



International Energy Policies & Programmes Evaluation Conference

CONNECTING EVALUATORS, IMPLEMENTERS AND STAKEHOLDERS OF LOW CARBON POLICIES AND PROGRAMMES

2014 EVENT - BERLIN, GERMANY - SEPTEMBER 9-11 - PRE-CONFERENCE WORKSHOPS ON SEPTEMBER 8

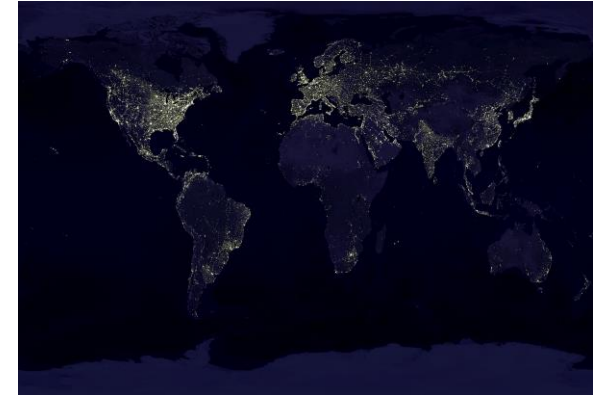


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UCL ENERGY INSTITUTE

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Demand-Side Management Policy: Implementation and Success

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Presentation Outline

- 1) *The gap*: focus on impacts? Yes, but not *how* and *why*...
- 2) *DSM policy*: a short primer
- 3) *Methodological approach*
- 4) *DSM policy implementation*: a global review
- 5) *DSM policy success*: the how and why explained
- 6) *Conclusion*: implementation and success

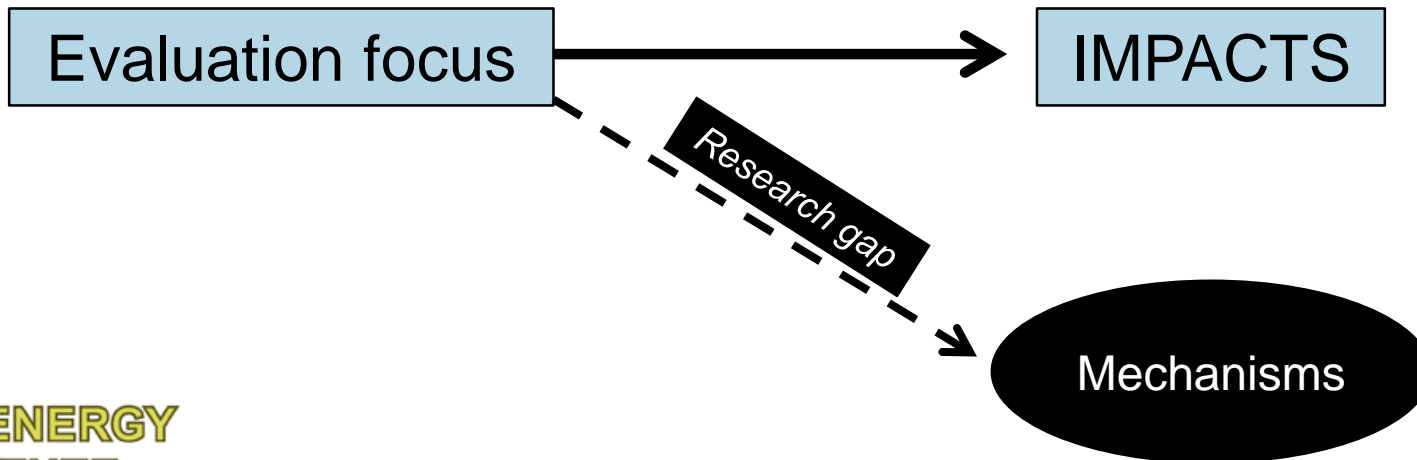
1) Research Gap

Historic focus of DSM research:

- Utility programmes
- Technological trials
- Modelling the potential of DSM
- Pre-policy impacts (estimated)

