

Mississippi Renewable Energy and Energy Efficiency Update

MPSC Regular Meeting and Docket Call – October 5

At the October 5, 2017, MPSC Regular Meeting ([see agenda](#)), the Commission acted on the following items of interest to clean energy stakeholders:

MS Power Co.; Docket No. 2017-UN-149: MS Power Co. (MPCo) filed a [petition for annual changes](#) to its Public Utility Regulatory Tax Recovery Rate. The tax assessments fund electricity regulatory expenses incurred by the MPSC and MS Public Utilities Staff. The change will increase the average customer bill by about 4 cents/month. In the past, the taxes collected under this assessment went directly to the MPSC to cover the anticipated costs of agency operations. However, actions imposed by the legislature now cause these specially-directed funds to be swept into the state's General Fund.

Next Meeting of the MPSC – The next [regular meeting](#) of the MPSC will take place on **November 7, 2017, at 10 am** in the MPSC Hearing Room to consider the Docket.

MDA Energy Awareness Day – October 5

The MDA-Energy and Natural Resources Division held its annual [Energy Awareness Day](#) on the grounds of the MS Agriculture and Forestry Museum. Nearly 1000 school-aged students and their teachers learned about various sources of energy, energy efficiency and natural resource conservation. In addition, students from the MS School of Math and Science hosted a hands-on, educational exhibit and directly interacted with all of the students that participated in the event.

Energy Efficiency Day – October 5

Energy Efficiency Day is a collaborative effort between regional and national organizations, businesses, utilities, and individuals working to promote energy efficiency: the cheapest, quickest way to meet our energy needs, cut consumer bills and reduce pollution. [Learn how you can take action](#) and increase energy efficiency at home or at your place of work.

EE Spotlight: Mississippi Power Heating and Cooling Programs

Mississippi Power has several programs to help you increase energy efficiency in and around your home. These include the [Heating & Air Program](#) and the [Heat Pump Program](#). The programs consist of either a tune-up of existing HVAC systems or replacing with a more efficiency heat pump unit. A heat pump is one of the most advanced and efficient heating and cooling systems available today and come in a variety of types. It is an investment that can result in major savings on monthly energy bills. MS Power also provides [rebate incentives](#) and [financing options](#). Learn more at [Ways to Save](#).

Solar Companies Considering Golden Triangle

Supervisors in Lowndes and Oktibbeha counties have [recently approved resolutions](#) of intent for tax benefits to help attract a pair of solar companies that are eyeing the Golden Triangle. E.ON Climate and Renewables North America, Inc. and NextEra Energy, Inc. are evaluating sites in the region to invest in

clean energy production facilities, most likely solar. TVA will purchase and distribute the energy to customers through its grid system.

Where is Solar Booming? In Mississippi!

Data compiled by GTM Research shows that eight of the 10 fastest-growing U.S. solar markets between the second quarters of 2016 and 2017 were states that voted for Trump, with Alabama and **Mississippi** topping the list. Why is that? Is it because our state leaders have gone green, have caved-in to environmentalists, want to fight climate change? Hardly. The reason is the economics: rapidly falling development costs, the creation of jobs and one of the lowest cost energy resources makes solar attractive to utilities, cooperatives and the general public.

Stion Closing Hattiesburg Solar Manufacturing Plant

While solar markets gain ground in Mississippi, solar panel maker [Stion notified the state](#) that it would close its Hattiesburg plant Dec. 13, laying off 137 employees. "Intense, non-market competition from foreign solar panel manufacturers, especially those based in China and proxy countries, has severely impacted the viability of our business," the San Jose, California, company said in a statement. Stion is the latest green energy company heavily incentivized by a deal made by former Gov. Haley Barbour to flop. Mississippi initially loaned Stion \$74.8 million, and local governments have given millions more in other tax breaks and subsidies. The Mississippi Development Authority has reportedly sent the Stion matter to the Attorney General for legal response considerations.

UK's Velocys Moving Forward with Wood-Based Biofuels Project

Velocys has [signed a site option agreement](#) with Adams County for its first U.S. biorefinery to be located in Natchez. The company has been offered up to \$42 million in county tax breaks, up to \$15 million in state tax breaks, as well as \$5 million worth of land and infrastructure upgrades from the county and local utility. The MDA says the company could invest several hundred million dollars. [Velocys](#) enables the production of renewable jet fuel and diesel from forestry by-products.

