

## LowUP to make heating and cooling more efficient and more sustainable

A new project funded by the European Commission has just been launched and will contribute to achieving Europe's GHG reduction targets and increase energy efficiency. LowUP – which stands for 'Low valued energy sources UPgrading for buildings and industry uses' – will develop and demonstrate three new efficient heating and cooling technologies that will significantly reduce both CO<sub>2</sub> emissions and primary energy consumption.

Heating and cooling refers to the energy needed to warm and cool buildings, both residential and tertiary (i.e. office buildings, hospitals etc.) and includes the energy needed in nearly all industrial processes to manufacture products that we use every day. It accounts for 50% of the EU's annual energy consumption, of which 85% comes from burning fossil fuels, mostly coal and natural gas.

Led by the Spanish firm ACCIONA, LowUP gathers 13 partners (3 large companies, 3 research and technology organisations and 7 SMEs) from 7 European countries. During 42 months, the consortium will develop and demonstrate in a relevant environment one heating and one cooling system for office buildings, and one heat recovery system for industrial processes.

All three systems will combine innovative heat and cool recovery technologies fuelled by low valued energy sources, also known as low grade. These include both renewable (solar energy, ambient air and water network) and wasted energy sources (sewage waters and excess heat rejected from industrial processes).

The use of low valued energy allows to produce heating and cooling at temperature close to room temperature. This reduces the total CO<sub>2</sub> emissions for buildings and the energy demand as a result of more efficient energy conversion processes and systems.

Beyond these savings, results generated by LowUP may open new opportunities for the heating and cooling industry, create new jobs and reduce Europe's dependency on imported energy. Market studies and exploitation strategies will be carried out to evaluate these benefits and maximise the impact of the technologies that will be developed and demonstrated.

### MORE INFORMATION

**Contact:** Jose C. Esteban Matías, LowUP Coordinator  
[josecarlos.esteban.matias@acciona.com](mailto:josecarlos.esteban.matias@acciona.com)



[www.lowup-h2020.eu](http://www.lowup-h2020.eu)



[@lowup\\_h2020](https://twitter.com/lowup_h2020)

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**EU contribution:** EUR 3 735 595

| PARTNERS |             |
|----------|-------------|
| Name     | Country     |
| ACCIONA  | Spain       |
| CARTIF   | Spain       |
| ENDEF    | Spain       |
| EURECAT  | Spain       |
| FAFCO    | Switzerland |
| GEA      | Netherlands |
| HALTON   | Finland     |
| LGI      | France      |
| POZZI    | Italy       |
| RDZ      | Italy       |
| TECNALIA | Spain       |
| TISUN    | Austria     |
| WASENCO  | Finland     |





Almost a year after the project proposal was submitted, LowUP officially kicked off in Sevilla on 3 and 4 November 2016. 27 participants from all partner organisations attended this two-day meeting, which was the perfect opportunity for all partners to review the project objectives and the work plan.



At the end of the first day of the LowUP kickoff meeting, a workshop was organised in order to start thinking collectively on the benefits and the impacts of the project, as well as the key messages aimed at target audiences and stakeholders.

