

## NEW PRODUCTS AND SERVICES

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Community Energy Workshop participants shared a wide range of ideas related to products and services they believe MGE should provide or make available to its customers. The range of suggestions includes the development of new technologies like energy web applications or "apps" to the development of new electric vehicle and battery storage product lines. The suggestions centered around providing greater customer energy control and more access to energy use information.

Ideas for using new technology for energy were extensive and included such suggestions as:

- Expansion of Nest thermostats.
- Expanded placement of charging stations for electric cars.
- The addition of new technologies in public transit.
- Using fitness equipment and events to generate energy.

Regardless of the new product and/or service introduced, participants were resolute about the importance of ensuring accessible technology for all customer populations and demographics.

A smaller – but noteworthy – number of comments were generated regarding what impact new products and services would have on energy infrastructure. Participants advised that the impact of future technologies be considered in discussions regarding new energy sources.

### Technologies for Sustainability

The vast majority of comments related to new products and services focused on smart technologies that support conservation and sustainability. An emphasis was placed on researching and developing products and services that allow customers to track and monitor their own usage via phone and/or other personal technologies. There was also interest expressed in having access to renewable energy sources. And, several suggested higher efficiency home appliances when asked to consider what kinds of new products or services they would like to see.

- *"Managing peak demand: services that can reach the individuals for this information. What is MGE's current status? Apps and websites to display this. Control by MGE is also an option to optimum demand. Self-management tools. Electrical usage timers and combine accessories into one control."*
- *"Smart appliances so you know how much energy is being consumed by them."*
- *"What's cool about Nest [thermostats] is its ability to learn. Smart tech[nology]. Take habits and link it or auto disconnect circuits."*
- *"People need a reason to care about energy consumption. Develop new technologies and incentives around that."*
- *"For me, challenge is that my programmable thermostat isn't 'smart' enough – why can't I control this from my phone?"*
- *"Home battery system similar to Tesla systems ought to be an option for some homes so they can store energy that is generated by renewable sources."*

### Future Planning

Participants placed importance on thinking clearly and strategically about the ramifications of the ever-evolving use and capacity of technology. Advice was offered regarding the need to carefully consider implementation of new technologies so as to avoid causing more problems than can be solved with the technology – cautioning that new technology be accessible and equitable in its application. While most embraced the need to add new products and services that support the community's energy goals, there was an acknowledgement that relying on and planning for future technologies can create challenges and suggested that be considered when looking to the future.

- *"Help businesses understand that profitability and sustainability are not mutually exclusive. Education for new technologies. Tech enhancements, modeled by MGE."*
- *"Technological advancements can help MGE and other companies correct errors faster."*
- *"Sharing the perspective of biotech startup company: cost, affect on community, preparing for industry as it changes."*

### Energy Storage and Management Products

The idea of creating storage options for energy with home batteries or similar products was of interest and discussion when thinking about new technology. Discussions centered on what products already existed in this area and what role MGE might play in this market area. Additional references were made to examples with which participants were familiar and could relate.

To many in this discussion, the energy storage and management option was a way of giving customers more control over their energy usage and tracking.

- *"MGE could get in the home battery market."*
- *"Are there energy storage options to consume energy in off-peak hours for bigger users? Creating batteries to power services."*
- *"Experiment with models where they can make money where instead of expanding grid, expanding storage. MGE providing batteries or infrastructure. MGE gets cut. Focus MGE profit off building system that is more flexible and giving customers more control of where they get their energy."*
- *"Must look at developing a MGE business model that would allow them to make their own products to store and distribute energy."*
- *"Give people control over how they get their energy; generating, solar, wind; storage the excess. Keep energy for your use. MGE can be a part of that system. New model. How can we be on front end of that? Change in distribution? Tesla sell[s] residential battery systems. It's possible."*

### Investment in New Products and Services

Many of the comments related to new products and services focused on how MGE could go about investing in the technologies and infrastructures to support future energy goals. Several participants mentioned the need to invest carefully and recognized the balance the company and community must manage as new technologies are introduced.

Others referenced the value of developing and investing in technologies that solve more than one problem at a time creating multiple benefits including access, equity and affordability, along with different types of energy sources. It was also suggested that MGE push harder on the new technology investment to be better prepared for the future changes in technology.

- *"Pace of change and level of uncertainty and financial pressures are at highest ever. MGE must provide energy to us all in the most economically and sustainable way possible. Can't do just one and not the other. Explore new options as they arise and don't place all bets on one modality."*
- *"Also have to invest in new technologies. Don't want to end up behind, instead need to try and lead. Have businesses and incubators share costs for collective projects. Renewable energy projects are complex so MGE could play an important role."*
- *"We talk a lot about today's technology. How much does MGE invest in technologies that we have not heard of, and how do you make sure that the new technology and energy is reliable?"*
- *"MGE should be on forefront of new technologies. Increase research and development of new tech besides just utilizing it as it becomes available."*
- *"Put more funding into moving forward, technology will save us if we let it."*

## Transportation

Participants identified a need for MGE to invest in infrastructure to support the use of electric vehicles and to explore more ways of including transportation issues in the conversations about energy efficiency and conservation. Charging stations, electric vehicles and partnering with the City of Madison were just a few ideas that participants suggested MGE consider.

- *"MGE could work with cities on their transportations issues, such as electric buses. More electric cars and charging places could be initiated by MGE. Subdivisions should now have houses with plugs for cars."*
- *"Charging stations, we need way more here to make electric vehicles useful."*
- *"Electric vehicles have lots of controversy. Battery life, extra cost on front end. More show off than actual conservation."*
- *"Start pressing with the transportation system – bring in electrified rail or bus services to decrease car use. Providing alternatives to car use is a real service they could provide leadership on!"*
- *"Buses should be electric. They would be easy to charge because they have the same route. We should have an electric rail/train/transit so there's less cars."*