Southern Cross Transmission Holds Info/Vendor Fair

The Southern Cross Transmission Project hosted information and vendor fairs in Columbus on Tuesday, Oct. 24 and in Ridgeland on Wednesday, Oct. 25. The Southern Cross Transmission Project is making every effort to include Mississippi contractors and suppliers to assist in the development and building of this transmission line. Project employment during the peak of the construction phase is anticipated to exceed 650 jobs. More information about the Southern Cross Transmission project can be accessed at www.SouthernCrossTransmission.com.

Green Business Boot Camp Held in Jackson

Representatives of the U.S. Green Building Council held a half-day session to provide an overview of the rating systems, resources, programs and certifications offered through USCBG and the Green Building Certification Institute. These tools include: [LEED](#), [Arc](#), [WELL](#), [Sustainable Sites Initiative](#), [PEER](#), [Parksmart](#), [TRUE Zero Waste](#), [EDGE](#), [GRESB](#). You can also [join](#) USGBC as an Individual Member and keep tabs with what is happening in the local market: www.usgbc.org/usgbc-mississippi.

Jaxon Energy Shifting, Expanding Production of Renewable Diesel

Jaxon Energy, located in the industrial park in west Jackson, produces renewable diesel fuel utilizing feedstocks such as soybean, canola and other vegetable oils. Renewable diesel is made from hydrotreating fats, oils and greases. In the process, hydrogen replaces sulfur, oxygen and nitrogen and converts triglycerides into paraffinic hydrocarbons. Renewable diesel can be used up to 100% as a direct replacement for petroleum diesel.

Owner of Hardy Wood Heaters of Philadelphia, MS Testifies Before Congress

In September, Frank Moore, President and Owner of Hardy Manufacturing Company, Inc. in Philadelphia, MS, [testified](#) before the House Energy & Commerce Subcommittee on Environment hearing on “[Big Relief for Small Business: Legislation Reducing Regulatory Burdens on Small Manufacturers and Other Job Creators.](#)” Mr. Moore asked Congress for more time will allow wood stove and wood heater manufacturing companies to develop less expensive alternatives that meet EPA emission standards and that will encourage consumers to replace their older appliances with the latest technologies.

Enerkem Begins Commercial Production of Cellulosic Ethanol from Garbage

In September, Enerkem [announced](#) it is the first commercial-scale plant in the world to produce cellulosic ethanol made from non-recyclable, non-compostable mixed municipal solid waste. It did this at its state-of-the-art facility in Edmonton, Canada. Enerkem has released a [new video](#) describing how they can reduce garbage volumes by 90%. Eight years ago, Enerkem said it would build a state-of-the-art facility in Pontotoc, MS and convert municipal solid waste from Three Rivers Solid Waste Management Authority into ethanol. At the time, they were awarded a \$50 million grant from DOE to be applied to the project. Efforts to reach Enerkem regarding future plans for the Pontotoc site were unsuccessful.

Millsaps College Partners with German Consulate on Climate Change Discussion

Millsaps College is partnering with the Atlanta-based German Consulate and the Ecologic Institute US to host a one-day conference entitled “Global Climate Action: Sustainable investment in Germany and the United States” on Thursday, November 2. The conference will begin at 9:30 am. Conference speakers include representatives of the Federal Republic of Germany’s Atlanta Consulate, Tennessee Valley Authority and Entergy Corp; and senior executives from Continental, Siemens USA, and Feuer Powertrain. More information and the registration page can be found [here](#). The event is free, but please [register](#) for an accurate lunch count.

Mississippi Energy Coordinators Association Conference Moved to January

2017 MECA Fall Conference in Tupelo had to be postponed due to multiple circumstances. However, the event has been rescheduled for Wednesday, January 24 to Friday, January 26, 2018. The new agenda and registration information will be announced soon at <http://msenergycoordinators.org/>. The event will be held at Itawamba CC Belden Center near Tupelo.

