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Energy Efficiency Update from Europe



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Presentation Overview

- Summary some of the key policy initiatives and frameworks currently underway to encourage energy efficiency within the European Union.
- Some key findings and lessons learned from the conference presentations at *the eceee 2011 Summer Study*, held in the South of France,
- Focus is on recommendations for new policy frameworks for energy efficiency programs in Australia and the United Kingdom, and an update on white certificate trading.



Findings from Three Papers on the European Perspective

- ***A policy design framework to identify the characteristics of robust energy efficiency policies:***
 - *Co-authors:* Robert Passey, Centre for Energy and Environmental Markets School of Electrical Engineering and Telecommunications, University of New South Wales, Sydney, Australia.
 - Iain MacGill, Centre for Energy and Environmental Markets, School of Electrical Engineering and Telecommunications, University of New South Wales, Sydney, Australia.
- ***Energy efficiency target for Europe: Why and how to make it happen***
 - Co-Authors: Didier Bosseboeuf, ADEME, Paris, France
 - Jean-Sébastien Broc, Ecole des Mines de Nantes, Nantes, France
- ***Energy saving certificates in France: A new frame for the second period (2011–2013) and afterwards***
 - Co-authors: Paul Baudry EDF R&D – Département EFESE, France
 - Dominique Osso, EDF R&D – Département ENERBAT, France



European Challenges



- The policy development process, complete with stakeholder input, has a significant impact on the design of policies that become legislation.
 - Governments can use various strategies to help navigate policies through this process.
 - Such strategies can be categorized by whether they relate to the broader political landscape, to the policy development process, or to the design details of the policy itself.
 - Whether the policy is likely to be introduced into the policy development process in the first place.
 - Whether the policy is likely to be attacked by key stakeholders; whether those stakeholders will be powerful enough to alter it, and if so, how it may be changed.
 - Whether the policy is likely to be defended by other stakeholders; whether those stakeholders will be powerful enough to defend it, and how they may change it.
 - Whether the policy is likely to be robust against such attacks.
- (Passey & MacGill 2010)

The Need for an Energy Efficiency Framework



- Setting energy efficiency or energy savings binding targets for European Member States is again on the political agenda, as supported by the European Parliament and the new Energy Efficiency Plan issued by the European Commission.
- The major components of this Framework are:
 - A transparent process to define clear and explicit targets, which takes into account both the estimated potentials and the differences in national situations.
 - A clear and transparent monitoring and verification system, based on data already collected on a regular basis.
 - A framework which offers flexibility to Member-States, while giving indicative directions to reach the target.
 - Additional provisions giving a positive signal to market actors for the development of energy efficiency activities and energy services.

Policy Framework Characteristic Types

Characteristics that ...

Increase likelihood of introduction

- clear evidence of a policy need
- facilitate political prestige, vote capture
- supported by advisors and bureaucracy
- advantages key incumbent stakeholders
- modest change from Business As Usual
- similar to types of policies used before and so more familiar
- limited alternative approaches

Decrease likelihood of introduction

- counter to party/personal ideology
- disadvantages key stakeholders
- very significant changes to current arrangements

Increase chance of effective attack

- significant adverse impact on powerful, motivated and coordinated stakeholders that might lose money/influence
- has a wide scope and so impacts on a broad group of stakeholders who may form a coalition

Reduce chance of effective attack

- impacts on weak or poorly organized or 'diffuse' stakeholders, or on stakeholders with conflicting aims
- has limited, indirect and/or gradual (and perhaps uncertain) adverse impact on powerful stakeholders
- if is easy for some key powerful stakeholders to be protected from impacts

Increase chance of defense

- favorably impacts on relatively powerful stakeholders (organized, motivated, numerous)

Reduce chance of defense

- complex policies are less likely to be supported by less organized/powerful stakeholders that may not be able to understand them
- if the benefit it provides is perceived as relatively small, diffuse, intangible or in the future

Impart robustness

- simplicity, clear and measurable outcomes directly linked to desired actions

Impart weakness

- complexity and abstraction make it difficult to assess if the scheme is actually being effective, as well as assess the impacts of changes

