

Message from the CEO

Dear readers

Almost 4 months have passed at an incredible pace since our last newsletter issued in June 2014. If time flies it means we have done and accomplished a lot, and we did. As the CEO of NewCO₂Fuels, I have to admit I am very proud of my team and the amount of work and achievements they are able to accomplish in such a short time. Sending out these periodical newsletters forces us to take a break for a while and look back, watch and summarize what we achieved since the previous letter. Every time, again and again, I am being inspired and reassured that the NCF team is on track to reach its milestones.



In the last few months we were able to solidify the ties with our partners in the steel industry and are advancing at steady pace along the path of the design, fabrication and deployment of our pilot at the steel plant. We are also advancing with other partners towards future business opportunities and obtained a grant from the U.S. Department of Energy (DOE) under a collaborative agreement with Alstom Power, U.S.

On the technical side, our engineering team is working on the design of our first commercial scale unit as well as further testing and improving our core CO₂ / H₂O dissociation technology. The perfection and stabilization of the process after the proof of concept for long term and steady operational reliability at an industrial product level is now on our focus.

NCF also received two acknowledgements by objective evaluators from the Israeli government; NCF was awarded two grants – one from the Ministry of Energy and the other from the Ministry of Economics. These two awards reaffirm the importance of the product NCF has developed, but also the confidence in the capabilities of the company and the competence of the team to fulfill its plan and accomplish its goals.

NewCO₂Fuels has also been nominated as a finalist at the World Technology Network annual awards that will take place mid-November in New York. This is a recognition for NewCO₂Fuels and shows, once again, the value and appreciation of NewCO₂Fuels' technology in the market

Further details are included in the below report.

Regards,

D. Banitt

Dudi (David) Banitt
CEO



NewCO₂Fuels Top News

Funding from the Department of Energy (DOE) in collaboration with Alstom

The United States of America's Department of Energy (DOE) has selected four projects to receive approximately \$16 million of funding for next-generation gasification systems that also reduce harmful greenhouse gas emissions to advance the gasification process, which converts carbon-based materials like coal into syngas for use as power, chemicals, hydrogen, and transportation fuels. Alstom's Limestone Chemical Looping Gasification Process, in collaboration with NewCO₂Fuels and the Illinois Clean Coal Institute, is one of the four projects that were elected to receive the funds. See more at: <http://energy.gov/articles/energy-department-announces-new-investments-gasification-research>



U.S. DEPARTMENT OF
ENERGY

Grants awarded by the Israeli Ministry of Energy and the Israeli Economic Ministry

The two grants that were recently awarded to NCF by two different Israeli ministries validate the recognition from the Israeli government towards the technology NCF is developing. These grants are a further confirmation of the innovation and commercial viability of NCF's product. These grants are part of an Israeli national long term program to develop alternative fuels to fossil fuel sources.



Ministry of Economy



Ministry of National Infrastructures, Energy and Water

World Technology Network Awards

NCF has been nominated as a finalist at the World Technology Network annual awards under the Corporate Energy category together with Abengoa Bioenergy, BrightSource Energy, GE, Hanwha Q-Cells and Lawrence Livermore National Laboratory (LLNL) National Ignition Facility (NIF).

See more at: <http://www.wtn.net/summit-2014/world-technology-award-finalists#sthash.qUZVosxp.dpuf>



Australian Government names NCF technology as a future fuel

NewCO₂Fuels' technology was included by the Australian Government's Bureau of Resources and Energy Economics (BREE) in an Australian Liquid Fuel Technology Assessment (ALFTA) report as:

- The only technology in the report converting solar energy into fuel; and
- The chosen technology to assess two alternative fuel paths to current petroleum based liquid transport fuels.
 - Solar energy to DME (DiMethyl Ether)
 - Solar energy to MTG: (Methanol to Gasoline)



Australian Government
Bureau of Resources and Energy Economics

Demonstration plants

As NCF is continuing to grow and improve its technology it is crucial to find the right partners and location for our pilot demonstration plants.

As previously announced, NCF signed an MOU with one of the world's largest steel companies and two international engineering firms to set up a pilot plant at a European steel plant to demonstrate NCF's system integration with the steel industry

NCF is working closely with these companies by hosting the companies' representatives on site in Israel for intensive technical discussions. This visit was followed by visiting the European steel plant to further discuss the design and implementation of the pilot plant within the steel facility, allocating the precise location and collecting detailed technical data.

In parallel NCF is conducting detailed discussions with companies in Israel, China and Australia to set up additional demonstration plants in other industries such as the gasification and gas industry where large quantities of CO₂ are emitted and in these cases at high purity, hence avoiding the cost associated with the CO₂ capturing from the flue gas.



Independent Review by Technip

Last year, Worley Parsons conducted an independent review of NCF technology, providing a detailed report with their findings regarding NCF's status, successes and main challenges that had to be overcome to develop a commercially ready product. Worley Parson's engineers were impressed with NCF's work and produced a positive report in October 2013.

Since the review, NCF made impressive technological advancements and accomplishments, demonstrating the viability of the technology through two separate operating prototypes. As a consequence, NCF decided to conduct a second independent review to validate the technology, team competence and company performance, this time by Technip. Technip is a world leader in engineering, construction and project management for the energy industry. A report is expected in November 2014.