Kemper Update

At the MPSC regular meeting on September 12, the Commission went into executive session to further discuss the status of the Kemper rate settlement and issues negotiations. The MPSC then unanimously

decided to start the hearing process that could decide the fate of the plant by January 2018. A [Scheduling Order](#) outlining a series of filing dates for the parties to submit testimonies and evidence for their cases was issued. The process will allow commissioners to ask questions, witnesses to testify, and cross examination to occur so commissioners will have factual evidence for the terms that the company and Public Utilities Staff have proposed. Hearings on this matter shall be held before the Commission beginning at 9:00 a.m. on December 4, 2017.

At the MPSC Regular meeting on October 5, the Commission ruled on the Public Utilities Staff's [Motion to Modify Testimony Deadlines in the Scheduling Order](#). The MPSC agreed to extend the deadline to file direct testimony to October 23 and the deadline to file rebuttal testimony to November 6. The MPSC retained the hearing date of December 4, 2017. The Commission anticipates issuing a Final Order on or before its January 2018 meeting.

The MPSC also took up MS Power's [Motion to Reconsider the Commission's Hearing and Scheduling Order](#) on the grounds that the Public Utilities Staff is not an "indispensable party" to a settlement agreement. In a lengthy Order, the Commission denied MS Power's Motion.

The [June 2017 Independent Monitor Report](#) is now online for review.

Regional Issues

More Virginians Go Solar

Due to rising electricity costs, falling solar equipment costs, increased consumer awareness and the 30% federal investment tax credit, over 3,000 homes in Virginia have installed solar, according to the Solar Energy Industries Association. There has been a 55 percent price decline in solar equipment over the past five years. However, installations are not uniform across Virginia as some utilities hit solar owners with service fees and stand-by charges that negates the savings from solar.

Entergy Arkansas Announces New Major Solar Project

Entergy Arkansas [filed documents](#) with the Arkansas Public Service Commission on Oct. 17 seeking approval for a 100-megawatt (MW) project called [Chicot Solar](#) to be built near Lake Village, AR. The solar farm will create enough to power about 17,000 homes and will flow onto Entergy's grid through a 20-year power purchase agreement. Entergy AR, in partnership with NextEra Energy Solutions of Florida, is currently in the final stages of completing an [81-MW solar farm near Stuttgart](#).

AAEA's 6th Annual Meeting & Policy Conference

The Arkansas Advanced Energy Association had its [annual policy conference](#) on Oct. 10. Featured speakers included representatives from the Southwest Power Pool, MISO, Silicon Ranch Solar, and Chairman of the AR Public Service Commission. The more than 150 industry stakeholders deliberated on topics including the integration of renewable energy resources and opportunities for advanced energy technologies amidst a changing energy ecosystem.

Atlanta Falcons New Stadium goes Solar

Georgia Power [has installed](#) more than 4,000 solar panels at the new Mercedes-Benz Stadium for the Atlanta Falcons football team. The solar project is expected to generate approximately 1.6 million kWh of electricity in the first year of operation. The stadium will utilize the Renewable Energy Credits (REC) produced by the solar installations in the project's pursuit of LEED Platinum certification.

Helping Renters and Multifamily Housing go Solar

New apartments, condominiums and mixed-use residential/commercial developments are on the rise in most U.S. cities in response to population growth and economic development. While residential solar installations on single family homes have soared, most multifamily dwellers are still unable to access solar. IREC has published a [report](#) focused on the Seattle market, but the guide principles can be applied across many jurisdictions.

Georgia Power Introduces New Community Solar Program

The new program will launch in January 2018 but is now open for pre-enrollment at GeorgiaPower.com/CommunitySolar. Community Solar is ideal for residential customers who are unable to install a photovoltaic (PV) system at their homes, including renters, multifamily dwellers, and condominium owners. However, the program [comes at a steep price](#) and some say GA Power is cashing in on consumer interest in solar while setting other barriers to individual solar ownership.

Forest “Fast Break” Videos Examine Forestry Topics

The newest 2-minute Forest Fast Break video addresses the renewable nature of forest resources. Topics also cover green building products, sustainability, carbon capture and more. The videos are made possible with support from state, regional and national forest agencies and organizations. See the latest at [YouTube](#) or the whole list at Forestinfo.org.



