

# **The Institutional Blind-spot in the Green Transition: Market Incentives versus Command-and-Control**

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# The Issue

## Green versus Green

- Environmental regulation and unpredictable permitting processes.
  - Stands in the way of the transition to zero-carbon technologies.
- Reflected in recent policy initiatives:
  - Inflation Reduction Act (USA).
  - Net Zero Industry Act (European Union).

## Calls for reforms

- Command-and-control have a bad reputation.
- Market based instruments are viewed as superior.
- The neoclassical economics claims ignore institutional contexts.

# Our main arguments

## The ongoing transition:

- Involves specific challenges.
  - Which tend to strengthen the case for Command-and-Control instruments.
- The specific challenges includes:
  - The need for technological innovation.
  - Long-term credibility.

## Potential for Command-and-Control requires:

- Attention devoted to the institutional context.
  - Knowledge generation and transfer.
  - Social trust.
  - Relationship between regulators and industry.

# The Debate: Market Incentives vs Command-and-Control

Some classic examples of the two approaches.

## Command-and-Control

- Emissions standards.
- Technological mandates.
- Bans and prohibitions.

## Market-based instruments

- Carbon taxes.
- Cap-and-trade systems.
- Subsidies.

# The Debate: Market Incentives vs Command-and-Control

The historical development of the debate.

## Command-and-Control

- Common during the 1960s and 1970s.
- Argued to have led to excessive costs and inflexible solutions.
- Political view shifted in the 1980s.

## Market-based instruments

- Shift towards Market-based instruments.
- Endorsed by economists.
- Viewed as superior to Command-and-Control.

# The Debate: Market Incentives vs Command-and-Control

## Weaknesses of Command-and-Control

- Firm-regulator information asymmetries.
- No incentives to reduce emission further.
- Risk of non-binding constraints.

## What is overlooked?

- Historical, technological and institutional contexts.
- Standards differ in design and implementation.
  - Emission taxes and allowance schemes not always well designed.

# The Debate: Market Incentives vs Command-and-Control

## When could standards be the better choice?

- Obscure abatement costs.
  - Given high costs of miscalculations.
- When innovation is important.

## Strengths of Standards

- Spurs green technology adoption and innovation.
- Politically feasible and robust.

However, dependent on design and implementation.

What characterizes carefully designed command-and-control industrial pollution policies?

# Standards-based Approach Revisited

## Firm-regulator relationships

- Information asymmetries.
- Knowledge procurement amongst regulatory authorities.
- Expert-based, and close, dialogues.

## Consensus-based Environmental Regulations

- Knowledge creation/dissemination.
- Important for development of more efficient abatement technologies.

# Standards-based Approach Revisited

## Regulatory System

- Differences between countries.
  - Knowledge.
  - Trust.

## Historical differences

- U.S. government has been predominately adversarial.
- European, especially Nordic, countries has built on:
  - Knowledge sharing (firm  $\leftrightarrow$  regulator).
  - Trust between firms and regulators.

Differences has diminished over time.

# Standards-based Approach Revisited

## Institutional differences matter empirically

- Stringency of environmental regulations.
  - Explains only a limited portion of differences in outcomes.
- Regulatory styles are demonstrated to be equally important.

## The Swedish environmental regulatory approach

- A Flexible Command-and-Control approach.
- Extended probation periods.
- Prioritized joint knowledge generation.
- A consensus-seeking and cooperative approach.

# Standards-based Approach Revisited

## The case of bleaching technologies

- Sweden and its regulatory system.
  - Achieved a fast development and adoption of alternative technologies.
  - Faster than in the U.S.

## The role of government authorities

- Can be evaluated based on its ability to establish:
  - Trust.
  - Cooperation.
  - Productive dialogues among participating actors.

Note! Trust-based dialogues cannot be taken for granted!

Involved parties may have incentives to distort, or conceal, vital pieces of information.

# Standards-based Approach Revisited

## What about weaknesses?

- Information asymmetries.
- Negotiations.
- Incentives to distort, or even conceal, information.
- Industry's influential positions.

The above weaknesses makes the Command-and-Control approach vulnerable to regulatory capture.

Studies has highlighted such rent-seeking efforts in which the firms needs are put above the needs of the public interest.

# Conclusions

Economic instruments not always superior!

Climate policies for the green transitions needs to be:

- Perceived as robust.
- Credible over the long-term.

Future environmental regulations:

- Learn from empirical experiences.
- Design and implementation is important.
  - To induce investments.
  - To effectively regulate industrial pollution.
- Command-and-Control may even outperform market-based instruments.



Questions?