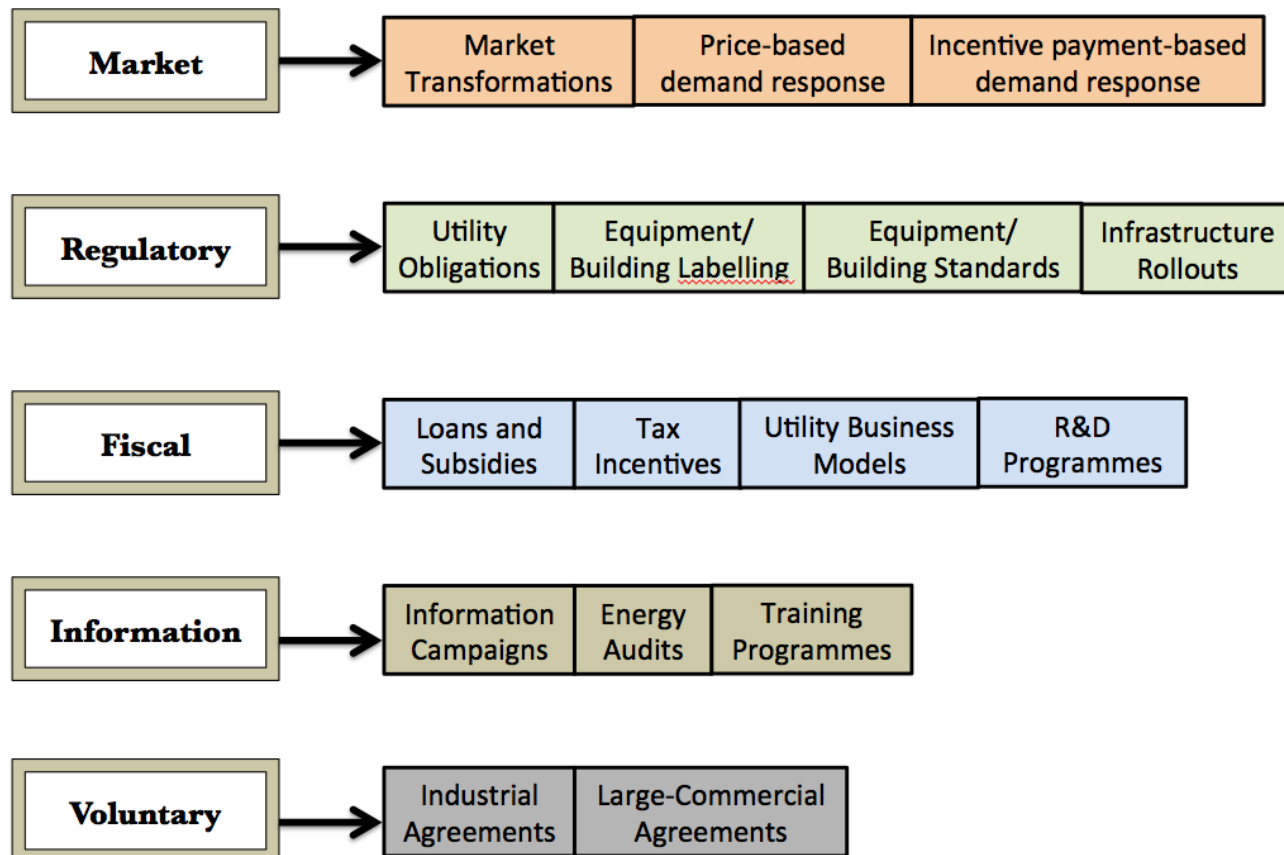
Historic focus of DSM policy evaluation:

- Pre-policy impacts (estimated)
- Limited post-policy evaluations



2) DSM Policy

“Demand-side management (DSM) refers to technologies, actions and programmes on the demand-side of energy meters that seek to manage or decrease energy consumption, in order to reduce total energy system expenditures or contribute to the achievement of policy objectives such as emissions reduction or balancing supply and demand.”



3) Methods

Data collection:

- ❖ Systematic review: collating and synthesising all of the relevant evidence, including an assessment of study quality

