

SDCL Investor Update:

Energy Efficiency for Energy Security

by Jonathan Maxwell, CEO of SDCL

March 2022

Energy Efficiency for Energy Security

At the time of writing, we see with great sadness the suffering of those in Ukraine, and their families. Our thoughts are with them. Although we outline views on energy efficiency and its long-term benefits including energy security below, we are very mindful that the immediate situation is one of terrible human suffering and tragedy.

Energy security in the next decade is going to require energy efficiency as much as any other solution. Governments should mandate efficiency and improvements to the energy system at the same time as creating the conditions for the generation of new and clean energy supply.

The world is currently wasting most of its energy, across the points of generation, transmission, distribution and end use. Solutions to this problem would save gigawatts of energy, and are badly and urgently needed. They could be delivered at scale with existing technology, at low cost and in time frames of six months to three years, compared with decades for other solutions.

Meanwhile 80% of the world's energy system still depends on fossil fuels – oil, gas and coal. Natural gas consumption is on the rise, with surging global energy demand. Renewable energy supply and storage, and storage even of natural gas and LNG, are not close to sufficient. Geopolitical risk to the energy system has never been higher, and with the situation regarding Russia and Ukraine, some 40% of Europe's gas supply is in question. Among the many elephants in the room, we may be relying on other diplomatic hotspots to turn the oil taps back on.

Global energy security is also at the mercy of the climate and environment. Grids across the world fail during severe weather storms. Energy, particularly from fossil fuels, is a major contributor to man-made climate change. While constrained supply of fossil fuels in the coming years will increase the demand and urgency for alternatives, in the short term it could represent a significant setback for decarbonisation.

Clean and renewable energy represents less than 20% of the energy system today and new supplies at utility scale will take years if not decades to develop, from whatever source. Major new offshore wind and other large scale renewable generation ordered now can be expected from the late 2020s and the more controversial nuclear in the 2030s and 2040s. New natural gas capacity involves similar timeframes.

In the meantime, while we build incrementally on renewable energy capacity, we are likely to see more – rather than less – coal and gas used to balance grids in Germany, Ireland and other European markets. Energy security goes down, carbon emissions go up.

We urgently need gigawatts of clean power and heat in the immediate years, and so energy efficiency must be at the top of the agenda. Only by reducing waste in the energy system by bringing cleaner energy generation closer to the point of use (cutting generation, transmission and distribution losses) and reducing the 10-30%+ of energy that buildings and industry can waste, by improving their equipment, can we gain the ground we need so soon.

We need to reduce energy demand at the point of use, as well as making supply and distribution more efficient. We can do this with commercially proven technologies at scale that are readily available today, such as on-site cogeneration, solar and storage, renewable heat, bioenergy, green gas and hydrogen, efficient lighting, heating, cooling and controls. By reducing the 'size of the cake', rather than relying on the supply side alone, we can find gigawatts of energy demand reduction (or 'negawatts"), reducing and removing costs and carbon while reinforcing resilience and energy security.

We need large-scale clean energy generation as soon as we can get it, but we must get energy efficiency done in the meantime. Governments should mandate immediate and annual reductions in energy consumption per unit of GDP output and pass obligations down both to the public and private sector. They should invest in project development and reduce credit risks for investors decarbonising private buildings and industry.

By improving, diversifying and strengthening the energy system, it will be better prepared to take the clean energy when it arrives, rather than wasting it.

Jonathan Maxwell, CEO of SDCL

March 2022



About SDCL

Sustainable Development Capital LLP ("SDCL"), an investment firm established in 2007, with a proven track record of investment in energy efficiency and decentralised generation projects in the UK, Continental Europe, North America and Asia. SDCL is headquartered in London and also operates worldwide from offices in New York, Dublin, Madrid, Hong Kong and Singapore.

SDCL manages the SDCL Energy Efficiency income Trust plc (SEIT), which is listed on the main market of the London Stock Exchange, which has grown to over £1bn equity market capitalisation. Through a combination of growth of its private equity infrastructure platform and the IPO of the SDCL EDGE Acquisition Corporation (SEDA) on the New York Stock Exchange in October, SDCL is now managing over US\$2 billion for investment in energy efficient projects and companies.

SDCL is authorised and regulated in the UK by the Financial Conduct Authority. Further information can be found at www.sdclgroup.com.

This description of SDCL is neither an advertisement nor a prospectus for the purposes of the Financial Conduct Authority's Prospectus Regulation Rules. It has not been approved by the FCA.

SUSTAINABLE DEVELOPMENT CAPITAL LLP

One, Vine Street London W1J OAH United Kingdom

www.sdclgroup.com