

International Conference
on Solar Heating and Cooling
for Buildings and Industry



SHC 2013
CONFERENCE | SEPTEMBER 23-25
FREIBURG, GERMANY



AMBIENTEITALIA

**«Conto termico»
A new support scheme
for solar thermal in Italy**

Riccardo Battisti, Ambiente Italia S.r.l.



28...the «magic number»

2009: EU Directive no. **28**



2011: Ministry Decree
no. **28**, Art. **28**
Conto termico introduced

2012: Ministry Decree
28 Dec. 2012
Conto termico detailed

Application rules



Scope of application

Technologies:

- **Solar thermal**
- Biomass
- Heat pumps
- Energy efficiency (insulation, windows, condensation boilers, shadowing)

Beneficiaries:

- Private (**700 M€** annual budget)
- Public (**200 M€** annual budget)
- Also through an energy service company (ESCO)





Scope of solar thermal

- ▼ 1.000 m^2 (gross area)
- ▼ For both private and public beneficiaries
- ▼ Applications:
 - ▼ domestic hot water
 - ▼ space heating
 - ▼ cooling
 - ▼ industrial process heat
 - ▼ district heating
- ▼ Including concentration systems
- ▼ Where? Buildings (existing or new)...and ground
- ▼ Installed after 3 January 2013





Combination with other incentives

- Not possible with national support schemes (e.g. White Certificates or tax rebate)
- Dispensation from this rule: public buildings for public use
- “Obligated” solar heat in buildings cannot be supported

- Combination is possible with:
 - local incentives
 - low or zero interest loans
 - revolving funds





The «conto termico»

- Incentive related neither to the investment nor to the yield
- Just X €/m² year (gross area); VAT is not applicable
- Table no. 29 (**28** + 1...)

CONTO TERMICO	€/m² year (<50 m²)	€/m² year (<1.000 m²)
	2 years	5 years
<i>Conventional ST</i>	170	55
<i>Solar cooling</i>	255	83
<i>Concentrating ST</i>	221	72
<i>Concentrating solar cooling</i>	306	100



Docs and technical requirements

- Asseveration from a professional (technical report for plants >50 m²)
- Photos of plant components
- EN 12975 or 12976 (Solar Keymark after 29 March 2013)

- Minimum yield through performance curve

$$\eta_{min} = 0,7 - 7,5 \cdot T^*_m \quad 0,01 \leq T^*_m \leq 0,07$$

$$\eta_{min} = 0,55 - 2,0 \cdot T^*_m \quad 0,01 \leq T^*_m \leq 0,07$$

- Factory-made: 550 (Athens) or 400 (Würzburg) kWh/m² year



Management

- GSE is managing the support scheme
- All the applications must be submitted on line
- <http://www.gse.it/it/Conto%20Termico/Pages/default.aspx#1>

AAA ENGLISH CONTATTI GRUPPO GSE FAQ Cerca nel sito... AREA CLIENTI

Azienda Sala stampa Pubblicazioni Sostenibilità Statistiche Bandi di gara Verso il 2020 Lavora con noi

CONTO ENERGIA RITIRO E SCAMBIO QUALIFICHE E CERTIFICATI CONTO TERMICO CERTIFICATI BIANCHI GAS, CO2 E SERVIZI ENERGETICI ENERGIA FACILE

Home > Conto Termico

Interventi di efficienza energetica
Energia termica da FER
Come accedere agli incentivi

Conto Termico

Normativa

- DM 28 dicembre 2012 - Conto Termico
- Decreto Legislativo n. 28 / 2011

conto termico, DM 28/12/12, efficienza energetica, produzione energia termica



Examples – Small DHW plant 4 m²- 5,000 €

▼ Conto termico

▼ Total incentive: $170 * 2 \text{ (years)} * 4 \text{ (m}^2\text{)} = 1,360 \text{ €}$

▼ 27%

▼ Annual incentive: 680 €

▼ Period: 2 years

▼ Tax rebate

▼ Total rebate: 3.250 €

▼ 65%

▼ Annual rebate: 325 €

▼ Period: 10 years





Examples – Large plant 1,000 m²- 450,000 €

▼ Conto termico

▼ Total incentive: $55 * 5 \text{ (years)} * 1,000 \text{ (m}^2\text{)} = 275,000 \text{ €}$

