CraftStrom Technical Assistance Request

Request 1 – Smart Meter Data

Our solution is based not only on hardware development, but more crucially on the software component. Our automated battery App uses individual user's production and storage data, combines it with usage data form either smart meters or IoT devies, as well as power contract prices and optimizes the household's energy bill. We have started work with Texas Smart Meters and can now access Texan users' smart meter data in our App. Not all States, however, make it this easy to gain access to consumption data with users' permission. We, therefore, need to keep working closely with AHJs in all States.

Request 2 – Iot Metering And Control

Smart meters will provide us with accurate, daily total power usage data. However, in cases of high load appliances, it will be beneficial to understand required loads for certain appliances and usage schedules from the user, in order to offer better services.
Hence, we would appreciate contact to
- o IoT device OEMs for
    - Small, outlet-metering devices
    - Smart appliances, such as Wifi-enabled washing machines, ovens, etc.
    - Adoption rates of IoT devices, to better understand in which fields users are most likely to adapt smart devices and power regulation.

Request 3 – Regulatory Information and Help

Our technology is currently not regulated on a federal level and regulatory issues are always present. We are in contact with some public utility commissions, grid owners and utilities, but will need all the help we can get to make contact in all States. We have found that direct contact, especially during Corona times, was very difficult to establish. It typically takes us weeks for simple discussions and some AHJs simply do not reach to emails and do not answer their phone lines.

Request 5 - Logistics

Logistics of batteries in our size is a challenge. Typically, it requires hazardous goods transportation, which is very costly. Gaining access to a reputable logistics company with an established network might help us reduce those prices and devise a solution that will allow for the safe transportation of larger batteries. It has come to our attention that DHL is cooperating with one startup to provide safe logistics.

Request 6 – Production in the USA

We have not been able to find a manufacturer of semi flexible solar panels that could aid us in the USA with our own designs, hence we are still manufacturing in China. We are in contact with one very reputable company, Merlin Solar, and are in discussions, if production of our design is economically viable under a partnership. Production in China is neither cost effective, nor are the long delivery times working to our advantage. However, setting up a manufacturing workshop in the US is simple enough, as we understand the basic process and the machines used. However, we desperately need help in formalizing the production process and introducing automation for quality assurance in part of the process, as the entire process is still done by hand.

Request 7 – Battery Cell Recycling Process

An essential part of providing renewable tech is also ensuring to customers that their efforts are not in vein, by causing more pollution. It is in our interest, from a personal and professional viewpoint, that we can offer customers to exchange battery cells with recycled ones and still be profitable. Any help in understanding how the recycling process works, the costs and recycling efficiency rates would already be of help.