Grants from the Israeli and the U.S. Government

During the last quarter, NCF has received three grants from Israeli and U.S. government departments to further assist the development of the core technology. These are positive and important signals from government entities and officials, showing NCF's solution and technology truly adds value to the future energy market and add credibility by independent evaluators from the administrations.

- Grant obtained from the Israeli Economic Ministry
- Grant obtained from Israeli Ministry of Energy
- Grant obtained from the Department of Energy (DOE) under a collaborative agreement with Alstom Power, U.S.

Business Development on the Go

NCF was invited to present the NCF project at the following events in the past five months:

- Israel technological delegation to Hong Kong – June 2014
- CO₂ Forum, International Sustainable CO₂ Chemical and Biochemical Recycling, Lyon (France), Sept 2014
- European Steel Environment & Energy Congress 2014, Teeside University UK, Sept 2014
- Annual conference of the Ministry of Energy and Water in Israel – Sept 2014
- Go4Israel 2014, Tel Aviv (Israel), Oct 2014
- 2014 Gasification Technologies Conference, Washington DC (USA), Oct 2014
- World Technology Network annual event, New York (USA), Nov 2014

In the News

- AUSTRALIAN GOVERNMENT NAMES NCF TECHNOLOGY AS A FUTURE FUEL - Nov. 10, 2014
<http://www.greenearthenergy.com.au/downloadfile.php?filename=files/announcements/1383611.pdf>
- ENERGY DEPARTMENT ANNOUNCES NEW INVESTMENTS IN GASIFICATION RESEARCH - NOV. 06, 2014
<http://energy.gov/articles/energy-department-announces-new-investments-gasification-research>
- THE WORLD TECHNOLOGY NETWORK AWARD:FINALIST AT THE WTN ANNUAL AWARDS - Sep. 22, 2014
<http://www.wtn.net/summit-2014/world-technology-award-finalists>
- THE AUSTRALIAN, Solar guru wants to heat up the gas industry - Sep. 22, 2014
<http://www.theaustralian.com.au/business/mining-energy/solar-guru-jacob-karni-wants-to-heat-up-the-gas-industry/story-e6frg9df-1227065750166?nk=7b163a94557149d7715bce738f80f9c1>
- Little light (Hebrew) - Aug. 16, 2014
<http://www.iba.org.il/bet/bet.aspx?type=286&entity=1034302>
- THE AUSTRALIAN - Greenerth moves closer on CO₂-to-fuel - May 29, 2014
<http://www.theaustralian.com.au/business/latest/greenerth-moves-closer-on-co2-to-fuel/story-e6frg90f-1226936261960>
- PLATTS MCGRAW HILL FINANCIAL: Most steelmakers slow to adopt energy - Jul. 17, 2014
http://www.newco2fuels.co.il/files/files/SRM_20140707.pdf
- GASWORLD: CO₂ emissions converted to fuel - Jul. 17, 2014
<http://www.gasworld.com/regions/middle-east/co2-emissions-converted-to-fuel/2004033.article>
- STEEL TECH: New Co₂ Fuels (NCF) - from CO₂ to Fuels - Jul. 04, 2014
http://www.newco2fuels.co.il/files/files/steell_tech_july_issue_2014_Final.pdf



David Banitt, NCF CEO, receiving the grant from the Israeli Ministry of Energy



NCF's Booth at the Gasification conference in Washington



David Banitt, NCF CEO, presenting at the Gasification conference in Washington

News Around the World

EU leaders agree CO₂ emissions cut

EU leaders have reached a landmark deal to cut greenhouse gas emissions by 40% by 2030, compared with 1990 levels.

The binding decision came after heated discussions at a summit in Brussels, as some members had argued that their varied interests should be protected.

<http://www.bbc.com/news/world-europe-29751064>

China To Take Historic Step To Curb CO₂ Emissions

China, the world's biggest emitter of climate-changing greenhouse gases, will set an absolute cap on its CO₂ emissions from 2016, a top government adviser said on Tuesday.

<http://www.businessinsider.com/r-china-plans-absolute-co2-cap-for-first-time-government-adviser-2014-03>

Methane Leaks Wipe Out Any Climate Benefit Of Fracking, Satellite Observations Confirm

Satellite observations of huge oil and gas basins in East Texas and North Dakota confirm staggering 9 and 10 percent leakage rates of heat-trapping methane.

theenergycollective.com/josephromm/2146821/methane-leaks-wipe-out-any-climate-benefit-fracking-satellite-observations-confirm?utm_source=feedburner&utm_medium=email&utm_campaign=The+Energy+Collective+%28all+posts%29

China CO₂ emissions outpace EU and US, 45% above global average

China has passed the EU for the first time in terms of per capita emissions in 2013, according to a new scientific report. Globally, the limit for atmospheric carbon will be reached in 30 years if pollution continues at the current pace, the report warns.

<http://rt.com/business/189532-china-tops-world-co2-emissions/>

CONFERENCES AND EVENTS

WTN 2014

New York., U.S.A.

13-14 November 2014

<http://www.wtn.net/summit-2014>

3rd Conference on Carbon Dioxide as Feedstock for Chemistry and Polymers

Essen, Germany

2-3 December 2014

<http://www.co2-chemistry.eu/>

Eilat-Eilat Green Energy

Eilat, Israel

7 - 9 December 2014

<http://www.eilatenergy.org/>