▼ 60%

▼ Annual incentive: 55,000 €

▼ Period: 5 years

▼ Tax rebate: not feasible (cost cap)





Conto termico vs. tax rebate

	Conto termico	Tax rebate
Cap (single plant)	1,000 m²	92,000 € (130 ÷ 180 m²)
Cap	700 + 200 M€	No cap, but...
Beneficiaries	All	No public bodies
Incentive period	2 ÷ 5 years	10 years
Deadline	Cap reached + 60 days	Dec 2013 / Jun 2014
Bureaucracy	To be tested	Well known



Conto termico vs. tax rebate

Calculation method:

- Conto termico:
 - simple
 - verifiable
 - not technically “correct”
- Tax rebate:
 - simple
 - “verifiable”
 - investment-related





Is there a market potential?

- Resources: 700 M€/year (only private)
- ST share: ???
 - 12% (“pragmatic”, 2010 data from tax rebate shares)
 - 25% (“democratic”)
- 80% small plants, 20% large plants



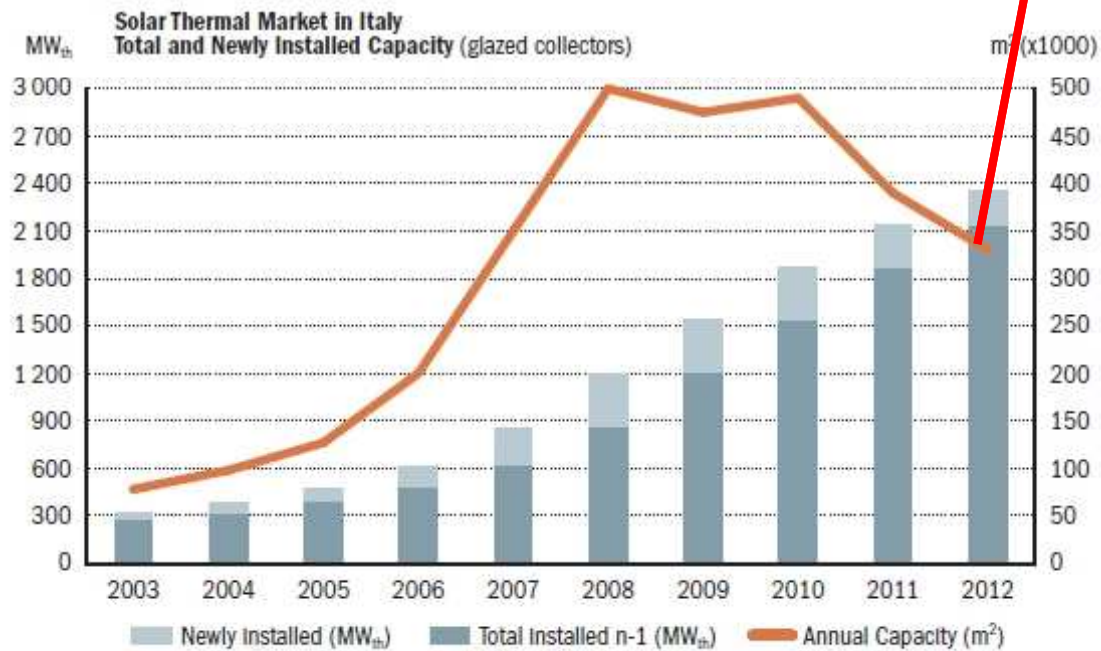


Is there a market potential?

	Pragmatic	Democratic
ST resources (M€/year)	84	175
Small plants (M€/year)	67	140
Large plants (M€/year)	17	35
Small plants (m ² /year)	395.294	823.529
Large plants (m ² /year)	305.455	636.364
TOTAL MARKET (m²/year)	700.749	1.459.893
Current market (m ² /year)	330.000	



Is there a market potential?





The «conto termico»

- Resources are there but...
- ...is the incentive appealing enough, e.g. for pumped systems?
- A new opportunity for medium and large plants

**Would It be better to lobby for
less resources
and higher contribution rate?**



Thank you for your attention!

riccardo.battisti@ambienteitalia.it
www.ambienteitalia.it