National Issues

DOE Proposes Flawed Cost Recovery Scheme for Baseload Generators

DOE announced a [new proposed rulemaking directing the Federal Energy Regulatory Commission](#) to boost compensation for coal and nuclear generators that hold 90 days of fuel supply onsite. If enacted, the new rules could provide a controversial lifeline for aging generators under competitive pressure from cheap natural gas and renewable power in the nation's wholesale power markets. However, multiple energy sectors (solar, wind, oil, natural gas, industrial energy consumers, RTOs/ISOs, etc.) have [come out against](#) the proposal. FERC [fast-tracked](#) the public input phase with comments closing on October 23. A slide deck presentation on the report is available [here](#). The **Mississippi Public Service Commission** and the Louisiana Public Service Commission [filed joint comments](#) in response to the proposed rulemaking. The **MPSC** and **LPSC** concluded that the proposed grid resiliency pricing rule is unjust and unreasonable and it should not be adopted.

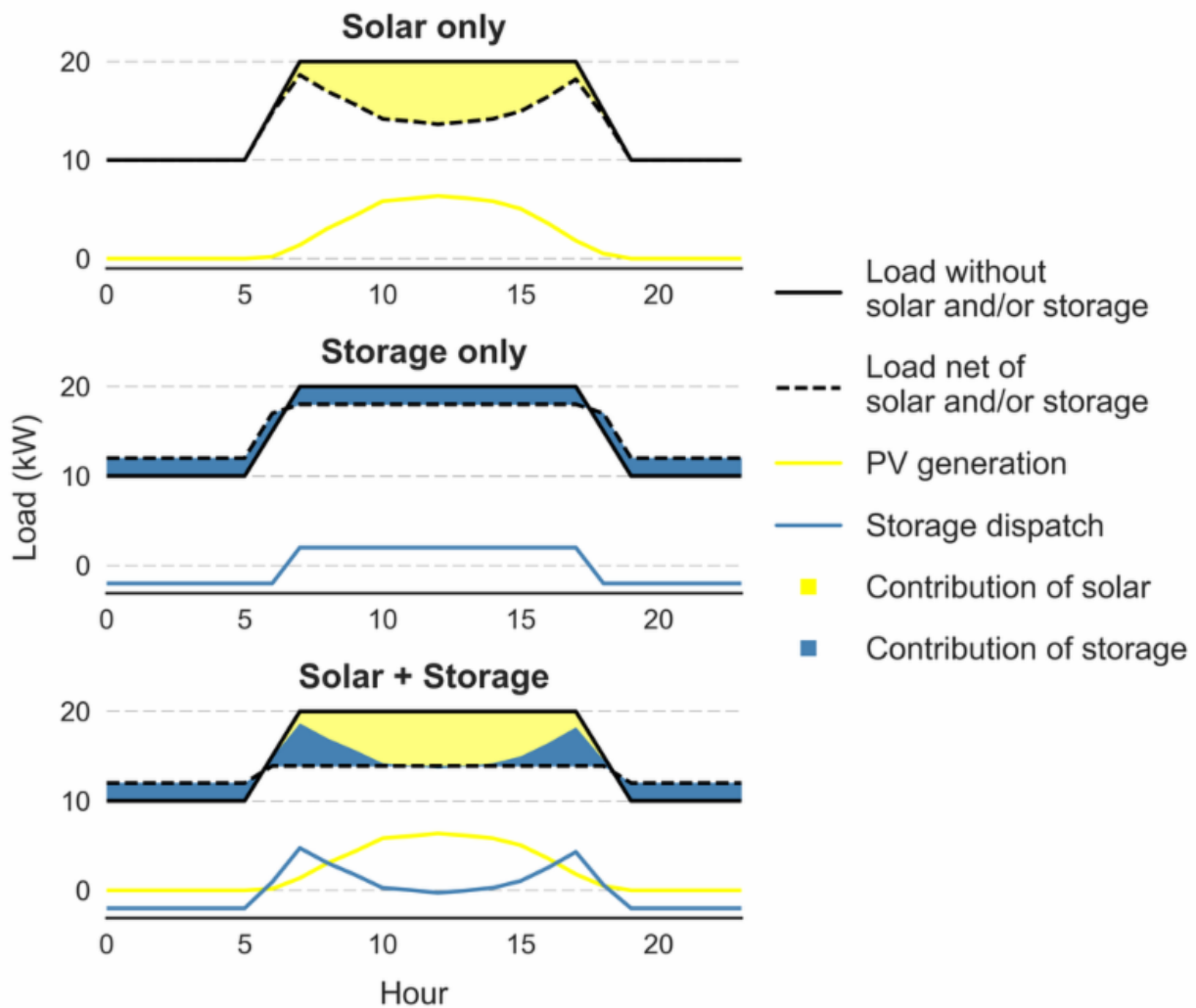
Under Pressure, EPA Backs off Changes to the Renewable Fuel Standard

