

News Digest

Costa Rica generates almost 100% renewable energy in 2016

For 271 days of 2016, Costa Rica ran on 100% renewable electricity and, for the second consecutive year, surpassed 98% of generation with five clean sources in the year.

According to preliminary data from the Costa Rican Electricity Institute (ICE), between January 1 and December 31, Costa Rica produced 10,778.32 gigawatt hours (GWh), of which 98.21% came from renewable sources, a percentage similar to that of 2015, when Reached 98.99%.

The numbers stand out in two years with particular characteristics: 2015 was strongly affected by the El Niño phenomenon, while 2016 had low rainfall throughout the country during most of the year.



Wind farm in Costa Rica (image courtesy of Jiri Stoklaska via Shutterstock).

The optimization of the medium and large storage reservoirs of the Costa Rican Institute of Electricity has been fundamental to maintain these percentages. After 17th June of last year fossil fuels were used just once for electricity generation. The biggest renewable contributor in 2016 was hydroelectric plants, which accounted for 74 of the country's total electricity needs. Following this, 12% of Costa Rica's energy needs were met by geothermal power, while wind accounted for 10%.

ICE have stated their hopes for Costa Rica to reach carbon neutrality by 2021. The president of the company, Carlos Manuel Obregó, has said the institute expects renewable power generation to stay "stable" throughout 2017, with four new wind farms being introduced and a forecast of favorable hydro-meteorological conditions near the nation's hydropower plants.

Call of EU battery manufacturers to develop a 'Battery Strategy for Europe'

EUROBAT, the Association of European Automotive and Industrial Battery Manufacturers, has published a call for the development of a '2030 Battery Strategy for Europe'.

The Association claims that batteries are at the very heart of the shift towards a decarbonized society, enabling energy storage of renewables, energy efficiency and hybridization and electrification of transports. Such a strategy, says EUROBAT, would lead to more coherence between the several EU policies in the field of energy, transport and environment.

For Europe as a whole, it is important to enable the future of its entire battery sector and ensure coherence between EU, regional and national policy initiatives, states EUROBAT. In particular, keeping and expanding the manufacturing base of all battery technologies in Europe will be of great importance for the industrial development of the European Union.

A variety of battery technologies exists today and they each answer to different demands in terms of performance, capabilities and applications they are central to solving the issues faced by the challenges of climate change and energy dependence, says the Association.

With this initiative, EUROBAT asks European policy makers to cooperate

with all stakeholders, including manufacturers, suppliers, value chain partners, users and civil society, to develop a '2030 Battery Strategy for Europe' that can provide assurance for the long-term investment planning by battery manufacturers and the supply chain in Europe. According to EUROBAT, such overall strategic EU policy framework could provide business certainty for European battery manufacturers, create new opportunities for all battery technologies and deliver jobs, growth and innovation in Europe.

The full call to action can be read here.

Official report highlights potential of tidal lagoon technology

RenewableUK is welcoming a review of the benefits of tidal lagoon energy. The study was commissioned by the Government, and carried out by the former Energy Minister Charles Hendry.

Hendry said tidal lagoon technology can deliver a secure supply of energy for a price that's competitive in the long term, stating the equivalent of the cost of a pint of milk per household per year. He added that tidal power is a completely predictable source of energy.

The review is significant for Tidal Lagoon Power. The company secured planning consent in 2015 to build the world's first tidal lagoon power plant in Swansea Bay. This 320 megawatt (MW) project will generate enough power to meet the annual needs of 155,000 homes.

The company aims to begin construction within a year of getting a final green light after the successful conclusion of



Tidal lagoon technology could be a cheap and reliable source of renewable energy, according to former Energy Minister Charles Hendry. Pictured: rendition of the Swansea Bay tidal lagoon.

negotiations with Government. It is the first project of its kind in the world, marking the start of a whole new industrial sector. We can expect to see significant cost reductions as each further project is built.

RenewableUK's Chief Executive Hugh McNeal said: "It's great to have this ringing endorsement of innovative technology and modern industry. The world's first tidal lagoon in Swansea Bay can provide power for our national energy needs and create local jobs for decades to come. Government should finalise negotiations so that work can start on this important infrastructure project as soon as possible.

This is a new growth sector with huge potential to bring industrial-scale economic opportunities to the UK. Each new tidal lagoon will drive down costs due to economies of scale, benefitting consumers, as well as strengthening the security of our energy supply.

"The UK's future energy mix will be powered by a broad range of low carbon technologies which can be delivered by British companies. This means investing today in new sources for tomorrow – including marine energy technologies such as wave, tidal stream, and tidal lagoons".

The full review can be read here.

E.ON to participate in European smart grid project InterFlex

E.ON has joined the European smart grid project InterFlex that aims to explore new ways of using various forms of flexibilities to optimize electric power systems on a local scale.

The project, which is part of the biggest EU Research and Innovation program, Horizon 2020, will run for three years. During this time, 20 project partners will investigate the interactions between flexibilities provided by energy market players and the distribution grid, with a particular focus on energy storage, smart charging of electric vehicles, demand response, islanding, grid automation and the integration of different energy carriers (gas, heat, electricity). The three regional demonstrators run by E.ON will be located in Germany and Sweden. The German demonstrator will be implemented by Avacon, a German grid operator belonging to the E.ON group. Avacon, located in Lower-Saxony, will manage a centralized platform of flexibilities and distributed energy resources in a rural area between Helmstedt and Salzgitter to use energy where it is generated in order to relieve the distribution grid.

The first Swedish demonstrator of E.ON Sverige is located in Malmö. It investigates energy carrier integration using the heat inertia of buildings as a flexibility measure to achieve a more optimized and environmentally friendly production in a distributed energy system. A second Swedish demonstrator of E.ON Sverige, based in the Skåne region (Southern Sweden), is exploring ways of operating part of the distribution grid on a standalone basis (islanding), supported by the client through a "peer to peer" approach, while assessing the benefit of advanced control of local energy systems for the DSO.

The project findings will allow the consortium members to replicate the demonstrated solutions and business models. The results are to provide an incentive for other services providers or investors to test and replicate the developed business models to further develop advanced monitoring, local energy control and flexibility services at EU level.

New IRENA report details how renewables can decarbonise the energy sector and improve the lives of billions

IRENA has released its third edition of REthinking Energy, outlining key developments in the global renewable energy industry.

Falling costs, driven by innovation in technology and policy, is spurring renewable energy deployment and with it a myriad of socioeconomic benefits, according to the new comprehensive publication released by the International Renewable Energy Agency (IRENA). REthinking Energy, now in its third edition, was released last week at IRENA's seventh Assembly, the Agency's ultimate decision-making authority.

"Renewables are gaining ground by nearly every measure. Accelerating the pace of the energy transition and expanding its scope beyond the power sector will not only reduce carbon emissions, it will improve lives, create jobs, achieve development goals, and ensure a cleaner and more prosperous future," said IRENA Director-General Adnan Z. Amin.

The publication highlights how global investment in renewables has steadily grown for more than a decade, rising from Download English Version:

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