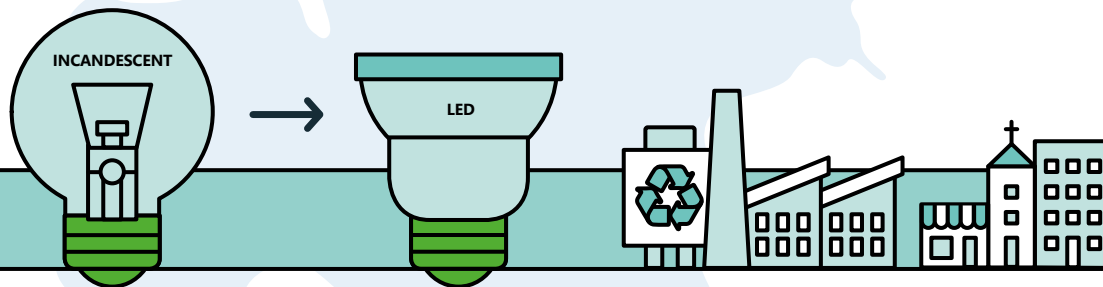


Italian Energy Efficiency White Certificate Scheme Policy Case Studies

Rethinking
Decarbonisation
Incentives

Italy's White Certificate Scheme has been implemented since 2005 to incentivise energy efficiency.



Policy Type: Market Based Mechanism

Key Features

An annual energy saving target is set for obligated energy suppliers, who can comply by implementing energy efficiency measures themselves or by acquiring traded market certificates representing savings made by others.



Key Dates

Italy has operated the Energy Efficiency White Certificate Scheme since 2005.

¹ Only energy emissions, associated with the combustion of fossil fuels, are covered.

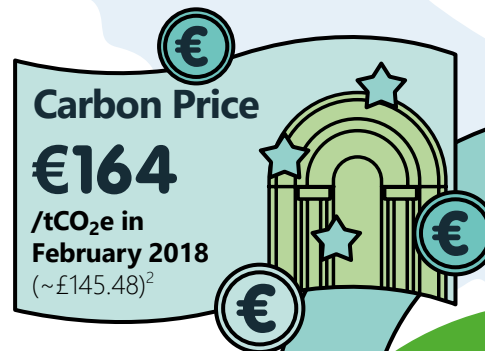
² Exchange rate February 2018: 1EUR: £0.887. Source: www.xe.com, accessed 02/07/2018.

Sectors Covered¹

Power, Industry, Buildings.

Sectors Not Covered

Agriculture, Forestry, Waste, Transport.



"Thanks to the Energy Efficiency Certificates (TEE), an innovative and pioneering system, we have achieved from 2005 to 2013 annual energy savings of 5Mtoe/year and incentivised more than €22 billion investments in energy efficiency."

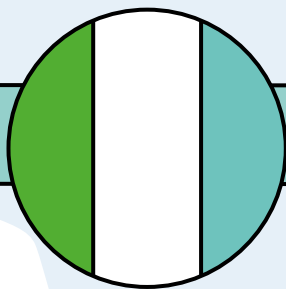
Federico Testa, ENEA General Director,
Rapporto annuale efficienza energetica 2015



Introduction

In 2005 Italy introduced the energy efficiency trading system (also known as White Certificate scheme) Titoli di Efficienza Energetica (TEE) in response to requirements under the European energy efficiency directives. The success of the scheme highlights the potential of such market based mechanisms as an approach to provide a strong investment signal to meet energy efficiency targets (or potentially other regulatory obligations) at least cost.

The TEE overlaps with a both domestic and EU level policy incentivising energy efficiency in Italy. At the domestic level, tax rebates were available on the costs of implementing eligible energy efficiency measures. At the EU level, the TEE overlapped with the EU ETS. Although the EU ETS is carbon based, both measures incentivise increased efficiency of energy consumption for energy intensive industries. For example, the TEE provides an incentive for industries to produce and recover heat more efficiently, decreasing primary energy demand and associated greenhouse gas emissions. Over the past decade, the Italian system has been through three major reviews aimed at harmonising the overlapping regulatory framework.



Key Findings

Evolution of Policy Design

- Initially the White Certificate scheme focused on energy savings from the residential sector and the price of certificates was capped. However, once the scheme was extended to the industrial sector, the cap was removed (and higher market prices emerged) as the industrial sector requires higher levels of economic incentive for energy efficiency measures.

Addressing Policy Overlaps

- Prior to 2013, eligible energy efficiency measures (e.g. solar thermal, photovoltaic, building insulation, etc.) implemented in industries and household could be rewarded with both white certificates under the TEE and tax rebates. To address overlapping regulation and create a fairer incentive landscape, as of 2013 the regulator prohibited the accumulation of overlapping benefits (i.e. both white certificates and tax rebates) for a single energy efficiency measure.

- However, the scheme was allowed to continue alongside the EU ETS because the carbon price provided by the EU ETS was not expected to be sufficient to meet energy efficiency objectives in Italy. It was further justified by the increased benefits that the TEE brings to key policy objectives such as improved industrial competitiveness, improved public health through the reduction of air pollution, and reduced fuel poverty.

Policy Effectiveness

- The Italian scheme has delivered substantial savings in electricity and heat use across many sectors. The primary energy savings certified in 2017 amounted to about 1.92 million tonnes of oil equivalent (Mtoe), of which more than 55% was achieved through the reduction of natural gas consumption and 26% from savings in electricity consumption.



Definitions

Energy Efficiency Trading System

A market in which certificates representing energy savings are traded between parties.

Regulatory Standard

A regulatory obligation to achieve a particular outcome (e.g. emissions produced per unit of activity, proportion of low carbon fuel supplied) which is placed on an entity.