In a major win for biofuel advocates, EPA Administrator Scott Pruitt released [a letter](#) confirming that his agency would not grant a petition that would move the RFS “point of obligation” from refiners and

importers to blenders. His letter also confirmed that EPA would meet the Nov. 30th statutory deadline for issuing 2018 Renewable Volume Obligations (RVOs) and that their preliminary analysis suggests that the final RVOs should be set at amounts that are equal to or greater than the levels proposed back in July. He went on to confirm that EPA will not pursue regulations to modify the treatment of Renewable Identification Numbers (RINs) associated with ethanol exports, and that he was open to working with Congress to clarify the agency’s authority to issue a nationwide Reid Vapor Pressure (RVP) waiver for E15 blended fuels. Pressure from Senators, Representatives, Governors and many others caused the Administration to act.

Solar + Storage to Manage Commercial Demand Charges

Demand charges, which are based on a customer's maximum demand in kilowatts (kW), are a common element of electricity rate structures for commercial customers. A new report, [Solar + Storage Synergies for Managing Commercial-Customer Demand Charges](#), estimates demand charge savings from solar and battery storage systems co-deployed in commercial buildings. Savings potential is customer-specific.



EESI Releases Biogas Fact Sheet

The United States produces more than 70 million tons of organic waste each year. Biogas systems turn the cost of waste management into a revenue opportunity for America's farms, dairies, and industries. If the U.S. intends to diversify its fuel supply and reduce emissions, it should strongly consider the many benefits of biogas. See the [Fact Sheet](#) or download it in [pdf format](#).

NRDC's Fifth Annual Energy Report Released

Action by local and state governments and corporate interests, and the economics of renewable energy, are driving clean energy use. [America's Clean Energy Revolution](#) highlights the record growth in solar, the first offshore wind farm and increased investments in energy efficiency.

From the Toilet to Your Tank: Turning Waste into Energy

Last night's dinner could be tomorrow's liquid fuel. Yes, the technology to turn ordinary human waste into biogas and biocrude oil is here, thanks to developments at DOE's Pacific Northwest National Laboratory. Watch their [videos](#) on waste-to-energy resources and their [blog](#) to learn more.

International Issues

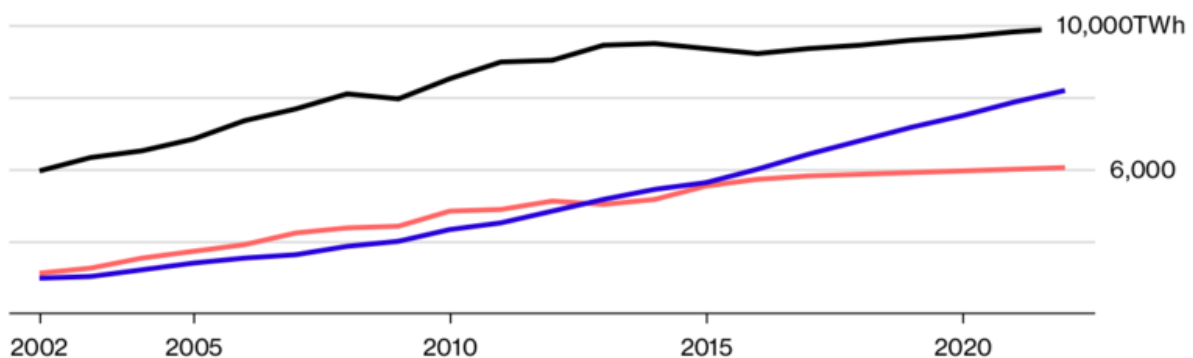
Renewable Energy Capacity and Investments Growing Around the World

2016 was a record year for renewable energy – globally. Net renewable energy capacity - including hydropower, solar, wind, bioenergy, wave and tidal - grew by 165 gigawatts (GW), 6% more than in 2015. Furthermore, solar grew faster than any other fuel source – including net growth in coal.

