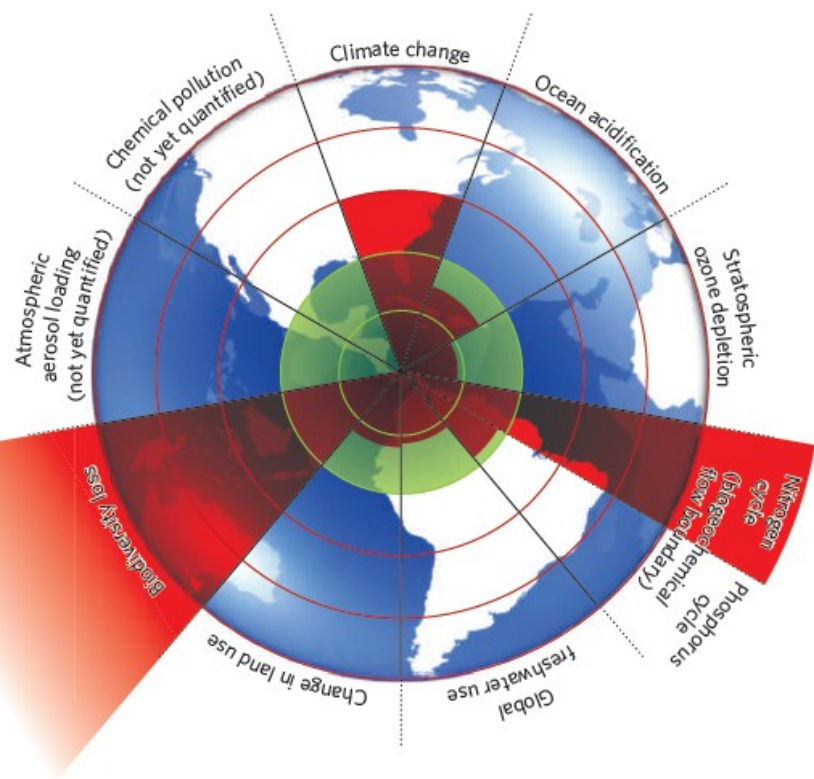
Table 2. Countries' economic performance, 1975–2005

Economic Performance Model	1975–1979	1985–1989	1995–1999	2001–2005
A positive score on all three indicators				
Model A	Australia	Australia	Australia	Australia
High Growth–High	Austria	Finland	*New Zealand*	Ireland
Employment–Low Debt	*Denmark*	Portugal	Norway	New Zealand
	France	Sweden	Portugal	*United States*
	Germany	United Kingdom	United Kingdom	
	Norway	United States		
A positive score on two indicators				
Model B		Canada	Austria	Finland	Spain
High Growth–Low Debt	*France*	France	Ireland	
	Greece	Germany	*New Zealand*	
	Ireland	Spain		
	Italy			
	Portugal			
	United States			
Model C		Canada	Canada	Canada
High Growth–High Employment			Denmark	
			Sweden	
			United States	
Model D	*Denmark*	Norway	Germany	Denmark
High Employment–Low Debt	Finland			Finland
	New Zealand			Germany
	Sweden			Netherlands
	United Kingdom			Norway
				Portugal
				Sweden
				United Kingdom
				United States
A positive score on one indicator				
Model E		Belgium	*Belgium*	Greece
High Growth		Ireland	Greece	
		Italy	Netherlands	
		Netherlands	Spain	
Model F		Denmark		Austria
High Employment				
Model G	Belgium	Greece	Austria	
Low Debt	Netherlands		France	
	New Zealand			
	Spain			
A positive score on none of the indicators				
Model H		New Zealand	*Belgium*	Belgium
Low Growth–Low Employment–High			Italy	France
Debt				Italy

Explaining Output: Conceptual and Measurement Problems

Existing Approaches:

Policy Styles; "Leaders" vs. "Laggards"; Policy Diffusion Studies

Common Underlying Problem:

conceptualising and measuring policy output across cases

Basic Conceptual Distinction:

"Policy Density" vs. "Policy Intensity" (Knill et al. 2012)

A Possible Measurement Tool: the Index of Policy Activity

		Policy Content		
		High Level Abstraction	*Programme Level Operationalization*	*Specific On-the-Ground Measures*
	Policy Ends or Aims	**GOALS** **What General Types of Ideas Govern Policy Development?** (e.g. environmental protection, economic development)	**OBJECTIVES** **What Does Policy Formally Aim to Address?** (e.g. saving wilderness or species habitat, increasing harvesting levels to create processing jobs)	**SETTINGS** **What are the Specific On-the-ground Requirements of Policy?** (e.g. considerations about the optimal size of designated stream-bed riparian zones, or sustainable levels of harvesting)
Policy Focus	*Policy Means or Tools*	**INSTRUMENT LOGIC** **What General Norms Guide Implementation Preferences?** (e.g. preferences for the use of coercive instruments, or moral suasion)	**MECHANISMS** **What Specific Types of Instruments are Utilized?** (e.g. the use of different tools such as tax incentives, or public enterprises)	**CALIBRATIONS** **What are the Specific Ways in Which the Instrument is used?** (e.g. designations of higher levels of subsidies, the use of mandatory vs voluntary regulatory guidelines or standards)

