

# Session 1: Incentivize Energy Efficiency Investments in ASEAN

The determinants of energy efficiency and the role of policy:

Empirical Evidence from developing countries

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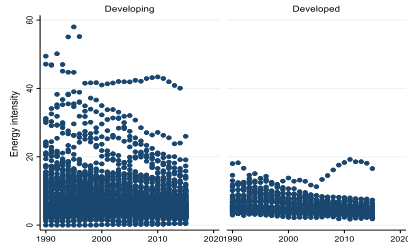
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# Why governments need to incentivize energy efficiency investments?

## Benefits (positive externalities)

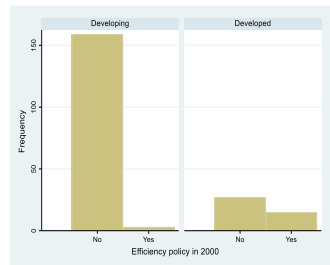
- Green energy is essential for sustainable economic growth.
- Energy efficiency can be considered as a green fuel.
- Energy efficiency is the one energy resource that every country possesses in abundance.
- Energy efficiency improvements allow countries to produce more GDP for each unit of energy consumed.
- Energy efficiency improvements can help to satisfy the growing energy demand (energy security). For example, energy improvements in China in 2000 saved 350 million tones of coal (IEA 2016).
- Energy efficiency is a cost-effective tool for sustainable economic growth and reduction of greenhouse gas emissions.

# Energy intensity in developing countries is higher than in developed countries

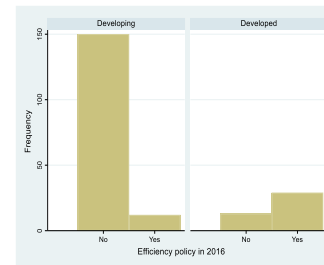


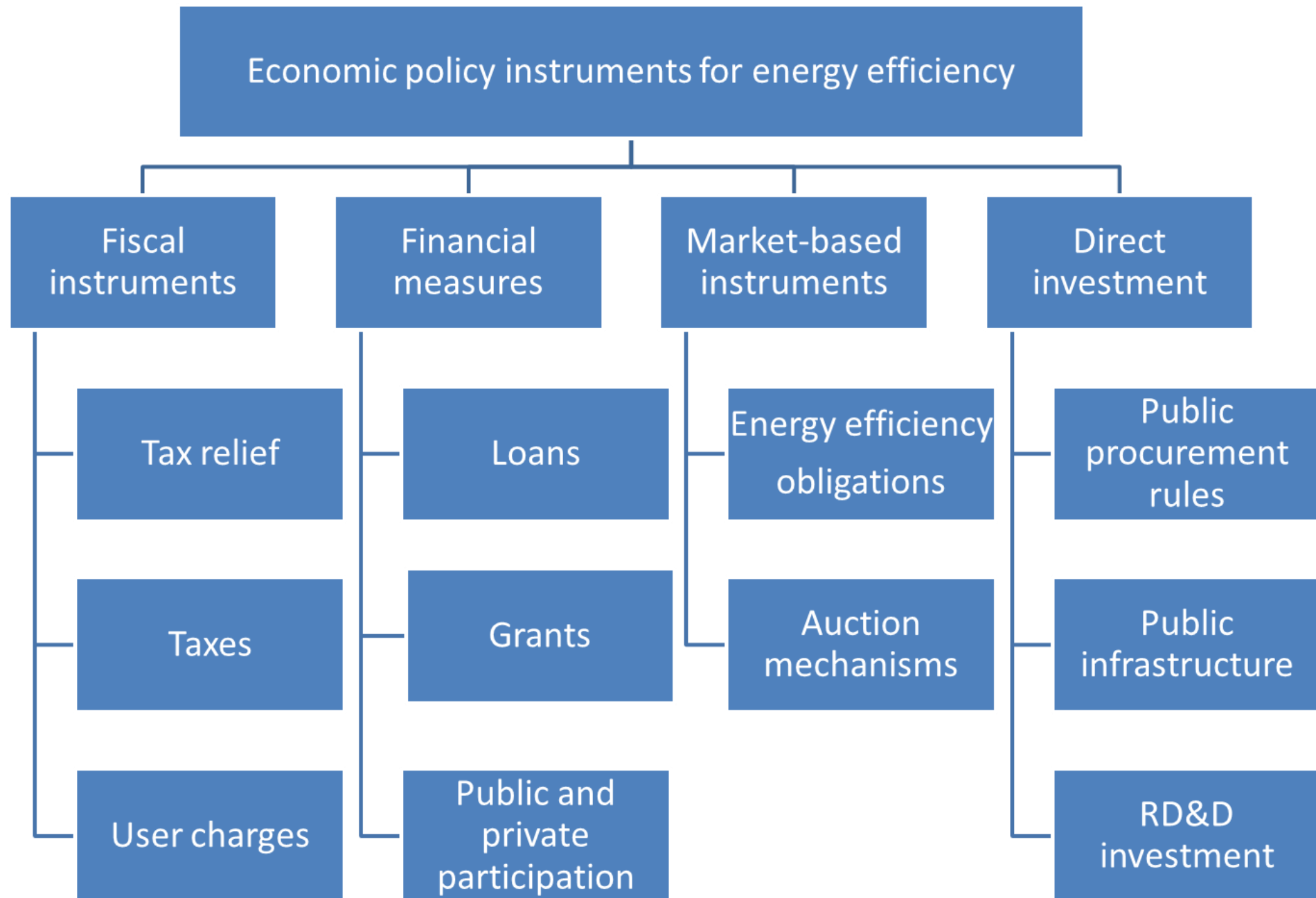
# Energy efficiency policy

## 2000



## 2016





# Empirical results

184 countries, 27 years (1990-2016)

- Energy efficiency policies are effective in developed countries and not effective in developing countries
- Energy efficiency is lower in countries with higher corruption
- Energy efficiency is higher in countries with more effective government

## Contribution to the literature:

- Energy efficiency policy
- Developing countries
- Evidence-based policy recommendations

## Readership:

- Policy-makers from developing countries

## Issues:

- Account for 'free riders', those who would have invested in energy efficiency technologies even without policies

# Energy Efficiency Market in Vietnam

- Important topic with implications for Vietnam
- Quantitative analysis
- Provides policy recommendations for Vietnam

## Suggestions

- Data as of 2009 or before. Any updates?
- Questionnaire can be included in Appendix
- Need to obtain consent form from those people mentioned in the paper if don't have it.



# Integration of Energy Efficiency and Renewables in ASEAN

- Provides a very good overview of energy efficiency in ASEAN
- Good literature overview
- Includes excellent country-cases demonstrating government policies
- Includes challenges and opportunities
- Provides policy recommendations for ASEAN

## Suggestions:

- Sources for tables/figures are missing. If own, include 'Author's own elaboration'. If from other sources, need to obtain permission.
- Replace some tables with figures.

# Energy Efficiency Market in Thailand

- Reviews energy efficiency development plan, implementation programs and their outcomes
- Very good analysis of energy efficiency policies in Thailand
- Measuring Energy Efficiency Policy Effectiveness in Thailand

## Suggestions:

- In **Title** include 'policy' since most of paper covers policies
- In **Results** make more links between energy intensity and policy
- In **Conclusions** expand policy recommendations and lessons for Thailand or developing countries.
- Is solar PV included in energy intensity? 'It is also possible that significant amount of self generation of solar PV has been produced and has a considerable effect on recent rapid energy intensity reduction.'
- If use not own figure must obtain permission from authors.

# References

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THANK YOU