Renewables Gaining

Clean energy generation is forecast to keep rising

■ Coal ■ Natural gas ■ Renewables



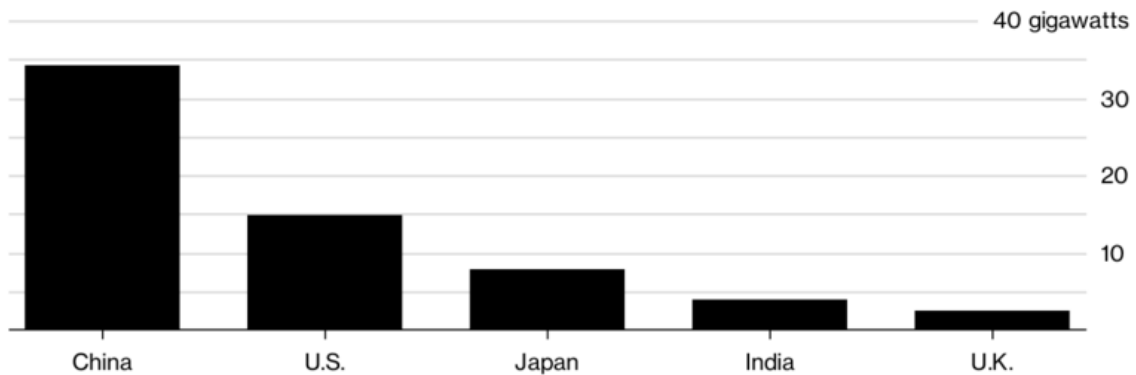
Note: TWh = terawatt-hours
Source: International Energy Agency

Bloomberg

What is also interesting to note is that almost half of new solar PV generation facilities were built in China.

Sunny in China

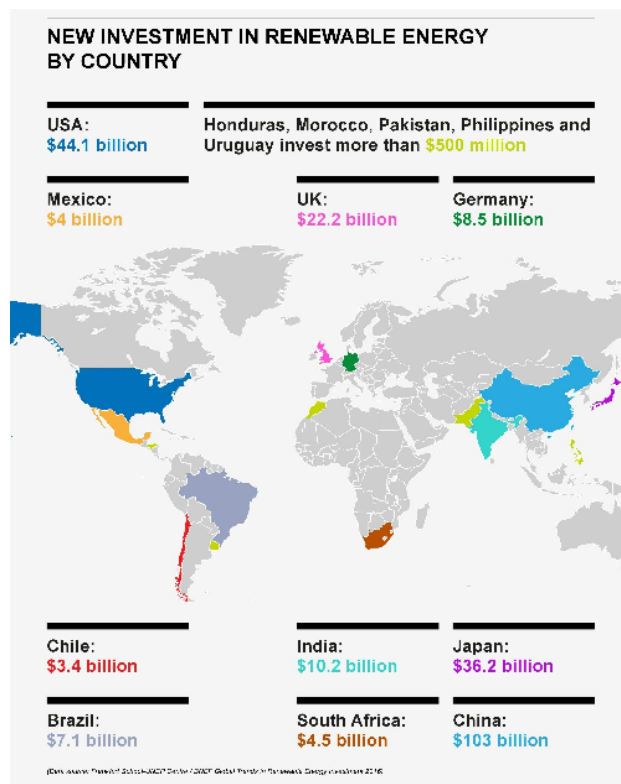
China installed so much solar in 2016 that it made up close to half of the global market



Source: International Energy Agency

Bloomberg

The U.S., India and China are projected to make up two-thirds of the clean-energy expansion worldwide. Despite the administration's push to bolster coal and nuclear in the power market, the U.S. is expected to be the second-largest market for renewables.



Looking ahead, solar power could soon overcome nuclear power for global gigawatt capacity. Data from [Global Solar Demand Monitor](#), indicates that solar power will reach a capacity of roughly 390 gigawatts at the end of 2017. Meanwhile, the latest figures from the [Nuclear Energy Institute](#) suggest that the world is currently home to 391.5 gigawatts of nuclear plants. Capacity is just one piece of the puzzle, however. Nuclear energy is still well ahead of solar in terms of electricity generated, outputting 2,476,671 gigawatt-hours compared to solar's 375,000. But falling costs, increasing convenience and energy storage cost-effectiveness is leading the IEA to predict that solar will become the world's largest energy resource by 2050.