



AABE Energy Hackathon Summary Statements

1. Using Technology to Effect Emergency Preparation and Recovery

Not unlike the experiences of small business owners, residential consumers face significant challenges in the aftermath of weather disasters that significantly damage or destroy safe access to energy. Low income consumers with no continuity plans or limited access to financial resource are particularly vulnerable.

Customers who have no alternative but to leave their homes in the face of disaster or who are unable to leave in an emergency situation, face hardships others with greater resources and adequate insurance do not. This inequity eliminates their opportunity to upgrade their homes and in some cases to rebuild the homes they may have lost.

2. Energy and Transportation ... E-Mobility

How to prepare for transportation 2020

How to best reach and motivate AA around transportation issues such as movement of mass transit, new Transportation infrastructure or transportation PODS (Atlanta) .

New initiatives between unlikely partners like BP teaming up with Nestle to develop a new biofuel source is materializing faster than imagined.

Best practices by agencies such as NJTPA are building plans to service the needs of future communities while being energy efficient. Transportation summits like Plug In America in Philla are examples of future planning.

Industry is recognizing the necessity to work on a VE and its infrastructure.

How to address equity, diversity and inclusion in transportation.

3. Innovations in Customer Service Engagements

With the energy companies focus on meeting customer needs, there is more opportunity to engage customers in additional services. Companies have to developing innovative ways to engage with customers.

What are the policies that offer greater engagements for customers. What is the affect of current practices that become barriers for low income customers. And in the age of big data how does this engagement happen without in being "Big Brother".



4. Workforce Integration ... How to eclipse barriers to entry for jobs in the energy business

With the changing demographics of the country, companies are trying to identify the right solutions so that their workforces reflect their customer base. However, there are barriers to entry which makes it difficult for all communities to participate in the industry. One such barrier are standardized tests. Workforce programs have to become inclusive enough to have a greater impact on hiring practices.

5. Energy Storage for Urban Communities...Without using Batteries

Energy storage is the big game changer. How to get out front with the right first step applications. What are those applications and how to accelerate acceptance. How can energy storage be integrated in urban communities?

6. Using Data To Improve Residential User Impact On Building Performance

The age of information and big data and the "Internet of Things" (IoT) and smart devices. More homeowners are purchasing web-connected household appliances and systems that produce a lot of data about energy use, maintenance alerts, and service needs. The effective use of these data to motivate energy savings actions by homeowners remains a challenge.

There are issues in knowing what is the right data to use and for what purpose. What information would make homeowners take action.

7. Improving Access to Energy Efficiency Programs for Low Income Communities

Many of us don't spend much time thinking about how energy efficiency helps ensure our appliances aren't wasting energy.

Modern technology ensures we usually don't have to think about these things. However, many families feel the pinch once the monthly utility bills arrive, and one in five households reduce or forego other necessities such as food and medicine to afford those energy payments.

Left unchecked, rising energy costs can compromise the quality and long-term of rental homes for low-income families and can even lead to health risks for these families. For years, many energy efficiency programs have been geared toward commercial, government and institutional buildings, and to single-family homes. These programs have often excluded residents in multifamily housing, where at least two in three low income people resides.

8. Using Block Chain Technology for Energy Transactions

The emergence of distributed ledgers has caused excitement in the utility sector as energy suppliers consider how to best utilize this transactive solution. In fact, more than 110 potential



use cases has been identified for this technology. Blockchain is emerging as the next big thing in energy markets, where the technology can help reduce energy transaction costs and facilitate trading, but areas of regulatory friction and other challenges must be smoothed out first, experts say.

An experimental energy microgrid in Brooklyn, New York, shows how energy-generating homes can become part of a peer-to-peer electricity system, *Fast Coexist reports*. The project, part of the [Brooklyn Microgrid](#) – a distributed energy development group in the Park Slope and Gowanus communities of Brooklyn, creating a connected network for local energy – also shows how distributed ledger technology could enable the emerging "energy Internet."

9. How to make Solar Accessible to Urban Communities

How do you engage and communicate to low income consumers to educate them about energy efficiency.

What role does solar play in the solutions. Do consumers know who to get solar from or whether they should buy or lease solar.

10. Achieving Energy Efficiency Through Shared Energy Technology

How to use technology to revise potential product distribution PODS that allow sharing of current energy initiatives