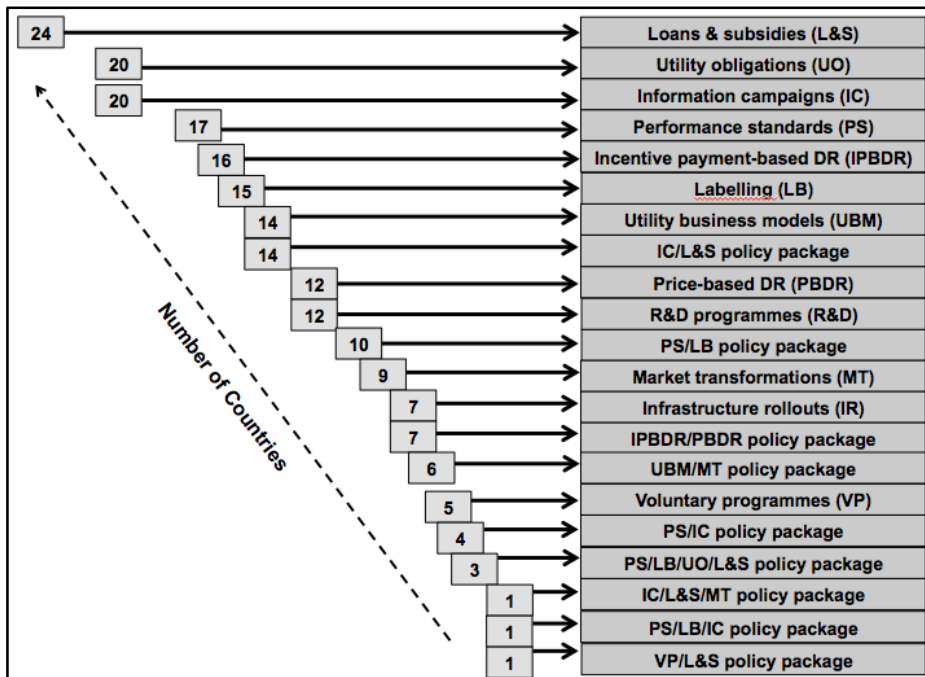
Data analysis (DSM policy success):

- 1) Factor frequency analysis: frequency that specific success factors are discussed across evaluations
- 2) Factor weighting analysis: importance that evaluators give to specific success factors within evaluations
- 3) Triangulation: combining the frequency and weighting analyses

4) Implementation

35 countries, 61 states, 6 continents