Development of Energy Efficiency Targets in Europe



- The European Commission has recently published a new Energy Efficiency Plan, announcing a revision of the ESD, as well as the question of a binding target on energy savings. Indeed, the European Parliament resolution of 15 December 2010 on Revision of the Energy Efficiency Action Plan “*calls for the EU to adopt a binding target on energy efficiency by at least 20 % by 2020*”
- The European Council acknowledges that achieving the 2020 target “*requires determined action to tap the considerable potential for higher energy savings of buildings, transport and products and processes*”. But in concrete terms, the target on energy efficiency remains indicative so far.
- The Commission’s Plan introduced an intermediate path, whose “*leading principle (...) is to propose stringent binding measures without binding national targets*”(Bosseboeuf & Broc 2010)

Number of Countries Having Defined Quantitative Energy Savings Targets

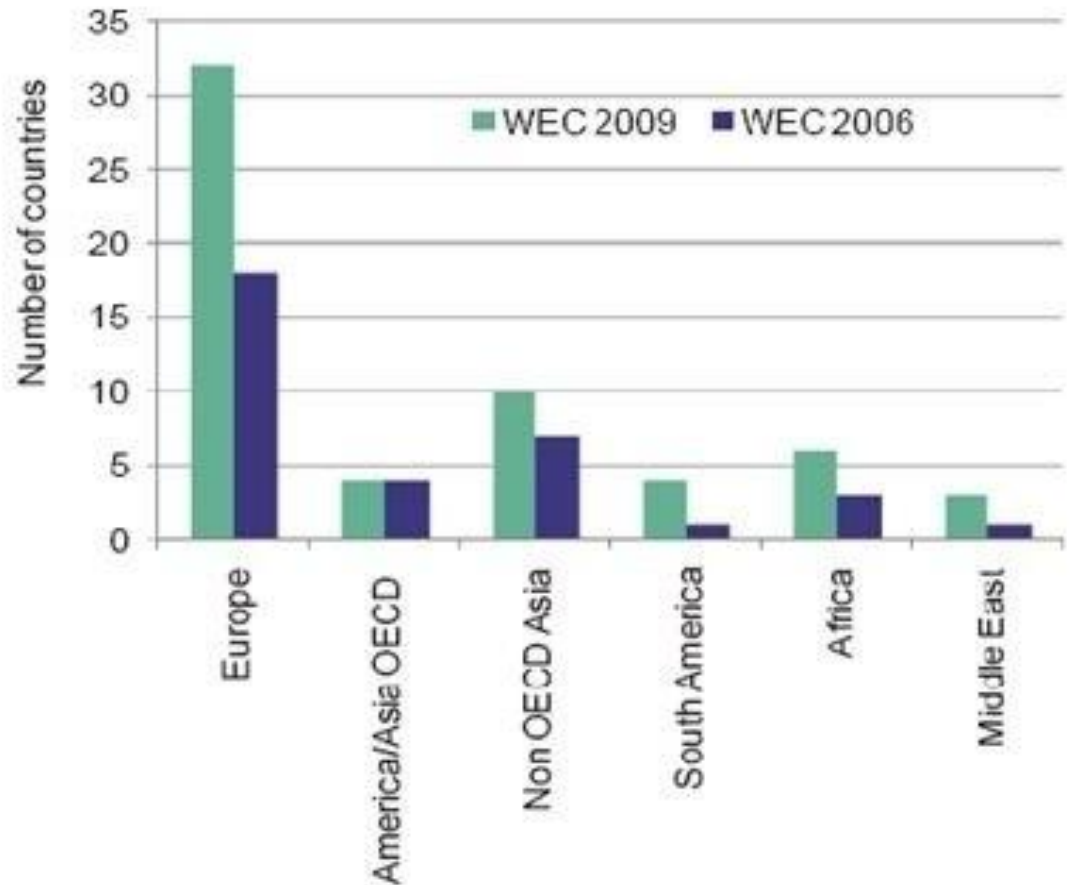


Figure 1. Number of countries having defined quantitative energy savings targets (WEC, ADEME et al. 2010, p.47).

