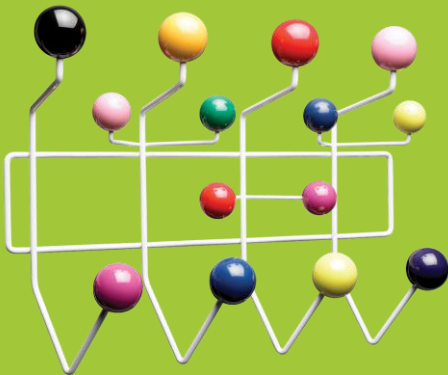


The transition to the low-carbon society: which role for taxation?

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*15th Global Conference on Environmental Taxation
Copenhagen, 25 September 2014*



Outline

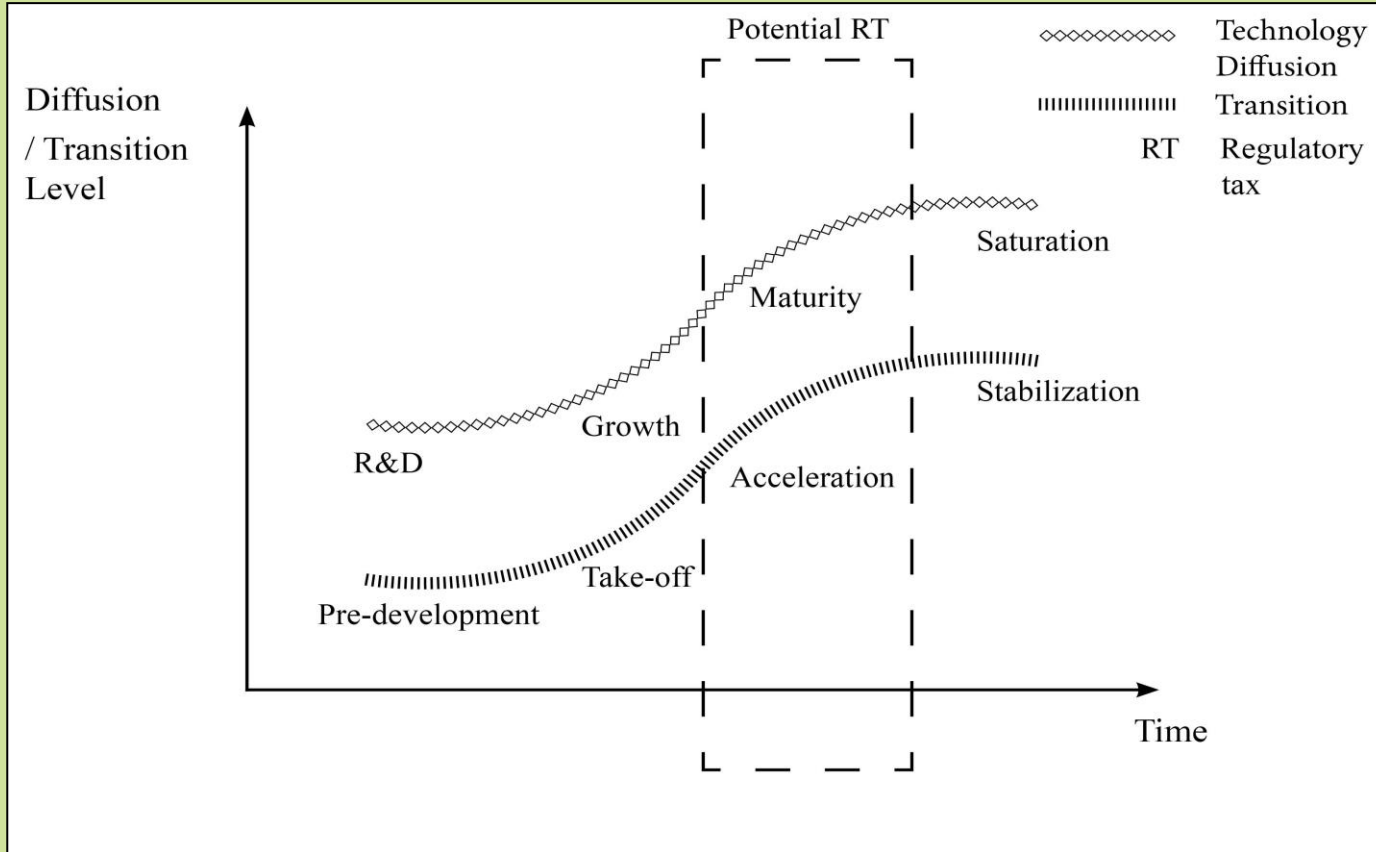
1. Transitions and system thinking
2. Using taxation to drive technological innovation
3. The social practices model
4. Barriers
5. Case study: Energy transition Flanders/Belgium
6. Conclusions

1. Transitions and system thinking

- Persistent sustainability problems
- **Socio-technical systems** (Rotmans & Loorbach, 2010)
 - Structure: infrastructure, technology, institutions, economy;
 - Culture: dominant images, values and paradigms;
 - Practices: routines, habits and procedures.
- Transition theory: Need for radical *system* changes (= transition)
- Where does regulatory taxation fit in?

