



Global Energy Solutions

For Prosperity and Climate Neutrality

Hereby you are receiving the Global Energy Solutions newsletter for the month of October 2021.

Our topics:

GES work programme is ready: Christof von Branconi on the aims of the association

GES position in the German election campaign

Short news



Christof von Branconi,
Chairman of the Board of Directors Global Energy Solutions e. V.

Interview: The structure of the work programme is in place

Global Energy Solutions (GES) has specified its work programme for the next two years. In an interview, Christof von Branconi, Chairman of the Board of Directors of the association, names the focal points. The challenges of a global energy transition are enormous, and so are the tasks. After all, around 85 percent of the energy used worldwide today comes from fossil sources. Over the next 30 years, "we have to find a way to use or replace this 85 percent in a way that is as climate-friendly as possible," says von Branconi. GES has now drawn up a programme on how possible solutions - open-ended - are to be developed, step by step. There are five major building blocks:

- (1.) a vision of the future, taking into account the UN's Sustainable Development Goals,
- (2.) a toolbox with technical solution modules,
- (3.) the concrete application of the toolbox in individual industrial sectors,
- (4.) the specific geographical, political, economic and infrastructural conditions for individual regions of the world, and
- (5.) the solution picture: "How does the association envision that the greenhouse gas problem can be solved in concrete terms - while at the same time increasing global prosperity?"

Among the next tasks, GES has set itself, are investigations into the following questions:

- (1.) the large-scale production of green hydrogen by electrolysis and
- (2.) the transport of hydrogen, taking into account various routes, including hydrogen derivatives such as methanol or synthetic natural gas (methane).

In particular, GES wants to address the question of how CO₂ from point sources (e.g. from a cement plant) can be used in a meaningful way. In two years, GES wants to present proposed solutions for the global energy and climate problem, and ones that are also economically viable.

[To the Interview](#)

[To the Video](#)



Facts and Figures

84,3 %

This is the share of fossil energy generated globally in 2019. The remaining 15.7 % is made up as follows: Hydropower (6.4 %), nuclear (4.3 %), wind (2.2 %), solar (1.1 %) and others.

The path towards a global energy transition is therefore still very long. Mankind will continue to use fossil fuels for a long time.

ourworldindata.org

GES position in the German election campaign

Wolfgang Reitzle, who has held top management positions in industry (BMW, Continental, Ford and Linde) for many years, gave a remarkable speech at a party conference of the FDP on 19th September. He pleads for the low-cost production of green electricity, e.g. in the sun deserts of the earth. This electricity is to be used to produce green hydrogen in order to build a worldwide hydrogen society in the medium term. Reitzle is particularly interested in the further processing of hydrogen derivatives such as methane, methanol and ammonia. He wants to fuel the world's 1.3 billion vehicles with combustion engines with synthetic fuels. Reitzle also advocates nature-based solutions. All four points coincide with the position of Global Energy Solutions. Reitzle points out that by the middle of the century, 2.5 billion more people will live on this planet. And that "in Africa, 600 million people do not have a power socket today - but will legitimately have one very soon. And much of the electricity from these sockets will come from new coal-fired power plants". It makes no sense, he said, for German politicians to spend almost all their energy, time and resources on making their own country climate neutral: "We either save the climate globally or not at all." A narrow, nationally oriented climate policy would lead to deindustrialisation, which would weaken the country in international competition. "Germany cannot supply itself self-sufficiently with renewable energy. We need imports of green electricity, or green hydrogen and its derivatives," Reitzle said.

[Bundestagswahl 2021](#)

welt.de

Direct Air Capture – World's largest facility goes into operation

Every year, the Swiss start-up Climeworks wants to suck up to 4,000 tonnes of CO₂ directly from the air and deposit it underground. Orca, as the plant is called, went into operation on Iceland at the beginning of September. Orca consists of eight large containers that suck in CO₂ with the help of fans and filter it out. Climeworks' plants are powered by renewable energy. Icelandic carbon storage company Carbfix mixes the captured CO₂ with water and pumps it underground. There, the mixture reacts with basalt rock and mineralises into solid carbonate in a few years. The quantities of CO₂ that Orca captures are still relatively small. The company's goal is to increase them significantly. A major problem with the method is its high cost. They are said to be in the range of several hundred dollars per tonne of CO₂. In the long run, however, the price is supposed to drop to under 100 dollars.