Possible Types of Indicators for Policy Frameworks

Type of Possible Indicators for Policy Frameworks	Advantages	Drawbacks
Absolute Energy Consumption	Easy to calculate and monitor; clear and consistent with climate objectives	May not be transparent, cannot be tackled by energy efficiency policies
Relative Energy Consumption	Takes into account trends not directly related to energy efficiency	Often difficult to explain
Energy Savings	Results are really related to energy efficiency improvements	Requires to develop a consistent energy savings approach (harmonized energy savings)
Energy Intensity	Easy to calculate and monitor; takes account changes in economic growth/recession	Issue of the structural effects not easy to appropriate and possible corrections may not be transparent
Rate of Energy Efficiency Improvements	Can be monitored	Relevant when applied to end-sectors but difficult to apply to at the national global level

Types of Target Indicators Currently Used for Energy Efficiency Frameworks

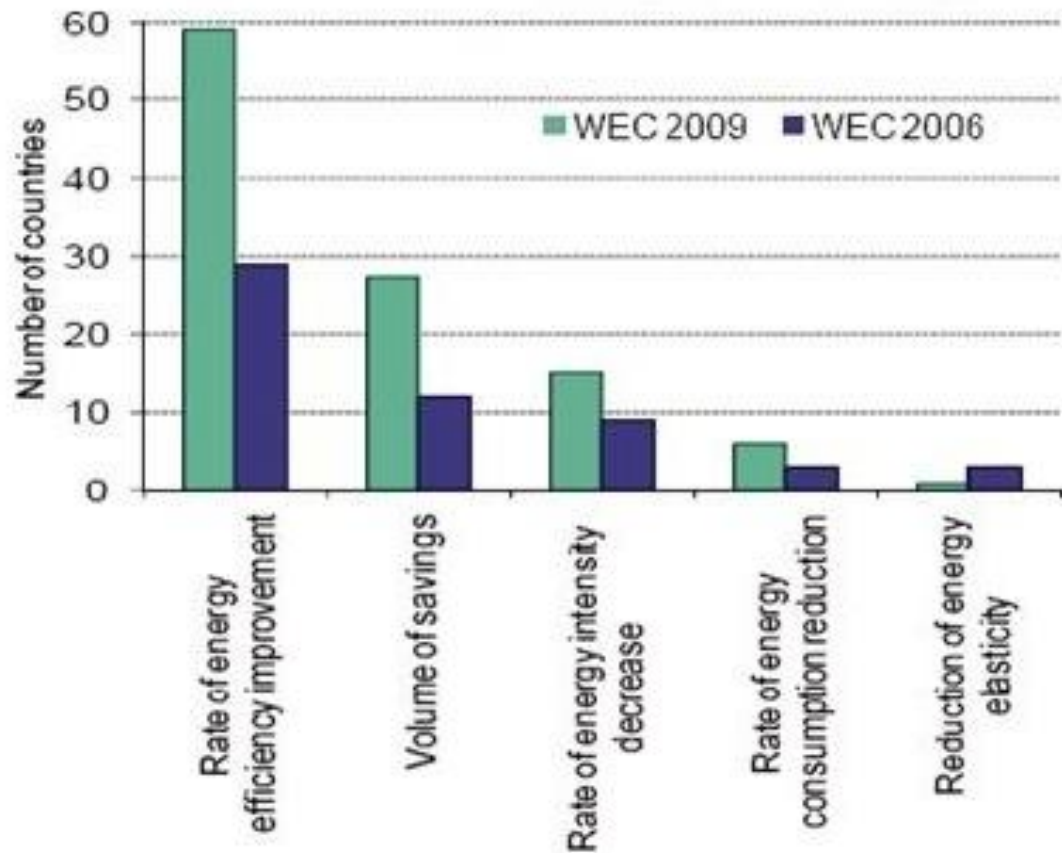
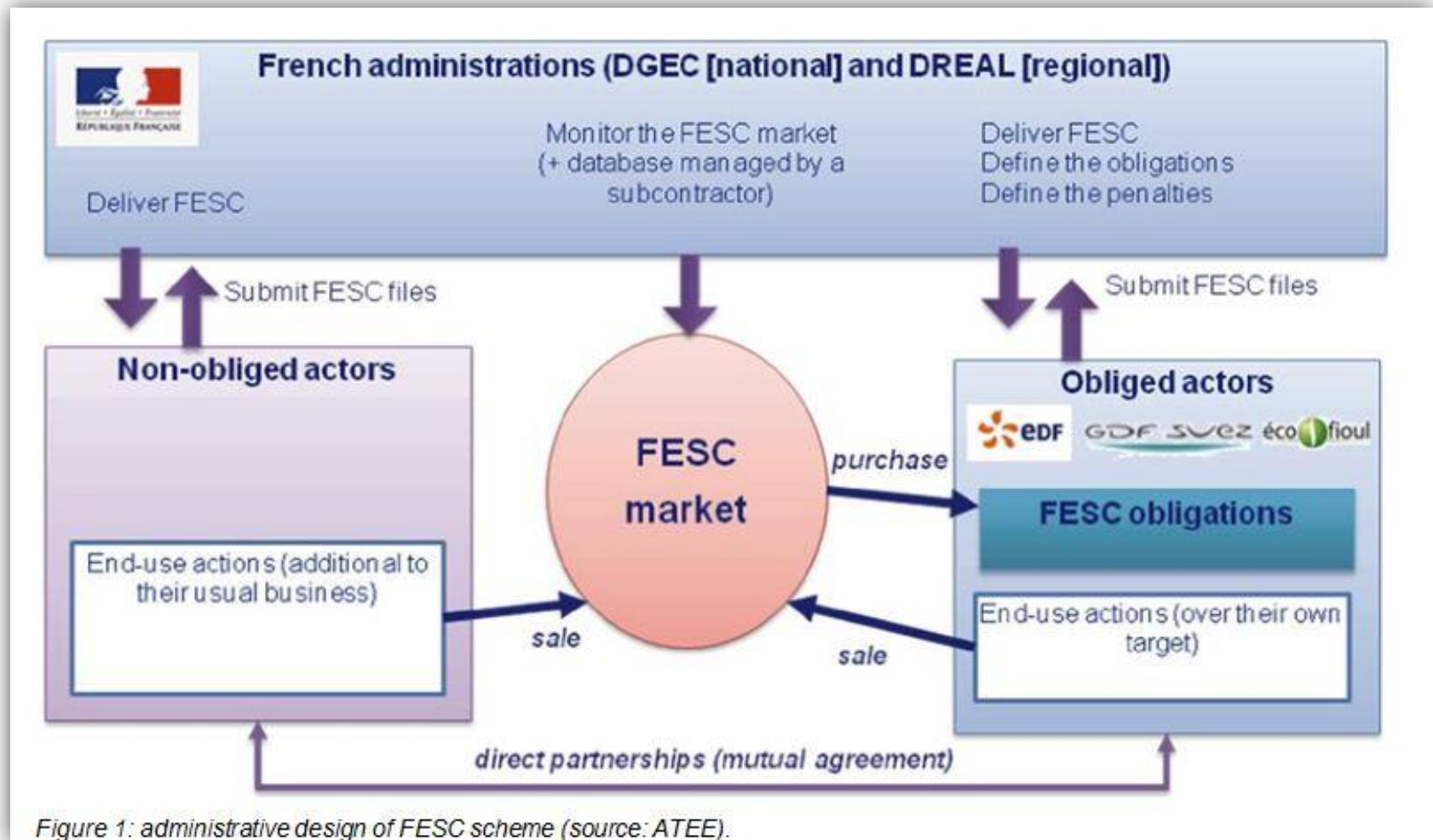


