

[Inici](#) > Mateo Valero, in the short list of nominees for the Global Energy Prize

[Mateo Valero, in the short list of nominees for the Global Energy Prize](#)

This award honors outstanding achievements in energy research and technology from around the world that are helping address the world's various and pressing energy challenges.



BSC Director Mateo Valero has been nominated for the [International Global Energy Prize](#) and entered the short list, which consists of 10 nominations among 152. This award honors outstanding achievements in energy research and technology from around the world that are helping address the world's various and pressing energy challenges.

The organisation of the prize has stressed the achievements of Valero in this field:

Mateo Valero Cortes advocates for decreasing the energy consumption of the IT industry. In particular, he produced significant results in energy-efficient Central Processing Units (CPUs). CPUs are the most power-consuming component of an IT system, so any CPU energy savings are highly valuable.

186 scientists from 31 countries have contended for the Prize in its XV Anniversary cycle. The top 10 of the most promising researchers was compiled according to the evaluations of the international experts and the working group of the Global Energy Prize International Award Committee. Twenty prominent and authoritative experts from all over the world will decide during the election who of the short-listed nominees will be recognized by the prestigious award.

The Global Energy Prize, founded in 2002, is awarded to the most accomplished minds in the research world. The honorees are awarded the Global Energy Prize at the International Economic Forum in St Petersburg along with a monetary prize. The Laureate will be chosen at the Global Energy Prize International Award Committee meeting on April 4, 2017 in Moscow (Russia), and the Laureates will be announced at the official press conference on April 6, 2017.

All candidates' research studies and innovations nominated for the Global Energy Prize are extremely important for solving the problems facing humanity, including reduction of energy costs, development of new energy saving technologies, as well as search for new energy sources.

Here are brief descriptions of the achievements of the rest of nominees:

- **Dr. Dharendra Yogi Goswami** has done his works in the area of solar thermal power. His solar photo-electrochemical disinfection technology has resulted in new indoor air disinfection device, the world's first molecular air purifier, which alleviated the allergic and asthmatic sufferings.
- **Michael Graetzel** is an inventor and developer of dye-sensitized solar cells, called "Graetzel cells". The experts are convinced that this invention may lay the foundation for the future energy technologies. The "Graetzel cells" are aimed at playing a significant role in creating cheap, large scaled technical solutions to obtain renewable energy.
- **Igor Grekhov** has developed and implemented semiconductor devices for ultrafast switching of high power.
- **Martin Andrew Green** has made researches and developments in the field of photovoltaics that have dramatically reduced costs of the solar energy transformation to the electric power, significantly increasing its deployment on a global scale.
- **Elon Musk** was nominated for his exceptional management and scientific efforts to bring the new ecologically clean electric car concept for the modern civilization.
- **Yury Oganessian** has discovered a series of new super heavy elements in the Mendeleev's periodic table. Thanks to these elements, it is possible to create a fundamentally new nuclear power engineering in the future, which will be less dangerous in comparison to the traditional one, and will not have such a large amount of hazardous waste. Perhaps, the planet's energy problems may be solved in this way.
- **Victor Orlov** has made a fundamental research concerning development of the innovative energy technology based on the fast reactors with a heavy metal coolant and the closed fuel cycle, generating new opportunities for nuclear energy development.
- **Henry James Snaith** has created a technology on the use of perovskites (relatively rare for the Earth's surface minerals) as the basis for very efficient low cost solar cells.
- **Hans Joachim Schellhuber** has significantly advanced both the scientific understanding of the rate and extent of climate change, and has defined many of the key policy opportunities for nations to act to develop environmentally, socially, and politically sustainable energy and economic systems.

[Further information about the Global Energy Prize](#)

Barcelona Supercomputing Center - Centro Nacional de Supercomputación

Source URL (retrieved on 20 Mar 2025 - 09:57): <https://www.bsc.es/ca/news/bsc-news/mateo-valero-the-short-list-nominees-the-global-energy-prize>