

PRESS RELEASE

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London

ECUBES ARCOLA

Hydrogen & Flexibility

25 Year Programme for Zero Emission Mobility & Low Carbon Energy in South Sumatra, commencing with Asian Games 2018



Aligned with COP23, on 14th November 2017 at Her Majesty's Treasury London: political leaders from South Sumatra Indonesia met with UK government representatives at the launch of a 25 year business and research collaboration on zero emission mobility & low carbon energy between the Province of South Sumatra and UK infrastructure innovator Ecubes Arcola.

The 25 year collaboration will involve a rolling-programme of clean and low carbon infrastructure projects including power generation and mobility. In parallel a research partnership between the UK and South Sumatra will be established, building on the existing Ecubes Arcola training programmes and relationships with world leading universities in the UK.

Ecubes Arcola has partnered with leading power equipment and engineering suppliers in the UK and with PT-PP, a leading Indonesian state-owned construction and investment company to deliver power projects in Indonesia. Together, Ecubes Arcola and PT-PP have already identified over 1GW of potential projects, with the first 10MW project in Muba Regency about to commence.

Ecubes Arcola will also be working with PT-PP on the first cross-sectoral infrastructure integration project - hydrogen zero emission mobility at Jakabaring Sports City, Palembang, for the Asian Games 2018. This involves delivery and operation of a fleet of hydrogen and electric vehicles including buses, vans and cars, along with associated hydrogen refuelling and electric charging infrastructure. The project is championed by Governor of South Sumatra Alex Noerdin and sponsored by PT-PP. It is the flagship demonstrator of the Ecubes Arcola approach to using hydrogen for energy storage to

enable greater penetration of renewables, and using the hydrogen to provide zero emission mobility.

Governor of South Sumatra Alex Noerdin said: *“South Sumatra has great potential for renewable energy. Over the next 25 years we will see the transformation of our power generation and transport systems to zero-emission technologies, ensuring we have clean air and affordable renewable energy. We will start at Jakabaring Sport City, which will become a showcase for wider region for implementation of clean infrastructure, enabled by using hydrogen to store and transport energy.”*

Regent of Muba Regency Dodi Reza said: *“In order to realise our vision for clean energy and economic growth we must succeed in implementing new energy concepts involving high penetration of renewables in the power mix. This can only be achieved by aligning all participants in the value chain, working both top-down from the vision and bottom-up from the practicalities of each site and of each technology. It is this approach which has enabled the first project in this programme to proceed, and it will ensure the success of future projects.”*

Mr. Tumiyana, President Director of PT PP (Persero) Tbk. said: *“PT-PP vision is to become a leading construction and investment company in the South-East Asia region. Investing and contracting sustainable energy projects is a key part of our approach. I am delighted that we are demonstrating our sustainability leadership by supporting the hydrogen zero emission mobility project for the Asian Games 2018.”*

Mr. Abdul Haris Tatang, EPC Director of PT PP (Persero) Tbk., President Commissioner of PP Energi said: *The transition to a low carbon economy requires investments in renewable energy sources. Hydrogen as an energy vector can play a key role, providing mid- to long-term carbon-free-energy storage, enabling the balancing of supply and demand from renewables. By ensuring security of supply, mastering the buffering challenges, electrification of transport and can help decarbonise the power grid.”*

The 25 year collaboration agreement was signed in the Winston Churchill Room of Her Majesty's Treasury, London on 14th November 2017 by Governor of South Sumatra Alex Noerdin; Regent of Muba Regency Dodi Reza Alex; President Director of Ecubes Arcola Aleksander Gerbec and Managing Director of Ecubes Arcola Dr Ben Todd; in the presence of UK Prime Minister's Envoy Richard Graham MP, Minister of State for the Foreign & Commonwealth Office Mark Field MP, and Louis Taylor, Chief Executive Officer, UK Export Finance.

UK Prime Minister's Trade Envoy to Indonesia Richard Graham MP said: *“Increasing our trade with Indonesia is an important goal and I strongly support the Ecubes Arcola partnership in South Sumatra, which will benefit both our countries.”*

Greg Hands, Minister of State for Trade Policy said: *“As an international economic department, DIT is delighted to be supporting such an exciting company as it delivers its zero emission project at the Asian Games 2018. Our department supports UK companies, whatever their size, export their products and services across the world, and are delighted to see a British company lead the way on low carbon infrastructure projects in Indonesia.”*

At a second meeting on the same day, at the Sustainable Gas Institute at Imperial College London, opportunities for potential collaboration between the Province of South Sumatra, Ecubes Arcola and Imperial College were explored. Discussion topics included research activities to support the expansion of green infrastructure in South Sumatra and training on sustainable energy in schools, universities and businesses.