<u>Two Starting Points:</u>

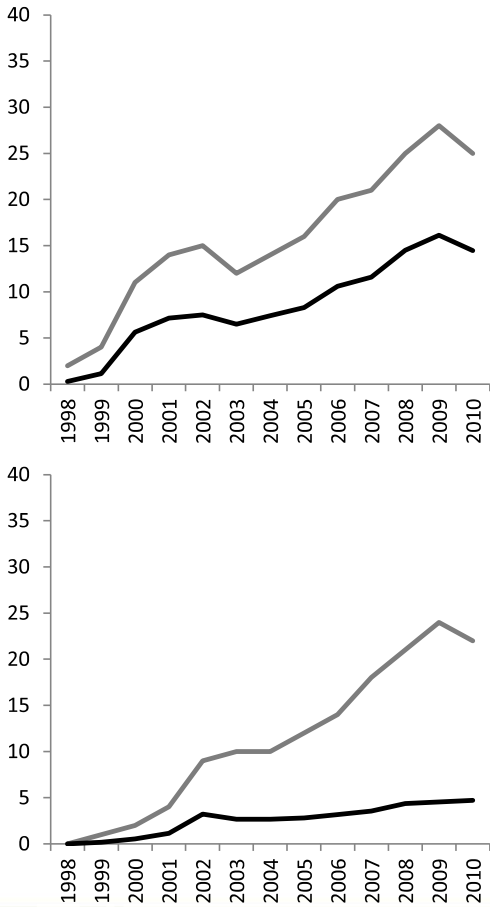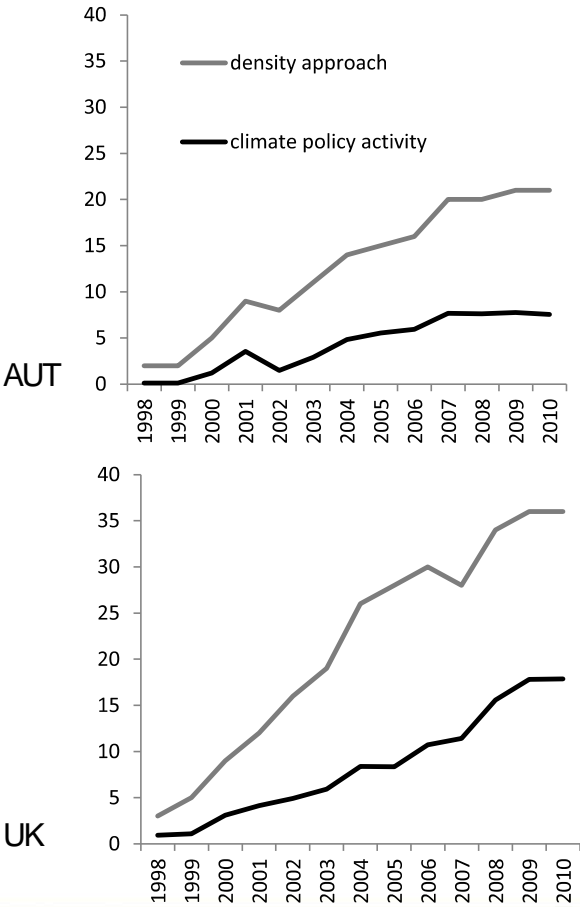Howlett & Cashore's (2009) Taxonomy of Policy Components (cp. Table)

&

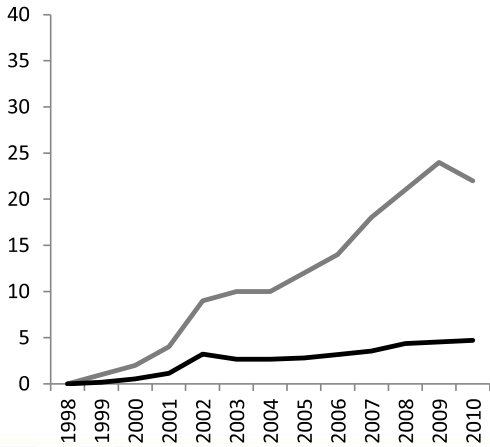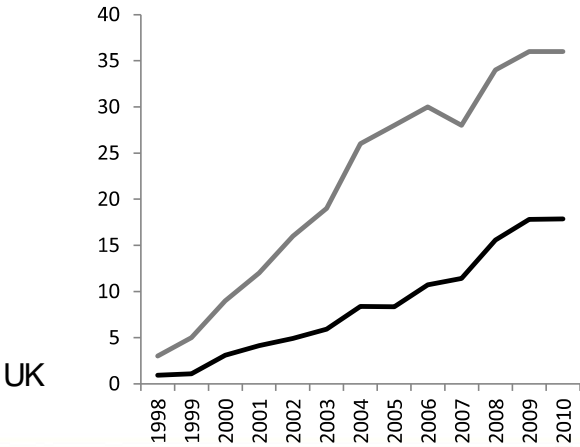Knill et al's (2012) distinction between "Policy Density" and "Policy Intensity"

