

E-NEWS | Issue n.1

Revolutionizing Europe's Cooling Sector: The COOLING DOWN Project

The vision of COOLING DOWN is to create a sustainable future with renewable cooling technologies. Our research, expert consultations, and modelling will lead to policy recommendations to tackle climate change adaptation and combat the urban heat island effect. Let's cool things down!

COOLING DOWN Website is live

Cooling Down Project partners are happy to introduce you to the website of the project! A modern graphic design, fresh, easy and lively to offer good navigation.



COOLING DOWN

COOLING DOWN seeks to propose a vision for a renewable cooling sector in Europe in the coming decades, and issue policy recommendations and proposals to achieve it. Beyond the technological, economic, and social trends to be assessed through research, expert consultations and modelling, the COOLING DOWN project will also be seeking to address the contribution of renewable cooling technologies to climate change adaptation with a specific focus on the mitigation of the urban heat island effect.

[Go to website](#)

Innovative Business models for accelerating the geothermal and solar thermal cooling

According to several experts, there is a high demand of renewables in the sectors of heating and cooling. That demand is partly covered by renewables already today. Figure 1 shows the comparison between different kind of renewables and their energy yield.

The financing of energy supply contracts can become hard, so it is necessary to include Business models in the research and to show possibilities to handle the financing well.

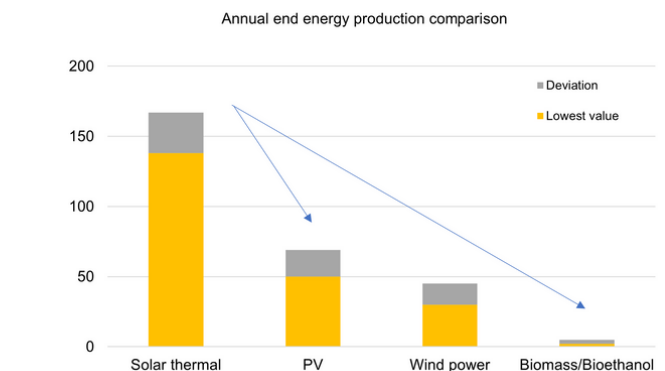


Figure 1: Yield per area comparison of different renewable energy technologies

Source: news on solarthermalworld.org from 31 July 2017 | Fraunhofer ISE, PlanEnergie and Chalmers University



The financing options can be grouped as follows.

- Own financing
- Public finance
- Third Party Financing
- Special Purpose Vehicle
- Development aid

Also, there can be made a separation between Business modelling and simple financing. While the financing itself mostly only contains of the equipment acquisition, Business models mainly offer services containing energy supply or the utility services.

Further on in the project Cooling Down the different possibilities will be discussed and researched in depth. **Stay tuned to not miss this!**

Benjamin Hueber, B.Eng.

Project Manager

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[Download the article](#)

COOLING DOWN | Around Europe



Renewable cooling in the new Euronext data centre in Bergamo

In 2022 Euronext, the pan-European market infrastructure, has completed the migration of its Core Data Centre and related services from Basildon, UK, to the Aruba Global Cloud Data Centre IT3 in Bergamo, Italy. It benefits from

reduced power consumption thanks to very efficient cooling systems using geothermal and dynamic free cooling, and the use of cloud computing to reduce the number of servers. With geothermal cooling, groundwater is used as the main cooling energy source to reduce energy waste, while dynamic free cooling uses the outside air to cool the server room.

[More Information](#)

First low-carbon underground heat storage in France, hybrid h&c systems

Our basement can store large amounts of heat for a long time at a very low cost. This did not escape the notice of the start-up AbSolar, which produced the first Underground Energy Storage (SES) demonstrator in France, to store in the underground solar thermal for a future use of heating and cooling. ([original text in FR](#))



[More Information](#)





Business and financing models – a clear distinction

Non-technical barriers often play a critical role when it comes to increasing the number of solar cooling systems in the sunbelt countries. Business and financing models are among the important factors in overcoming non-technical barriers.

[More Information](#)

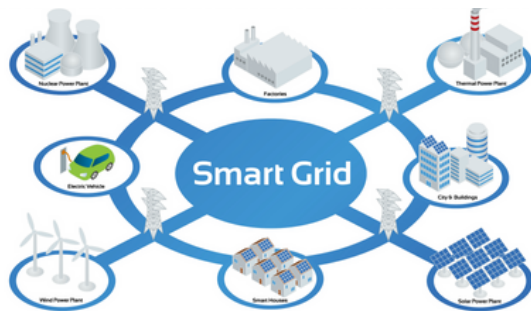
MEPs back plans for a climate neutral building sector by 2050

The EP Plenary adopted the EPBD recast and final negotiation with the Council have started. Among the main measures:

- New buildings to be zero-emission from 2028
- Residential buildings to achieve energy performance class E by 2030, and D by 2033. Non-residential and public buildings to achieve the same ratings by 2027 and 2030 respectively.
- Fossil fuel heating systems from households to phase out, preferably by 2035, and by 2040 at the latest.



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EC launches the Electricity Market Design proposal – cooling must be considered

On 14th March 2023, the Commission proposed the reform EU's EMD to accelerate a surge in renewables and phase-out of gas. One of the aspects of the EMD is to increase the use of long-term contracts to provide households and businesses with more predictable and stable energy bills.

The cooling demand has to be better considered as it influences the electricity consumption drastically especially in summer.

[More Information](#)



MEPs strike deal with Council to boost use of green energy

On 29th March 2023, the Council and the European Parliament negotiators reached a provisional political agreement on RED (Renewable Energy Directive), where renewable heating and cooling is key to reach 2030 targets.



[More Information](#)

COOLING DOWN | 1st Webinar



**Towards a Net-Zero Future:
the vital role of geothermal and solar
thermal in providing sustainable cooling
solutions**

WEBINAR

15 May 2023 | 14:00 - 15:30 CET

Join us for the Cooling Down's first webinar on Monday afternoon 15th of May, where we'll be bringing together experts from the COOLING DOWN Consortium and beyond to explore innovative renewable cooling solutions in a changing energy market.

[More Information & Registration](#)



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