DSM Policy Category	Policy Evaluations
Utility business models	122
Information campaigns	118
Loans and subsidies	100
Utility obligations	89
Performance standards	81
Incentive payment-based DR tariffs	62
Labelling	42
Price-based DR tariffs	26
Market transformations	17
R&D programmes	17
Voluntary programmes	12
Infrastructure rollouts	4

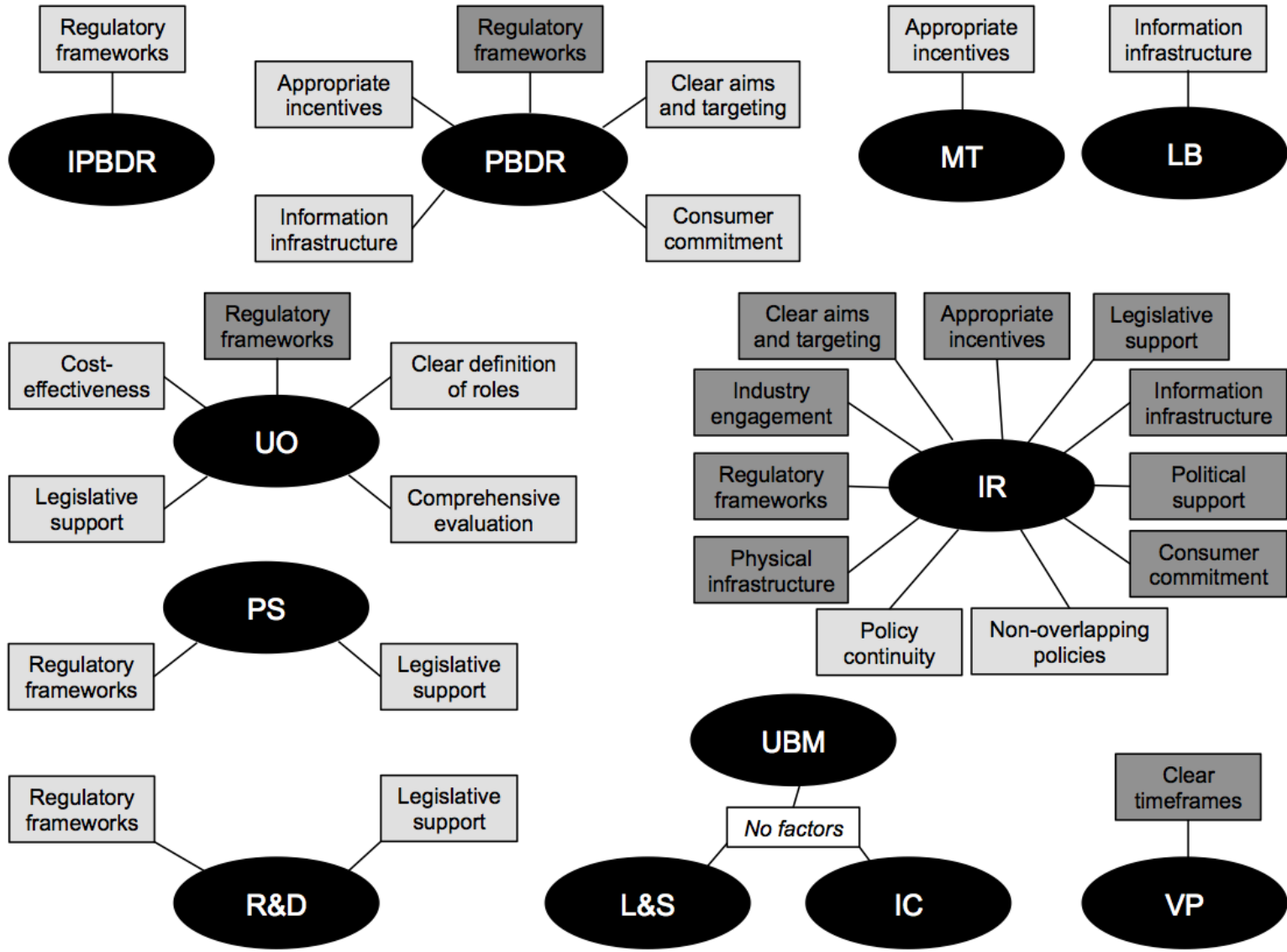
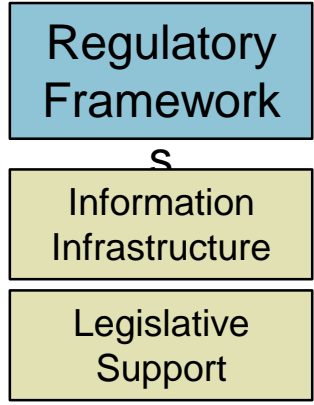