Article coming up in *Policy Studies Journal.*
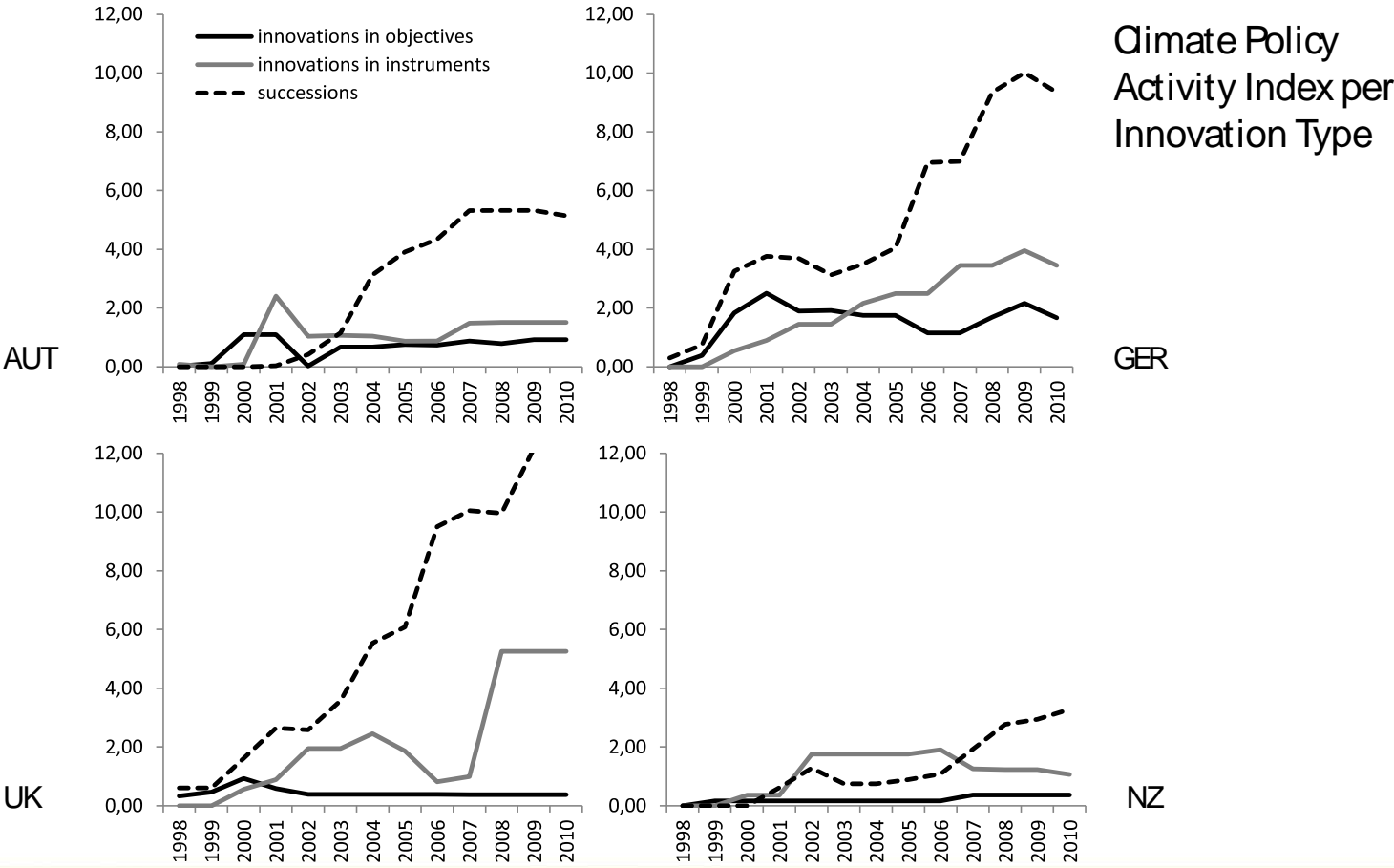
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First Findings: Comparing Austria, Germany, New Zealand and the UK

Climate Policy Activity Index vs. Density Approach / Counting Policies

First Findings: Comparing Austria, Germany, New Zealand and the UK

Climate Policy Activity Index per Innovation Type

Legend:
- innovations in objectives
- innovations in instruments
- successions

Charts: AUT, GER, UK, NZ (1998–2010)

Research Project 2: Analyzing the Impact of Policy Activity – Policy Innovations and the Energy Transition

Research Question:

What is the impact of patterns of energy policy intensity and innovativeness on technological change towards low-carbon solutions?

Cases & Data Set:

Climate Policy Activity (in the energy sector) in Austria, Canada, Germany, New Zealand and the UK

Contribution:

- detailed assessment of the existing policy mixes: contributes to the empirical operationalization of policy mixes

- identifying processes of layering, drift and conversion

- effect of policy mixes on indicators of technological change in the energy production sector (such as share of renewable energy, R&D expenditures and patent registration)

Thank You!

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