



Blue Certificates, formed from a combination of the experience gained by Whitenergy in the energy efficiency field and the use of renewable thermal sources serving district heating networks, provide benefits on the heat used for production processes, heating and domestic hot water production. *Blue Certificates* are compatible with:

- White certificates or TEE (from both Ministerial Decree 12/28/2012 and 11/01/2017)
- Conto Termico 2.0 (Renewable Heat Incentive)
- Comprehensive tariffs and other electrical RES incentives (for biomass plants producing heat and electricity).

Incentives for the use of biomass heat, which can be combined with White Certificates, Conto Termico 2.0 Renewable Heat Incentives and Comprehensive Tariffs.



THE BLUE BIO SERVICE

Thanks to the Blue Bio solutions, companies are now equipped with an innovative tool, unique to the market, that renders investments in biomass heating systems more profitable.

The Bio Blue service is designed for:

- EXISTING BIOMASS PLANTS

To maximize the production of existing plants and reduce heat production costs. To allow for the recovery of up to 100% of the costs of the renewable fuel used by the generating plant.

- NEW BIOMASS PLANTS

To improve the competitive edge of investments in renewable energy sources (biomass) for the production of thermal energy with respect to traditional fossil fuels.



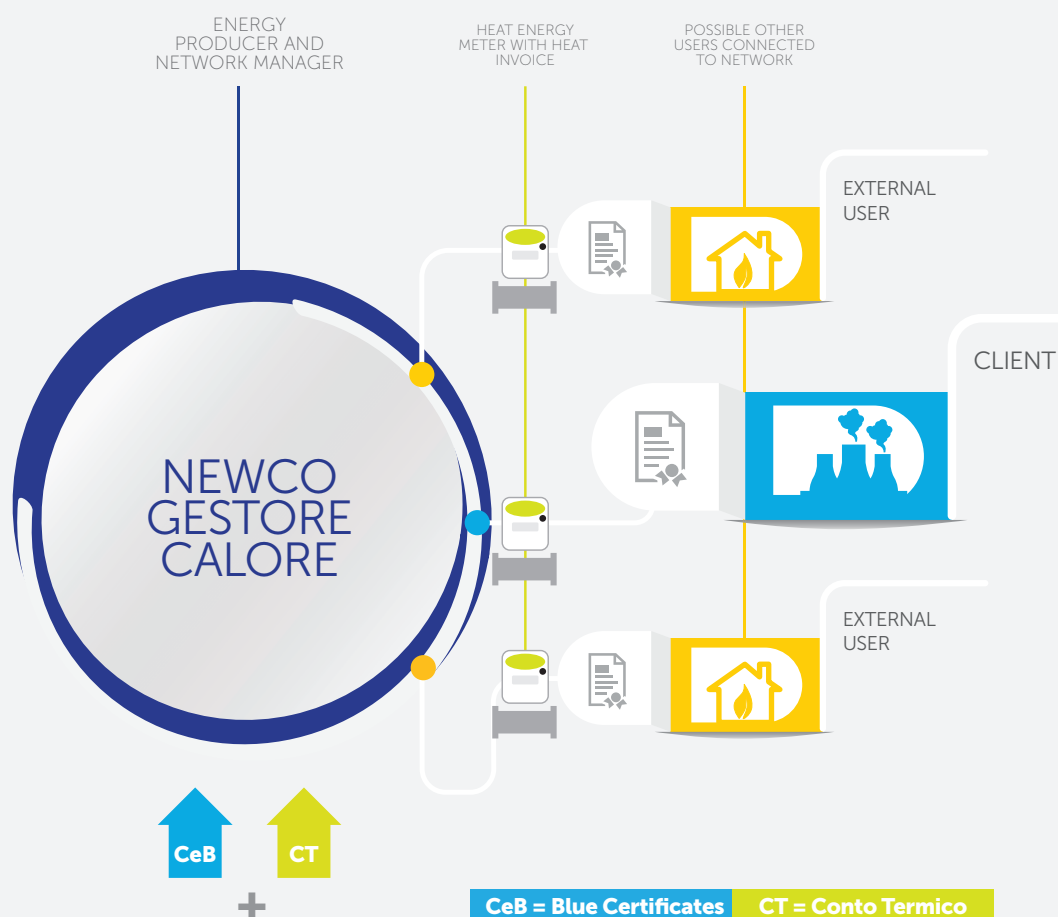
whitenergy
EFFICIENCY SOLUTIONS PROVIDER

WHO IS IT FOR?

BLUE BIO is designed for companies and individuals who use heat generators powered by biomasses in compliance with current regulations (Legislative Decree 152/06 and European Directive 2009/28/EC), or who wish to make an economically rewarding and environmentally sustainable choice by investing in biomass energy.

The BLUE BIO service is particularly suited to:

- industries for wood products, furniture manufacturing, panels, pellet production, etc.;
- the agri-foods sector: oil mills, canning, distilleries, rice mills, greenhouse crops;
- the civil-residential sector: medium and large accommodation facilities, condominiums, large-scale retailers;
- the chemical and pharmaceutical industries.



THE WHITENERGY GUARANTEE

- Preliminary study of the project's technical and economic feasibility
- Acquisition of qualifications and permits required by authorities



CASE STUDY

The BLUE BIO solution with an existing boiler

The client is a company in the wood sector with an existing 3MWth boiler installed in Northern Italy, which produces hot water.

Situation prior to intervention

The company used 5,000 tons of biomass (wood chips) composed of processed waste from its production process.

The production costs for this heat can be calculated as lost profits from the sale of biomass on the market of € 60.00 per tonne, which equals € 300,000 a year.

Proposed solution and post-intervention situation

Following a technical and economic analysis, Whitenergy identified the possibility of supplying heat to neighbouring civil users and thereby qualifying the company as a beneficiary of Blue Certificates.

The Blue Certificates, which amount to € 260,000 a year, allow the company to reduce its thermal energy production costs by 87%.



The BLUE BIO solution with a new boiler

The customer company must renovate its heating systems, which consist of an old 1.6 MWth biomass boiler. The solution identified uses a new boiler constantly supplied with biomass, which is able to access the Conto Termico 2.0 Renewable Heat Incentive.

Situation prior to intervention

The company used 2,000 tons of biomass (wood chips). The cost of heat production was € 60.00 per tonne, or approximately € 120,000 a year.

Proposed solution and post-intervention situation

Following a technical and economic analysis, Whitenergy proposed the installation of a new biomass boiler with a higher power than the one required by the plant, so as to supply heat to other nearby users.

The investment required for the biomass boiler and connection of the utilities amounted to € 250,000. The accessible Blue Certificates reach a total of € 105,000 a year. Additionally, the annual Conto Termico instalment is equal to € 96,000 per year for 5 years.



- Financial, administrative and contractual support
- Measurements, consumption monitoring, quantification and certification of incentives