- Overall: 12 policies & 9 policy packages
- By continent: North America dominates evidence followed by Europe & Asia
- By country: USA, UK & California dominate evidence followed by France, China, Denmark and Italy

5a) Policy Success

BY POLICY

OVERALL



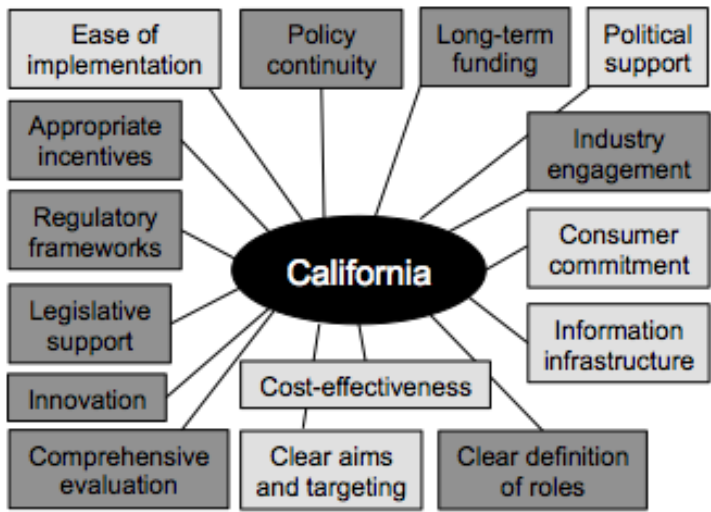
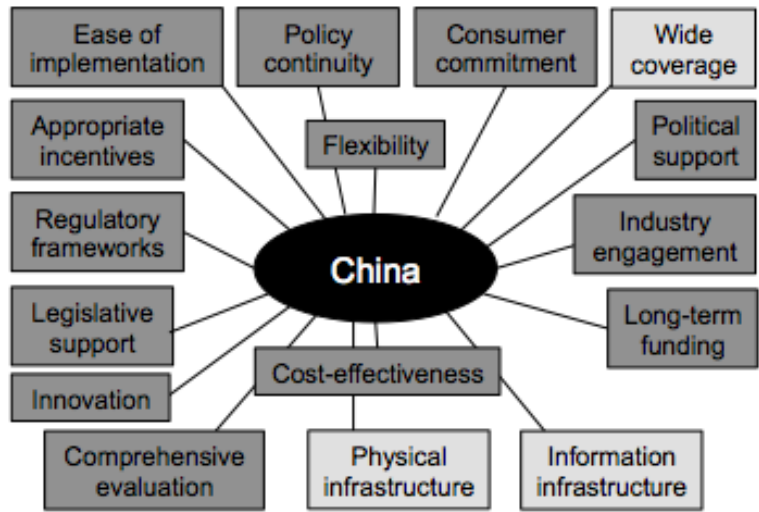
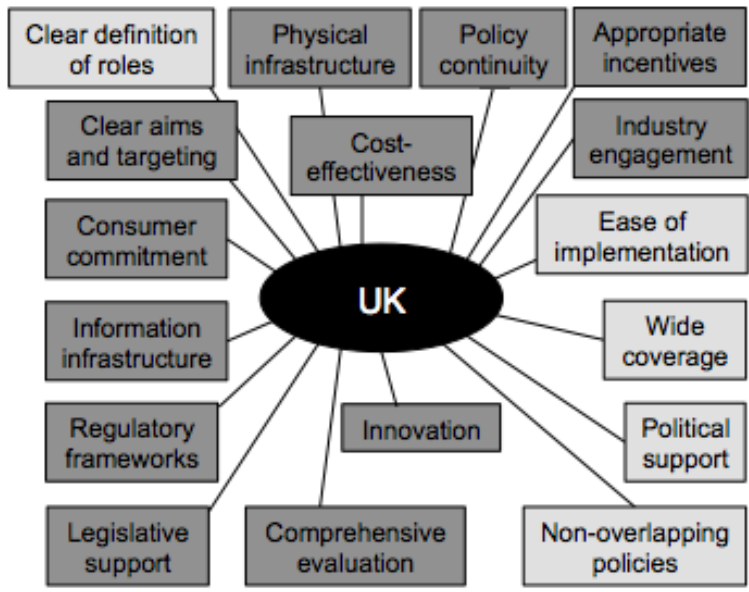
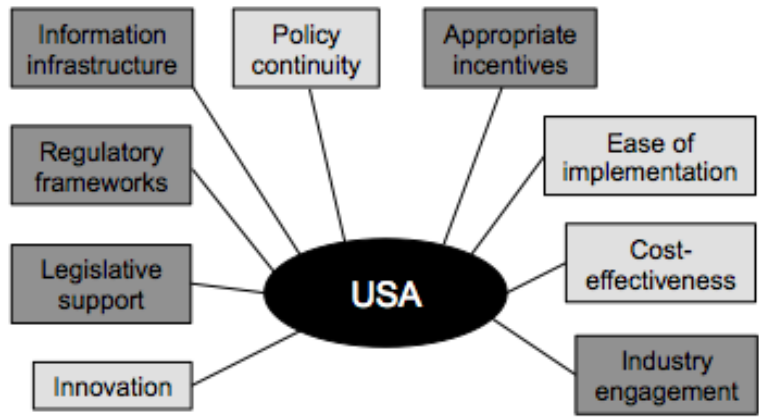
5b) Policy Success

BY COUNTRY/STATE

OVERALL

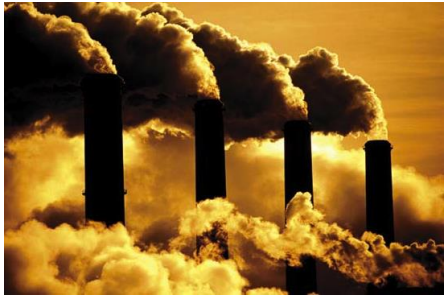


- Regulatory Frameworks
- Information Infrastructure
- Legislative Support



6) Conclusion

- Research gap: previous focus on impacts rather than the mechanisms behind policy success and implementation
- DSM policy: managing or reducing demand through market-based, regulatory, fiscal, information-based or voluntary instruments
- Methodology: global systematic review of 119 documents; policy analysis using the triangulation of factor frequency and weighting analyses
- Policy Implementation: 35 countries and 61 states across 6 continents – North American dominance, but growing evidence from Europe and east-Asia
- Policy Success: regulatory frameworks most crucial factor overall, followed by information infrastructure and legislative support
- Current Research: applying same analysis to DSM policy failure and analysing the transferability of successful policies between countries



*Thank you.
Any Questions or Comments?*



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Energy Films Produced:

The View from Here:

<http://www.youtube.com/watch?v=uHMYIHItInY>

And Look Beyond:

http://www.youtube.com/watch?v=_uBRI-jdTk

