# Future50

Industry, Manufacturing and Resource Management

Energy/Resource Efficient Manufacturing



**Desolenator** 



https://www.desolenator.com/

#GreenManufacturing

## **Highlights**

Desolenator is part of the **Masdar Innovate** initiative,<sup>29</sup> and has won a number of awards, including the **2020 WEX Global Awards.**<sup>30</sup> The company is recognised by the **World Economic Forum** as an innovator in the field of water purification and sustainable technology.<sup>31</sup>

Desolenator reports that it has registered three international patents and is fully operational at scale. Desolenator has built and delivered a carbon-neutral water desalination plant for **Dubai Electricity and Water Authority (DEWA)** following its participation in the **Dubai Future Accelerator.**<sup>33</sup>

Desolenator has announced a project with **Silal, as part** of **ADQ**, deploying the **first solar desalination plant for agriculture** in Abu Dhabi.<sup>34</sup> The company anticipates this to be completed ahead of COP28. Desolenator's Board of Directors is chaired by Paddy Padmanathan, the CEO of ACWA Power.<sup>35</sup>

# Strategic alliances:

- Corporations
- Government
- · Research Institutes
- NGOs
- Agriculture
- Development
- Islands Nations

#### **Headquarters:**

Netherlands

#### Middle East operational countries:

**United Arab Emirates** 

#### **Summary**

Desolenator has designed a **modular solar thermal desalination solution**, which it describes as harnessing photons from the sun to transform seawater or brackish water into high-quality pure water with no harmful chemicals or harm done to the environment. Its solution promises low maintenance along with a low carbon footprint, and the company provides it both directly and as a service, with customers able to choose their desired output between **high-quality drinking water** or **ultrapure water for the production of green hydrogen.** 

#### **Impacts**

Desolenator claims to be building a **fully circular desalination system** where **waste brine is recycled into resaleable solid rock salt** with nothing returning into the environment. The company adds that its patented PVT panels harvest four times more solar energy than traditional PV panels.

### List impact technologies:

Green Hydrogen Production Solar Power, High-Efficiency Heating and Cooling, Desalination

