



Legal Tools for Ecologically Sustainable Energy Systems

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Outline of my Presentation

- The project
 - Background and motivation
 - Theory and Method
 - The objective of the study
- How can my profile contribute to reach the goals of STandUP?



Background and Motivation of the study –
Energy Politics

- **EU targets** – 49 % of Sweden's energy should come from renewable sources by 2020, including a further requirement for at least a 10% renewable share in the transport sector.
- **Swedish vision** (Prop. 2008/09:163) – that Sweden in 2050 should have zero net emissions of greenhouse gases.
- Swedish environmental quality objective: to have limited impact on the climate
- The objective of the Environmental Code – that "sustainable development" should be implemented including "conservation of ... energy "(Chapter 1. § 1).



Background and Motivation of the study –
Why a Legal Study?

- The law can facilitate, but also prevent the implementation of energy policy
- The control system is extensive – involves legal environmental quality requirements for operators, permitting and planning systems and environmental quality standards
- The law is the basis for implementing most economic governance decisions
- The Law should satisfy conflicting interests



Background and Motivation of the study -
Fragmentation of the Legal System

- **In the law** - Activities and individual measures are often examined separately and in the light of the circumstances of the specific case
- **In reality** – it is often a question of activities and measures linked in systems (i.e. links between production and/or distribution – in a region, nationally or internationally)
- **Hypothesis** - A systems approach could lead to higher energy efficiency and more ecologically sustainable solutions



Theory and Method
A legal study – using a systems approach

- Traditional legal method
 - The content of the law will be analyzed in terms of sources of law (legislative texts, preparatory works and case law, etc.)
- Systems approach
 - Systemic issues
 - ecosystems, energy and legal systems which are interlinked in a complex system
 - System Theory
 - Holistic approach, dealing with complexity, non-linearity and adaptability



The Objective of the Study

- To identify situations where a fragmented legal system leads to energy inefficiencies and/or ecologically unsustainable results
- To design legal tools that lead to a higher level of systematic and holistic thinking with regard to energy



Examples From a Fragmented Legal System

- Lack of coordination between different energy activities' overall environmental impact
 - Various hydropower plants' impact on the same water system
- Lack of coordination between different energy producing activities
 - Relationship between wind and hydropower plants
- Lack of coordination between energy production and energy distribution
 - Wind power production and transmission lines



To design legal tools that lead to a higher level of systematic and holistic thinking with regard to energy

- Discuss changes in the current law
- Investigate new alternative legal tools for comprehensive planning
 - Energy policy often concerns large land-based areas
 - We are dealing with a reality that is complex with non-linear effects in ecosystems. The reality is changing and we receive new knowledge.
 - A need for plans which can handle large-scale issues, complexity and variability



Conclusion - My contribution to reaching the goal of STandUP

- Adding the legal system to the systems approach

Thank you for listening!

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