

Title of the measure:	ITA1 - First Financial Package for CHP Plants and District Heating Equipment Installation
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General description

The measure is a Voluntary Agreement signed in January 1999 between Environment and Industry Ministries plus various tertiary stakeholders, both public and private ones, in order to execute the *installation of CHP plants in urban areas* as well as *district heating equipment* all over Italian Regions and Municipalities.

Parties involved in the agreement implementation are:

- ⇒ the Environment & Industry Ministries;
- ⇒ ANCI (National Association of Italian Municipalities);
- ⇒ ENEA (National Agency for Energy, Environment and New Technologies);
- ⇒ ABI (Italian Banking Association);
- ⇒ UPI (Italian Provinces Union);

The agreement requires that all parties implement a series of action related to the installation of CHP plants and district heating equipment, in order to fulfil the Kyoto Protocol targets on CO₂ emissions abatement. As a whole, public stakeholders are supposed to phase out hindrance for urban CHP and district heating dissemination by means of defined rules and a related scheme of incentives. On the other side, private stakeholders will be meant to promote the enhancement of those actions – a number of 23 – to attain the goals highlighted.

The action in the agreement framework is due to be through by 2004.

The series of actions aimed at enhancing the installation of CHP plants and district heating equipment can be summarised as follows:

1. *Global research on evaluation of CO₂ and greenhouse gases abatement targets in order to define and allocate necessary financial tools for both CHP and district heating dissemination.* Parties charged with the related implementation tasks are ENEA and Italian Provinces and Municipalities. The action will be carried out since January 1st 1999 until March 31st 1999;
2. *Definition of standard requirements – for the financing of CHP and district heating equipment installation projects – which may allow an easy granting of loans* (for ex., provision of a loan on an interest free basis) by Italian commercial banks, even by means of either project financing schemes or co-funding from Italian Government or third parties. Parties charged with the

related implementation tasks are ABI and Italian Provinces and Municipalities. The action will be carried out all through 1999;

3. *Definition of execution procedures and norms – at a local level – for the plants establishment.* Parties charged with the related implementation tasks are UPI and ANCI. The action will be carried out all through 1999;
4. *Definition of a new fiscal scheme and tax burdens to be applied to CHP and district heating enhancement* in time, by 2006 at least. Parties charged with the related implementation tasks are Environment and Industry Ministries. The action will be carried out since January 1st 1999 until December 31st 2003;
5. *Promote a further release of legislative norms to enhance CHP and district heating installation.* Parties charged with the related implementation tasks are Environment and Industry Ministries. The action will be carried out since January 1st 1999 until December 31st 2003;
6. *Assistance and support for operators delivering schemes of projects for CHP and district heating installation.* These projects are supposed to point out:
 - ⇒ environmental stead in terms of CO2 emissions;
 - ⇒ energy saving quotas;
 - ⇒ possible hurdles to the project(s) execution.

Parties charged with the related implementation tasks are ENEA and Italian Provinces and Municipalities. The action will be carried out throughout the whole validity time period to the agreement;

7. *Promotion of local voluntary agreements for the execution of every single project, between local institutions, companies charged with the project execution and financing parties.* These agreement are the one requirement to be granted a financial package fro the project execution. All parties are charged with the related implementation tasks. The action will be carried out throughout the whole validity time period to the agreement;
8. *Monitoring actions for plants and equipment installed,* in order to enhance the technology evolution, the overhead costs related and knowledge dissemination amongst operators. Parties charged with the related implementation tasks are ENEA and Italian Provinces and Municipalities. The action will be carried out throughout the whole validity time period to the agreement

The first activities have been carried out in early 1998, mainly as regards actions from series 1. Another association was involved, namely the AIRU (Italian Association for Urban Heating), in order to create a permanent working group (named as “*Conferenza permanente per il Contributo Energetico Ambientale del Riscaldamento Urbano tramite Reti*”) for urban heating contribution to energy saving and R.U.E.

Research was achieved on the overhead costs, financing and development features for district heating in Italy and related benefits. Amongst financing sources, revenues from “carbon tax” (see measure A 0ITA6 in MURE DATABASE – INDUSTRY) were taken as one of the most pivotal.

A first set of 23 actions has been envisaged for 1999, namely overall 53 projects concerning CHP and district heating installations to be implemented by 2004. Other research is being currently carried out, mainly for action related to series 4. and 8.

Impact evaluation (methods and results)

Methods

Results

In 1998 the PEN (National Energy Plan) forecast a global energy saving target for district heating up to 1 Mtoe per year. Thanks to a wider spread of technology, implementation of such measures aimed at enhancing CHP and district heating installation would spur this trend up to 156 ktoe/year, namely a reduction of CO2 emissions by 588 kton/year.

The table below shows these forecast data, highlighting that overall additional costs related to the execution of the whole of the projects would reach a €139 million value overall.

Ex-post evaluation	1995	2000		
CO ₂ (kt)				
Energy (TJ)				
Ex-ante evaluation	1995	from 2000 to 2004		2020
CO ₂ (Mt/year)		5		
Energy (Mtoe/year)		1 - 1.5		

Source: Conferenza Permanente Reti and CNEL, 2001

Measure Impact		
Low	Medium	X High

Historical data

This agreement stems – like several ones regarding transport, energy, tertiary and industry sectors- from the Energy and Environment Pact . The agreement wholly fulfils both in CIPE 19/11/98 norm on reduction of energy consumption in the transport section and two out of the five main targets to the Pact, i.e.:

1. energy efficiency increase in the electricity sector;
2. reduction of energy consumption in agriculture, industry and tertiary sectors

The Pact was signed in order to fulfil the tasks of Kyoto Protocol for CO₂ emissions abatement, by the promotion and enhancing of a range of agreements signing throughout of Italian economy system (amongst Italian Government, trade unions, companies, associations, etc.), though it spread in time other related actions, including energy saving and sustainable mobility ones.

In December 1999, 36 agreements were signed, respectively 5 in the energy sector, 9 in the transport sector, 4 in the renewable sources sector, 5 in the household sector and 13 in the industry one.