Figure 2. Types of target indicators (WEC, ADEME et al. 2010, p. 47).

Example of a Energy Efficiency Policy Framework in Action; French White Certificate Trading Scheme



Outcome of French Framework

- The amount of FESC to obtain in order to comply with obligation has strongly increased from the first to the second period. This contributes to fulfill the objectives of the French energy efficiency policy, in the framework of the European package on energy policy against climate change.
- The European Commission is proposing in its draft of the new European Energy Efficiency Action Plan to make it mandatory for each member state to set up an energy saving obligation scheme addressed to energy suppliers or distributors. Implying suppliers is necessary as they are one of the key participants in national strategies to increase the level of energy efficiency in member states, but is not effective by its own to create a real energy service market: it will be therefore key to ensure that other market participants are involved in such strategies.
- On the base of our experience in France, we consider that the economic efficiency of this instrument will depend on its capability to minimize transaction costs and to address the more relevant and cost-effective actions first (Baudry & Osso 2010).

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Key Takeaways for Policy Frameworks

- The design of policy frameworks should *benefit stakeholders* who are willing and able to provide political support.
 - Other design characteristics can be used to reduce opposition from incumbent stakeholders include gradually increasing stringency and the ability to pass through costs.
 - Governments can build on these characteristics by providing support for supportive stakeholders and transitional assistance to others likely to be negatively affected.
- The Australia is the Prime Minister's Task Group on Energy Efficiency Report provides additional examples and more in-depth analysis of effective frameworks.
- However, it is not sure if these policies will be supported or opposed by incumbent stakeholders and if the end-result will place Australia at the forefront of OECD energy efficiency improvement by 2020 (Passey & MacGill 2011).



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