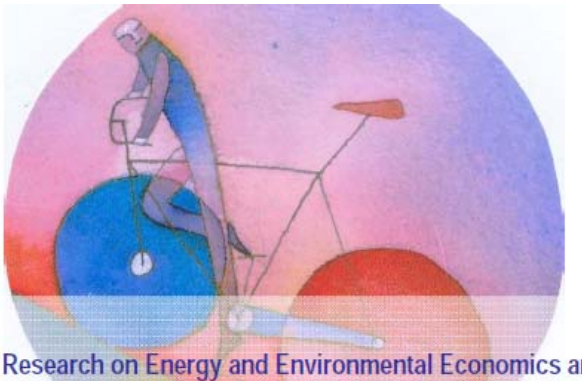

IEFE
Centre for Research on Energy and Environmental Economics and Policy

Research Report Series – ISSN 2036-1785

Mapping and Categorising of Cross-cutting Barriers across Buildings and Transport Sectors - National Report for Italy

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Research Report n. 23
September 2015

Report developed within HERON project - "Forward-looking socio-economic research on Energy Efficiency in EU countries", which received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649690

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HERON (No: 649690): Deliverable D.2.2

MAPPING AND CATEGORISING OF CROSS-CUTTING BARRIERS ACROSS BUILDINGS AND TRANSPORT SECTORS

30 SEPTEMBER 2015

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HERON: Forward – looking socio-economic research on Energy Efficiency in EU countries

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 649690. The content of this document reflects only the authors' views and the EASME is not responsible for any use that may be made of the information it contains.

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ACRONYMS

EE	energy efficiency
ENEA	Italian National Agency for New Technologies, Energy and Sustainable Economic Development
EU	European Union
NEEAP	National Energy Efficiency Action Plan
SEAP	Sustainable Energy Action Plans

EXECUTIVE SUMMARY

Italy is characterized by few examples of cross-cutting EE barriers existing in the building and transport sector. Most of the common barriers regard general aspects related to the institutional and social/cultural pattern of the Italian context and can be identified in the lack of a well-established culture of saving, in the low degree of environmental awareness, the fragmentation of the different administrative levels with consequent delays in adopting norms and regulations. Besides these, a relevant economic barrier is due to the persistent economic stagnation, which has contributed to reduce both the public as well as the private investment shares in EE, and it makes more difficult to access EE technologies, in particular those characterized by high upfront costs. Despite their general character, these barriers show a relatively high degree of influence, which varies from high to medium level.

At policy level, some policy interventions recently implemented have influence on some of the cross-cutting barriers previously described. In this respect, it is worth mentioning: (i) the creation of the National Energy Efficiency Control Room (Cabina di Regia per l'Efficienza Energetica), within the Ministry of Economic Development in 2015, which aims at coordinating the EE measures and interventions across the different administrative levels; (ii) the economic incentives, which represent effective instruments aimed at increasing the turnover of EE technologies in order to replace or renewal the stock of existing buildings, appliances and carbon-intensive vehicles.

CHAPTER 1: MAPPING CROSS-CUTTING BARRIERS ACROSS BUILDINGS AND TRANSPORT

1.1 SOCIAL, CULTURAL, EDUCATIONAL, ECONOMIC AND INSTITUTIONAL CROSS-CUTTING BARRIERS IN ITALY

As mentioned in Deliverable 2.1 Annex 6, the lack of a 'culture of saving' as a precondition for successful energy efficiency policy interventions as well as an implicit incentive to invest in energy efficiency represents a first important element that affects both the buildings and the transport sectors. Such negative conditions are supported also by official statistics. Recent surveys conducted by the EU Commission show that although "the vast majority of Europeans also think that it is important for national governments to provide support for improving energy efficiency by 2030", Italy ranks only slightly below the mean, with only 51% of respondents stating that such a support is "very important" (EU, 2014). In addition, indicators on the environmental awareness here employed as further proxy on the relative perception of energy saving benefits, show also a low rank of Italy with respect to other Member States (compared to the EU mean of 50%, only 43% of 2013 Italian respondents admit to have taken actions to face climate change over the past six months and such a share is decreased with respect to 2011) (EU, 2014) [1]. Broadly speaking, these recent data confirm the low perception that Italians show with respect to the importance of energy saving concerns. As a consequence, Italy is characterized by a lack of social and cultural background which acts as an intangible but relevant barrier when policy measures are implemented at any administrative level and in any sector of the population and economy. Broadly speaking, such a lack produces non-virtuous behaviours which vary across different sectors of the population and according to the level of income and education, thus limiting the quality and the size of the policy interventions for boosting EE. In the building sector, official data demonstrate that although the relatively large success of tax deduction program aimed at inducing EE improvements, the majority of the applications received refers to insulated windows, while those implying more pervasive interventions such as roof insulation, thermal heating etc. show relatively less success (ENEA, 2014). Although other types of interventions show higher upfront costs but also more than proportional net economic returns, according to ENEA (2014) Italian population prefer to invest a minor part of their income for marginal EE interventions such as new insulated windows. The same factors determine some limitations for increasing the energy saving in the transport sector and for reducing the amount of carbon-intensive vehicles. In particular, Italians seem to prefer cars for travelling to other environmental-friendly vehicles such as bicycles or public transportation (see also Deliverable 2.1, Annex 6 for further details).