spiegel.de

solarify.eu

Short News

Alongside the IAA Mobility in Munich, Global Energy Solutions held an event on 6th September on the global challenges in the field of energy and climate and possible contributions to solutions by the industry. The event was hosted by Linde GmbH. Among others, the Federal Minister for Economic Cooperation and Development, Dr. Gerd Müller, was present. Participating companies and organisations: Aramco Overseas Company, H2 Global, Linde GmbH, Obrist Powertrain GmbH, Robert Bosch GmbH, Stiftung Allianz für Entwicklung und Klima, thyssenkrupp AG, vbw - Vereinigung der Bayrischen Wirtschaft, VDMA - Verband Deutscher Maschinen- und Anlagenbau, ZF Friedrichshafen AG.



(r. t. l): Dr. T. Orthen (Global Energy Solutions), P. Ellett (ZF Friedrichshafen AG), C. Meusburger (Obrist Powertrain), D. Erdmann (VDMA), B. Noack (Robert Bosch), F. Hachenberger (Robert Bosch), P. O. Calendini (Aramco Overseas Company), C. von Brancioni (Global Energy Solutions), Dr. A. Opfermann (Linde), Prof. Dr. E. Herlyn (Global Energy Solutions), C. Völzow (vbw), P. Renner (Stiftung Allianz für Entwicklung und Klima), Prof. Dr. Dr. Dr. h. c. F. J. Radermacher (Global Energy Solutions), F. Wolf (Obrist Powertrain), Bundesminister Dr. G. Müller, M. Exenberger (H2 Global), K. Radtke (thyssenkrupp), M. Braun (Aramco Overseas Company), not on the photo: Dr. D. Walliser(ZF Friedrichshafen AG)

Another Global Energy Solutions event took place on 15th September alongside alongside the Auto-mechanika in Frankfurt. The question here was also what the industry can do to help with international climate protection and to get a sustainable energy transition underway. Present were:

Dr. R. Stahlschmidt (CAC Chemnitz), P. Sonntag (EDL Anlagenbau), A. Mathuren (FuelsEurope), P. Müller-Baum (VDMA), Prof. Dr. G. Ruß (Hochschule Darmstadt), H.-P. Messmer (MessmerPartners), Prof. Dr.

Dr. Dr. h.c. F. J. Radermacher, C. von Branconi, Dr. T. Orthen (Global Energy Solutions), M. Braun (Ar- amco Overseas Company), S. Frank (Mission Hydrogen), M. Breuer, Svenja Kley (ZDK), P. von Westerholt (MesseFrankfurt)

iaa.de

automechanika.messefrankfurt

China does not want to build any new coal-fired power plants abroad in the future. This was announced by Chinese President Xi Jinping in a speech to the UN General Assembly in New York. "China will provide more support to other developing countries in developing green and low-carbon energy and will not build new coal-fired power plants abroad," Xi said. He did not give details on how this would be implemented. However, coal-fired power plants will continue to be built in China itself.

Nevertheless, GES remains convinced that there must be a global solution with the coal-fired power plants, because it is hardly to be expected that the existing capacities will be shut down in foreseeable periods of time.

sueddeutsche.de

The USA and the EU are calling for a reduction in methane emissions. A corresponding initiative is to be presented at the World Climate Conference in Glasgow at the end of October. Supporters of the initiative pledge to jointly reduce global methane emissions by at least one third by 2030. Methane is a highly potent greenhouse gas that escapes into the atmosphere mainly during the production and distribution of natural gas. In addition, there are significant emissions from agriculture. Global Energy Solutions is aware of the methane issue and focuses its work on the technological issues.

whitehouse.gov

mckinsey.com

You find our monthly newsletter interesting? Then feel free to recommend [it](#) to others or send it to friends or acquaintances right away. You can subscribe to it free of charge [here](#). Thank you for your support.

Further Infos under:



Imprint: Global Energy Solutions e.V, Lise-Meitner-Straße 9, D-89081 Ulm, Germany |
+49 (0) 731-85071287 | office@global-energy-solutions.org | <https://global-energy-solutions.org> |
CEO: Christof von Branconi

global-energy-solutions.org