Professor Nigel Brandon OBE, Dean of the Faculty of Engineering, Co-Director of Sustainable Gas Institute, Imperial College said: *“Having worked with Arcola for many years on advanced fuel cell and battery technologies, and having strong existing connections to Indonesia, we are delighted to explore opportunities for collaboration with Ecubes Arcola in South Sumatra.”*

Dr Ben Todd, Managing Director of Ecubes Arcola said: *“With the dedication of our partners in the UK and in Indonesia we have a real opportunity to accelerate the transition to a low carbon economy in South Sumatra. With the cost of renewable energy generation in many territories now lower than fossil-fuel sources, and hydrogen fuel cell products available from many of the world’s leading industrial companies, now is the time to act to create a truly sustainable power and mobility infrastructure.”*

Aleksander Gerbec, President Director of Ecubes Arcola said: *“With the required technologies now available, it is political and business leadership challenges which must be overcome in order to deliver the new energy concepts which will provide a clean and prosperous future for everyone. Our partners in Indonesia have shown precisely this leadership, and it is our honour to work with them.”*

ENDS

Notes for Editors

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ECUBES ARCOLA is a cross-sectoral integrated energy infrastructure provider, delivering solutions for affordable, low-carbon distributed power generation and zero emission mobility. It is a UK registered Joint Venture between Ecubes Technologies and Arcola Energy. The two companies also have further collaborations with Norwegian offshore specialists IMS Group. <http://ecubesarcola.com>

ECUBES TECHNOLOGIES is a Slovenian energy strategy consultancy, with deep understanding of challenges at transmission system operator level, focusing on clean energy infrastructure. We have been active in South Asia for many years, developing a very strong network in Indonesia based on identifying a combination of acute needs and opportunities for visionary leadership.

ARCOLA ENERGY is an internationally respected UK hydrogen and fuel cell integration company. We are the centre of a network of leading UK manufacturing businesses, international supply chain partners and UK academic expertise in the sector. UK partners include leading hydrogen refuelling provider ITM Power (backed by JCB) and global bus manufacturer Alexander Dennis. We are working on projects with most of the leading global players active in the sector including Toyota, Shell, Anglo American, BOC/Linde as well sector leaders Ballard, Hydrogenics and Luxfer in North America and Symbio FCell and Proton Motor in Europe. <https://www.arcolaenergy.com/>

PT PP (Persero) Tbk. (PEMBANGUNAN PERUMAHAN) is a state-owned construction and investment company in Indonesia. The company's lines of businesses consist of construction services in building and infrastructure, property, engineering, procurement and construction (EPC), as well as investment. <http://www.pt-pp.com>

MUSI BANYUASIN (MUBA) REGENCY, SOUTH SUMATRA is one of richest regions in South Sumatra province, even in Indonesia. The main source of its economy is mining and energy. Musi Banyuasin reGENCY consists of 14 districts and 236 villages. <http://mubakab.go.id/>

SOUTH SUMATRA is one of 34 provinces in Indonesia and one of the richest in natural resources including oil, gas and coal. Government has commitment to support development towards green future. In August 2018 South Sumatra will be co-hosting, together with Jakarta, the 2018 Asian Games. <http://sumselprov.go.id/>

ASIAN GAMES are the world's largest sporting event outside of the Olympics. In August 2018 they will be held in Indonesia at venues in Jakarta and Palembang, South Sumatra. Governor Alex Noerdin has committed to delivering zero-emission mobility as part of the Palembang Asian Games infrastructure. <http://www.jakarta-palembang2018.org>

UK EXPORT FINANCE (UKEF) is the UK's export credit agency. Its mission is to ensure that no viable UK export fails for lack of finance or insurance. It helps UK companies to win export contracts by providing attractive financing terms to their buyers and fulfil contracts by supporting working capital loans. As of November 2017, UKEF has cover of £2 billion to £3 billion for Indonesia, including Local Currency Financing for medium/long term business. <https://www.gov.uk/guidance/country-cover-policy-and-indicators>

UK DEPARTMENT FOR INTERNATIONAL TRADE (DIT) works to secure UK and global prosperity by promoting and financing international trade and investment, and championing free trade. It is an international economic department, responsible for bringing together policy, promotion and financial expertise to break down barriers to trade and investment, and help businesses succeed. <https://www.gov.uk/government/organisations/department-for-international-trade/about>

THE HYDROGEN COUNCIL is a global initiative of leading energy, transport and industry companies with a united vision and long-term ambition for hydrogen to foster the energy transition. The growing coalition of CEOs have the ambition to: Accelerate their significant investment in the development and commercialization of the hydrogen and fuel cell sectors. Encourage key stakeholders increase their backing of hydrogen as part of the future energy mix with appropriate policies and supporting schemes. Members include Shell, Statoil, Kawasaki, General Motors, BMW, Linde and Toyota, <http://hydrogencouncil.com/>

IMPERIAL COLLEGE LONDON was founded in the 1907 and is a world top ten university with an international reputation for excellence in teaching and research. Imperial is committed to developing the next generation of researchers, scientists and academics through collaboration across disciplines. Imperial is a space for education, research, translation and commercialisation, harnessing science and innovation to tackle global challenges. <https://www.imperial.ac.uk/energy-futures-lab/>

THE SUSTAINABLE GAS INSTITUTE AT IMPERIAL COLLEGE is a unique academic-industry partnership between the United Kingdom and Brazil, providing thought leadership and research into the technology that could underpin a role for natural gas in the global energy landscape. The Institute operates on a 'hub and spoke' model, with an international research hub in Imperial College, London and spokes at leading research universities in Brazil. <http://www.sustainablegasinstitute.org/about-us/>