

HORIZON
2020

Condensed Heat - Optimization and scaling up of an energy efficient, long-during biomass condensation boiler with curved heat exchanger

Fact Sheet

Project Information

C-Heat

Grant agreement ID: 711007

[Project website](#)

DOI

[10.3030/711007](https://doi.org/10.3030/711007)

Project closed

EC signature date

9 December 2015

Start date

1 December 2015

End date

31 March 2016

Funded under

SOCIETAL CHALLENGES - Secure, clean and efficient energy

Total cost

€ 71 429,00

EU contribution

€ 50 000,00

Coordinated by

BIOCURVE



Spain

Objective

BioCurve and Quintín laid the groundwork for a new generation of condensing boilers. We have developed a biomass condensing boiler that has been internationally awarded, which led C-Heat to surpass from far the current state of art, in terms of performance, ripping design and price. By taking advantage of the

identified market opportunity, C-Heat will contribute to the growth of BioCurve and Quintín with a turnover of 6.7Mio. € and 20 new jobs by 2022 introducing an innovative technology powered by renewable organic sources and available in a broad range of power outputs. Former technologies for domestic heating are either unsuitable for moving forward towards a sustainable energy model across EU, or insufficient in terms of energy efficiency. In order to overcome these issues, BioCurve and Quintín have developed a cutting edge biomass boiler capable of working under condensing conditions. Thanks to a novel spiral heat exchanger that enhances 50% the exchange surface, C-Heat compact solution shows > 100% energy efficiency by capturing almost all latent heat of condensation of water vapor in the exhaust stream. In addition, an accurate control of the system enables low temperature applications (i.e. radiant floors). Until now, C-Heat has passed rigorous technical assessments, procuring international quality standards certifications. Also, several units are well operating in real condition, installed in private apartments since 2013. Therefore, an appropriate technology readiness level together with the unmet needs invite us to establish an ambitious but achievable aim for the next years: To become an international reference in the bio heating domestic and tertiary segments as well as the small scale industry. In fact, it does lead us to believe that C-Heat is potentially the best solution for the appointed market niches, if we notice its competitive price and its unique features.

Fields of science (EuroSciVoc)

[engineering and technology](#) > [environmental engineering](#) > [energy and fuels](#) > **[renewable energy](#)**

[agricultural sciences](#) > [agricultural biotechnology](#) > **[biomass](#)**



Programme(s)

[H2020-EU.3.3. - SOCIETAL CHALLENGES - Secure, clean and efficient energy](#)

MAIN PROGRAMME

[H2020-EU.2.3.1. - Mainstreaming SME support, especially through a dedicated instrument](#)

Topic(s)

[SIE-01-2015-1 - Stimulating the innovation potential of SMEs for a low carbon energy system](#)

Call for proposal

[H2020-SMEInst-2014-2015](#)

[See other projects for this call](#)

Sub call

H2020-SMEINST-1-2015

Funding Scheme

[SME-1 - SME instrument phase 1](#)

Coordinator



BIOCURVE

Net EU contribution

€ 50 000,00

Total cost

€ 71 429,00

Address

C/Maria de Luna 11. Nave 8

50018 Zaragoza

 Spain 

SME 

Yes

Region

Noreste > Aragón > Zaragoza

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Participants (1)



CURVADOS QUINTIN S.L

 Spain

Net EU contribution

€ 0,00

Address

POLÍGONO INDUSTRIAL BAKIOLA, 35-B
48498 Arrankudiaga 

SME 

Yes

Region

Noreste > País Vasco > Araba/Álava

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

No data

Last update: 11 August 2022

Permalink: <https://cordis.europa.eu/project/id/711007>

European Union, 2025