A further general but relevant cross-cutting barrier is constituted by the persistent economic stagnation which affects Europe, and Italy in particular, since 2007[2] on both the supply and demand side. The sovereign debit crisis has also limited the government's expenditure capacity thus reducing

[1] Specifically, 1019 interviews which cover about 12,55% of EU population.

[2] Although some recent officials statistics has signalled a growth GDP trend in Italy from 2014 to 2015, although weaker than the EU mean (see Eurostat, 2015).

the budgets of those policy interventions aimed at boosting EE, while the persistent economic stagnation has more and more eroded the private consumer capacity to invest in EE, with negative consequences in both the building and transport sector. In addition, the upfront costs for adopting new more efficient technologies represent a cross-cutting barrier due to both limited expenditure budget as well as to high prices of more energy-efficient goods. Specifically, the effect of economic crisis has limited the private investments for new technologies that often show high initial costs although the net present value of such technologies is demonstrated to be positive in their lifecycle (e.g., high costs of heating pumps in the building sector or the high costs of batteries in the transport sector).

With respect to the cross-cutting institutional barriers, it is possible to identify:

- a lack of homogenous normative schemes, which would provide common legislative frameworks and would allow for univocal interpretation of the adopted measures over time and across different administrations. This translates in policy fragmentation with insufficient and unclear norms and regulations, also due to frequent delays in adopting the EU Directives. In this respect, Italy ranks as one of the most inefficient countries within the group of EU Member States (EU Commission, 2010). Since such a delay affects the first phase of normative process in any sector (that is, the implementation of EU guidelines into national laws and regulations), the negative consequences are equally dampened on both the two EE sectors here analysed;
- dyscrasia due to lack of coordination across different territorial levels (national, regional, municipal). The high regional fragmentation results in complex policy coordination across different administrative levels, which often generates insufficient policy response. Also in this case, this barrier affects in equal measure the transport as well as the building sector;
- related to the previous barrier, there is the high complexity and pervasiveness of Italian bureaucracy, which contributes to lower the transparency and efficiency of the in-force EE measures (e.g., longer times for authorizations, misinterpretation of norms and regulations, corruption phenomena).

Table 1 Cross-cutting barriers across buildings and transport

Types of barriers	Barriers in building sector	Barriers in transport sector	Description (how these barriers affect each sector)
Social	***None***	***None***	None
Cultural	***Lack of a 'culture of saving'.***		Low perception of social EE benefits translates in marginal renewal interventions in the building sector and in low propensity to environmental-friendly transport modes (transport sector).
Educational	***Scarce environmental awareness.***		
Economic	***Persistent economic stagnation.***		Both the high upfront costs of technologies as well as the reduced budget for EE investments imply low renewal rate of existing buildings and vehicles stock with more efficient ones.
	Upfront costs and reduced expenditure budget for adopting new more efficient technologies.		
Institutional	***High complexity and pervasiveness of Italian bureaucracy.***		Negative consequences in any sector in which EE plays a role. Specifically, authorizations for private building renewals as well as potential access to economic incentives for low-carbon vehicles and more efficient appliances are thus negatively affected by this common barrier. This also leads to misperception of EE gains thus acting as a disincentive to benefit from in-force EE policies.
	Dyscrasia due to lack of coordination across different territorial levels (national, regional, municipal).		
	Lack of homogeneous normative schemes for univocal interpretation of norms and regulations.		

1.2 ASSESSMENT OF IMPACT OF CROSS-CUTTING BARRIERS

Table 2 summarizes the cross-cutting barriers as identified in Table 1, subdividing them according to their impact (big, medium, small). Given the lack of quantitative comparative assessments on the barriers in literature, we followed the approach of Deliverable 2.1 Annex 6 (Italy), which relies on a qualitative expert evaluation based on the authors' knowledge.