2. Taxation and technology

- **Socio-technical systems** (Retmans & Loorbach, 2010)
 - Structure: infrastructure, **technology**, institutions, economic system and performance,
 - Culture: dominant images, values and paradigms;
 - Practices: routines, habits and procedures.



- Vollebergh, Johnstone: environmental taxes stimulate innovation

- **Socio-technical systems** (Rotmans & Loorbach, 2010)
 - Structure: infrastructure, technology, institutions, economic system and performance;
 - **Culture**: dominant images, values and paradigms;
 - **Practices**: routines, habits and procedures.

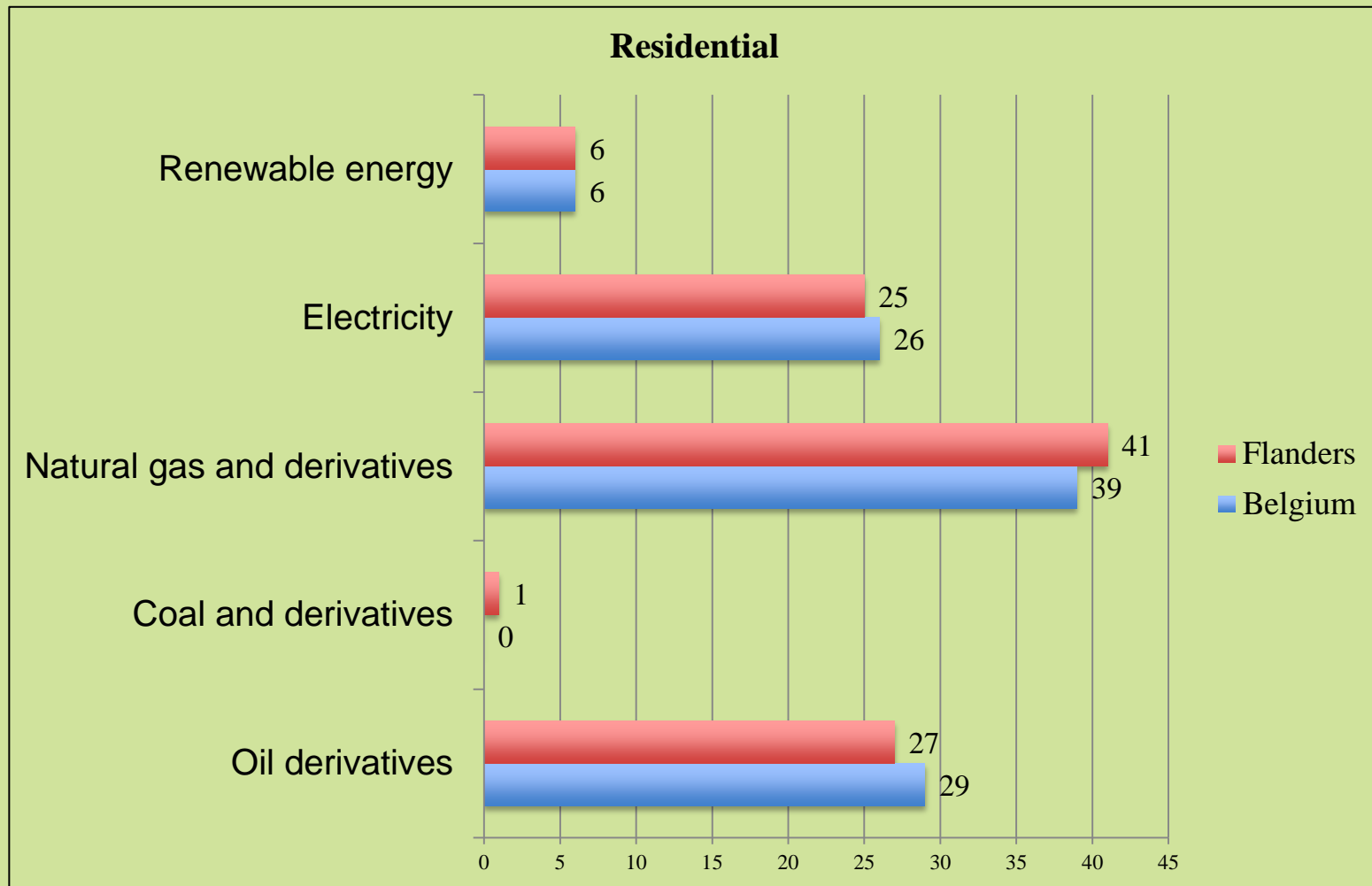
3. Practices and culture

- Work in progress
- *Rational choice*
- Transition governance?
- Social practices theory (Reckwitz, 2002): practices are explained by 3 elements: materials, competences and meanings: cannot be governed directly.
- Response:
 - Government is an important actor
 - Compromise: bounded rationality
- Tax on the ‘materials’

4. Barriers

- Rebound effect
- Carbon leakage
- Public and political acceptance
- Lock-in

5. Case study: the energy system



Source: Energy Balance Flanders (VITO) + IEA

6. Conclusions

- We do see potential for regulatory taxation;
- Environmental taxation as part of a policy package;
- Potential long term effects
 - Regulatory tax in acceleration phase, taxing dominant technologies or practices
 - Practices and culture: theoretical discussion is ongoing