Title of the measure:	***Design Norms for Thermal Plant Regulation and Meteri***

General description

Presidential Decree 16 April 2013, n. 74 is a regulation laying down general criteria regarding the exercise, run, control, maintenance and inspection of heating systems for winter heating and summer of buildings and for the preparation of hot water for sanitary use, in accordance with Article 4, paragraph 1, letters a) and c) of legislative Decree 19 August 2005, no. 192. This measure amends Presidential Decree in August 26, 1993, n. 412 and Dpr 2 April 2009, n. 59. This measure implements the provisions by legislative decree of 19 August 2005, n. 192.

The decree contain measure about:

- Maximum values of the room temperature (ITA 8)
- Limits of operation of thermal plants for winter heating
- Option of municipal administrations regarding the limits of operation of thermal plants
- General criteria, requirements and those responsible for the operation, management, control and maintenance of plants for winter heating and summer cooling
- Control and maintenance of heating systems
- Check of energy efficiency of heating systems

In particular, information is provided about:

A. Frequency of tests of efficiency on space heating systems of useful thermal output greater than 10 kW, and for air-conditioning of useful thermal output greater than 12 kW nominal

Plant	**Fuel**	**Power$_{th}$ [kW]**	**Frequency inspections for energy efficiency (years)**	**Control ratio of energy efficiency**
Installations with heat generator flame	Generators fueled by liquid or solid fuel	$10 < P < 100$	2	Type 1
		$P \geq 100$	1	
	Generators powered by gas, natural gas or LPG	$10 < P < 100$	4	Type 1
		$P \geq 100$	2	
Plants with refrigeration equipment / heat pumps	Refrigerating machines and / or heat pumps with electrically driven vapor compression and refrigeration equipment and / or	$12 < P < 100$	4	Type 2
		$P \geq 100$	2	

	absorption heat pumps to direct flame			
	Heat pumps vapor compression driven by combustion engine	P ≥ 12	4	Type 2
	Absorption heat pumps powered by thermal energy	P ≥ 12	2	Type 2
District heating plants powered	Heat exchange substations to network users	P > 10	4	Type 3
cogeneration plants	microgeneration	P_{el} < 50	4	Type 4
	CHP unit	P_{el} ≥ 50	2	Type 4

B. Minimum values allowed for combustion efficiency

Types of heat generators	**Date of installation**	**Minimum values allowed for combustion efficiency (%)**
Heat generator (all)	before 29 October 1993	82 + 2 Log Pn
Heat generator (all)	from 29 October 1993 to December 31, 1997	84 + 2 Log Pn
Heat generator standard	from 1 January 1998 to October 7, 2005	84 + 2 Log Pn
low-temperature heat generator	from 1 January 1998 to October 7, 2005	87 + 1,5 Log Pn
gas condensing heat generator	from 1 January 1998 to October 7, 2005	91 + 1 Log Pn
gas condensing heat generator	from October 8, 2005	89 + 2 Log Pn
Heat generator (all except gas condensing heat generator)	from October 8, 2005	87 + 2 Log Pn
Hot air generators	before 29 October 1993	77 + 2 Log Pn
Hot air generators	before 29 October 1993	80 + 2 Log Pn

Impact evaluation (methods and results)

Methods

Ex-post evaluation	1995	2000		
direct CO_2 (kt)				
Energy (TJ)				
(Fuels/Electricity)				
Ex-ante evaluation	1995	2000	2010	2020
direct CO_2 (kt)				
Energy (TJ)				
(Fuels/Electricity)				