Toussaint LLC, is developing a thermal management system to enable high efficiency solar cells in every environment. To this end, we have created and tested functioning subsystems for our: liquid cooling, control systems, and thermal management substrate using commercial, off-the shelf or bespoke products. Furthermore, we plan to test a low level integrated product by the end of calendar year 2020. That being said, we would request technical assistance to help us get to the end of the product development cycle and the testing & certification processes.

The partnering agencies we have chosen were selected based on location, practicality, ability to certify, and the capital requirements (labs & subject matter experts). For location and practicality, we have begun contacting the University of Central Florida (has a dynamic and diverse group of scientist and engineers with an equally broad set of engineering facilities that will allow us to test and process our materials), Georgia Institute of Technology (because of their exceptional engineering services), and the Florida Solar Energy Center (which is one of the best solar laboratories nationally, with resources to test our system in a representative environment to industry standards). For ability to certify and human capital requirements we plan to contact the Lawrence Berkeley National Laboratory (which has one of the most dynamic thermo-electric material labs in the world), and the Solar PTL (which is another advanced certification body and has access to the most comprehensive set of advanced renewable energy testing and knowledge in the world).

As an initial step, we plan to contact all of the subject matter experts from the University of Central Florida, the Florida Solar Energy Center, the National Renewables Energy Laboratory, the Georgia Institute of Technology, and the Lawrence Berkeley National Laboratory to plan timelines and figure out iterative testing that will maintain consistency with the milestones for the Set! And Go! events. From this, we should be able to get a clear understanding of our forward plan and available resources.

For product development, we plan to implement a multi-pronged approach to maintain our timelines for the Set!. For the cooling systems integration and optimizing our solar panel selection, we plan to use Toussaint's engineering team to build, test and iterate our current cooling systems to accommodate a healthy design spiral. We plan to utilize Toussaint's scientific team to investigate better thermoelectric substrates at the local laboratories affiliated with the University of Central Florida and the Florida Solar Energy Center using their Raman Spectroscopy and substrate processing tools.

Once our product begins to become finalized, we plan to reach out again to the National Renewable Energy Laboratory and the University of California-Berkeley to help refine manufacturing procedures, conduct life cycle / exotic testing, and perform certification on our solar panel systems. We plan to then use this to scale our subsystems into a 4 kW set for the Go! Demo day.

Ultimately, we are hoping that by the completion of the Set! And Go! Milestones, we will achieve TRL 6 and MRL 8 , moving toward full scale mass production of our products, assuming we are able to be certified in time. To this end, we are still looking for investors, manufacturing partners, and business mentors to help us clarify some of the business, legal, and commercialization aspects of our business.

As far as additional assistance, Toussaint LLC would be looking for partners in the following areas:

- Thermoelectric Material Production
    - A Foundry to produce semiconductor material
    - Testing and certification
- Solar Equipment Manufacture
    - Solar manufacturing equipment and techniques
    - Testing and certification
- Factory Setup and Logistics
    - Scalability
    - Safety
    - Distribution
    - Equipment