Table 2 Assessment of cross-cutting barriers

Impact of barriers	**Description of barrier**
High	Lack of a 'culture of saving'.
	Dyscrasia between national, supra-national and local norms (lack of policy coordination).
	Lack of normative schemes.
	Scarce environmental awareness.
Medium	Persistent economic stagnation.
	Upfront costs and reduced expenditure budget for adopting new more efficient technologies.
Low	*None identified.*

CHAPTER 2: KEY FINDINGS

Given the general nature of the existing cross-country barriers, there are no specific in-force policy interventions in which the aim of simultaneously targeting both the building and the transport sector is explicitly stated. Nevertheless, we can identify a group of policy interventions which takes into account both some of the cross-cutting barriers previously discussed.

With respect to the policy fragmentation and lack of policy coordination, an interesting initiative is the creation of the National Energy Efficiency Control Room (Cabina di Regia per l'Efficienza Energetica), within the Ministry of Economic Development3. Launched in January 2015, it aims to coordinate all the different stakeholders (both in the public and private sectors) and administration levels (national and regional levels) operating in the Italian energy efficiency market. Such an initiative will clearly produce positive impacts on the policy governance, in terms of facilitated bureaucratic procedures, normative simplification and efficiency gains in the policy implementation on both the transport and building sector.

Other integrated policy instruments addressing the institutional barriers are constituted, in order of administrative level, by the National Energy Efficiency Action Plan (NEEAP, last version approved in 2014), by the different Regional Energy Plans as well as by the municipal Sustainable Energy Action Plans (SEAPs). In particular, the SEAPs represent key documents in which the Covenant of Mayors signatory outlines how it intends to reach its environmental and energy saving targets by defining the set of activities and measures, together with time frames and assigned responsibilities, resulting as multi-sector policy instruments. The Covenant represents a remarkable initiative aimed at involving, on voluntary basis, local and regional authorities in order to promote the adoption of energy efficiency measures and renewable energy sources within the administrative territory through the use of SEAPs. Such an initiative has showed a relevant diffusion within the Italian local administrations4.

With respect to the economic barriers represented by the high upfront costs of EE technologies as well as by the economic stagnation which limits the household's expenditure budget for adopting new more efficient technologies, a common policy instrument is represented by the economic incentives. In the case of buildings, the incentive mechanism aims at facilitating the renewal of existing appliances stock and envisages a 65% tax deduction together to a tax bonus for energy efficient furniture and appliances (see Deliverable 1.2, page 16 for further details). A similar mechanism is in force for the transport sector, in which the national government provides subsidies for purchasing low emission vehicles in order to replace the older carbon-intensive ones (see Deliverable 1.2, page 37 for further details).

Given that some of the cross-cutting barriers are not envisaged by the existing set of policy measures, further effort should be devoted to accelerate the adoption process of EU directives and

[3] See also Deliverable 1.1, Landscape of energy efficiency policy packages in a multi-level government system. National report for Italy.

[4] http://www.covenantofmayors.eu/index_en.html

guidelines at national and local level. Such interventions would make both the transport and building sector more responsive to any type of EE regulation. In addition, communication campaigns aimed at enhancing the level of environmental awareness as well as initiatives aimed at informing consumers about the net economic returns deriving from more efficient goods, would constitute effective policy instruments addressing the cross-cutting barriers deriving from the lack of culture of saving. In addition, a higher policy stringency of the monitoring and sanctionary regimes, together to a simplification of the normative scheme for accessing EE incentives, would help reducing the barrier of excessive administrative bureaucracy.

REFERENCES

ENEA (2014). Le detrazioni fiscali del 55% per la riqualificazione energetica del patrimonio edilizio esistente 2012. Available on line at: http://efficienzaenergetica.acs.enea.it/doc/Rapporto55%25_12.pdf

Eurostat (2015). GDP and main components (output, expenditure and income). Quarterly data. Available on line at: http://ec.europa.eu/eurostat/data/database

EU Commission (2009). Letter of Recognition. Directorate-General for Energy and Transport. Document TREN/DDGI/FB/RD/ba D(2009) 70198. Available on line at: http://www.european-energy-award.org/fileadmin/Documents/Download/COM_Letter_of_recognition.pdf

EU Commission (2010). Measuring the quality of government and subnational variation. Report for the EU Commission, Directorate General Regional Policy, Directorate Policy Development.

EU Commission (2014). Special Eurobarometer 409 – Climate Change. Report edited by the European Commission, Directorate-General for Climate Action (DG CLIMA). Available on line at: http://ec.europa.eu/clima/citizens/support/docs/report_2014_en.pdf