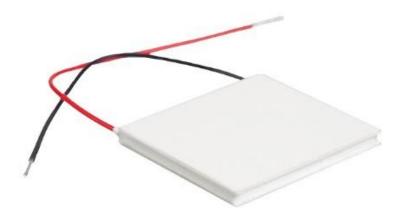


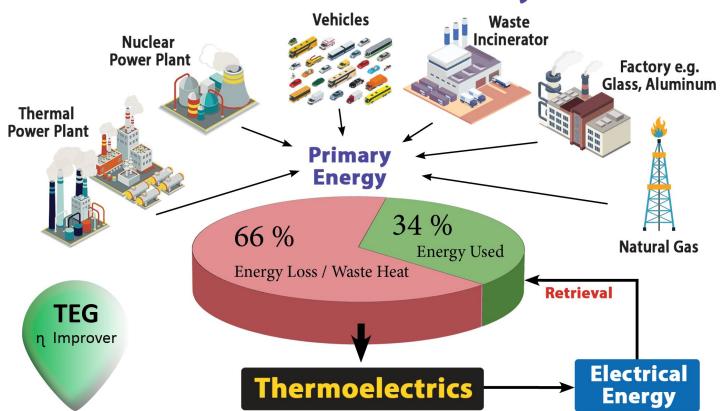
(Thermoelectic Generators (TEG) applications)



## Problem/Opportunity

- TEG App
- Conservation of the wasted heat energy
- Electricity access for campers or researchers

#### **Waste Heat to Electricity**

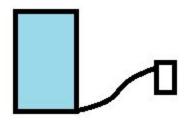


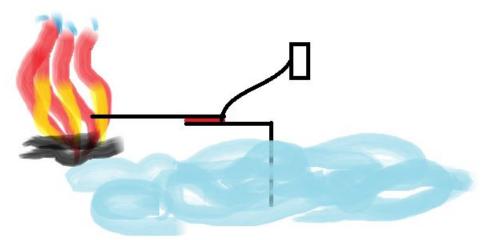
## Current Solution: Campfire phone charging station



1. Water container that charges a phone from the heat of the campfire



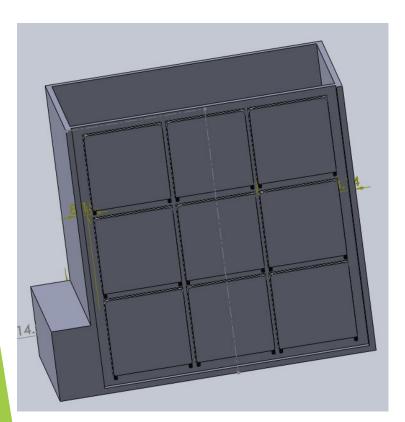


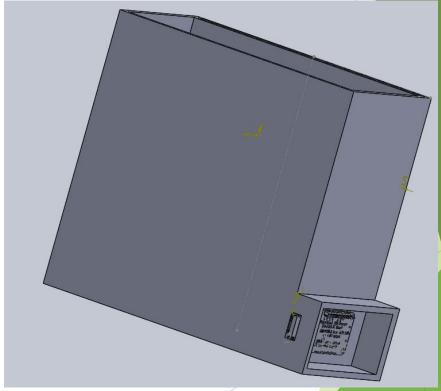


2. A Phone charger made out of metal rods. Applied in between campfire and ground/snow.

# 3D design of the phone charging water container

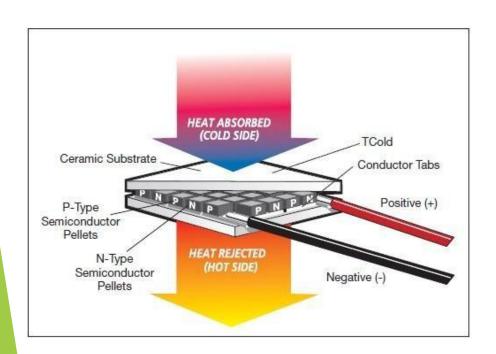


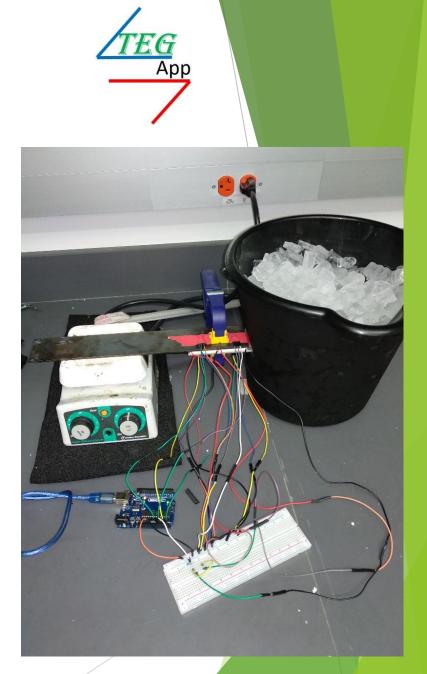




#### How?

- TEGs are devices that produce voltage from the applied temperature difference
- We optimize arrangements of TEGs and materials for specific outputs

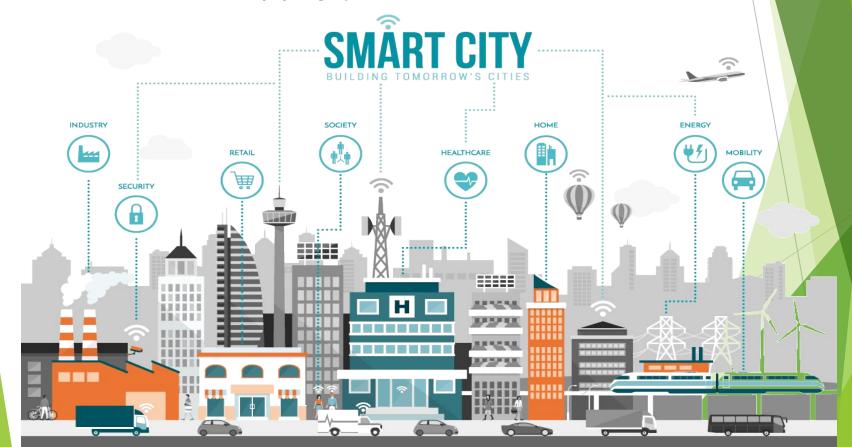




# **Future Development**

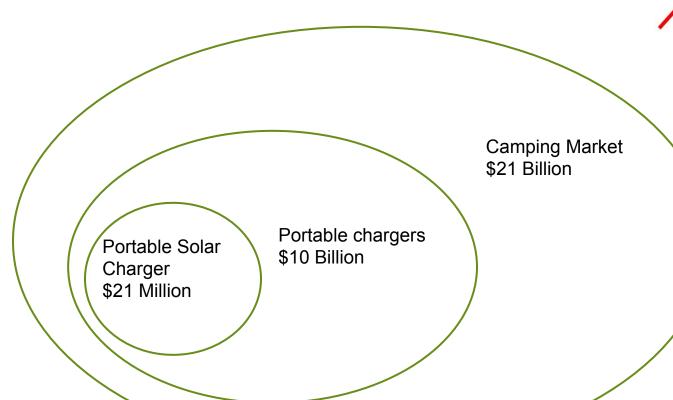
TEG App

- In vehicles -> Electric cars
- At homes -> In kitchen supplies, between water pipes and within the heating system
- Cities -> In the water piping system



# **Market Size - Opportunity**





# **Camping Market**

TEG App

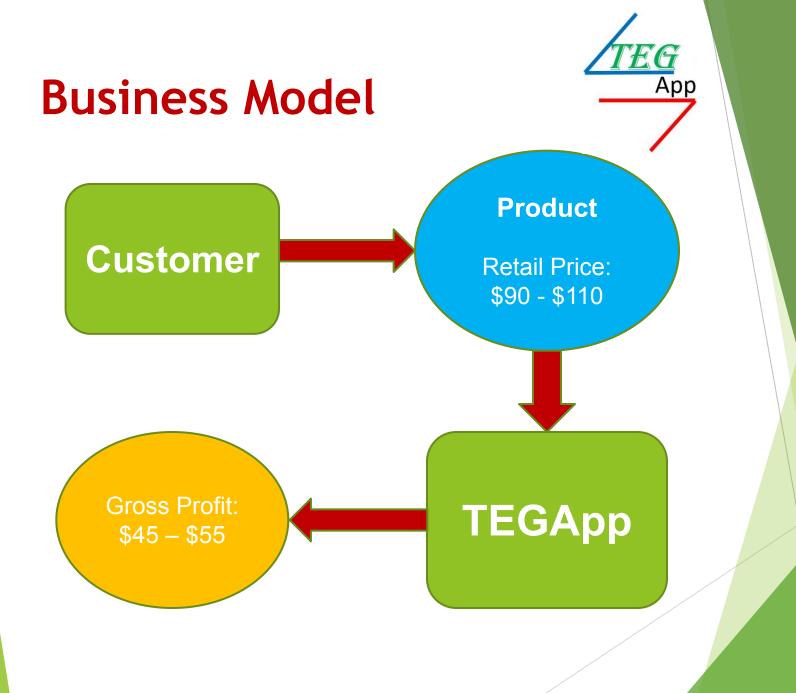
90% of campers use fires

56% of campers were traveling without electrical Hook-Up.

74% of campers used a Smartphone while camping. 53% use it for texting, 47% - GPA Location

Electricity top 3 luxury camping item.
We can provide it!





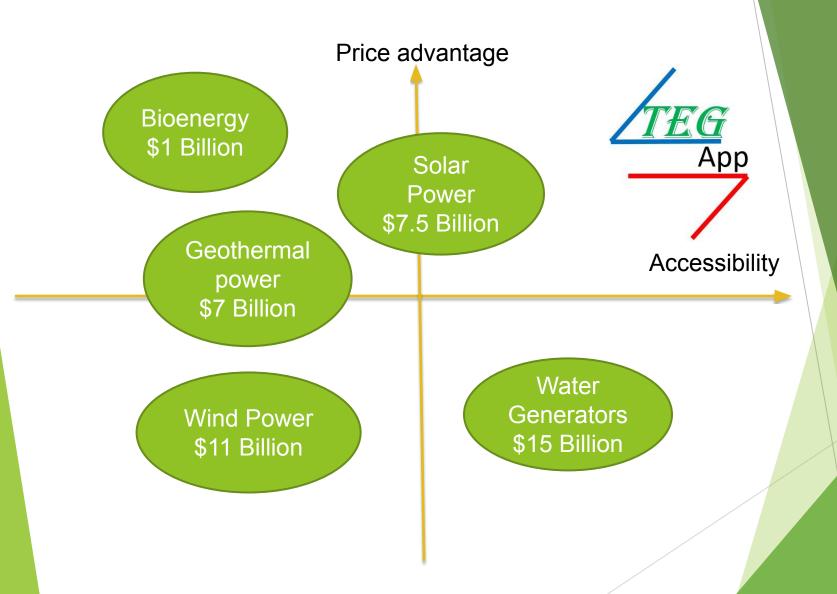
## Why are we special?

TEG App

- First to a market with TEGs application
- We provide a unique and simple technology to charge the phone in the place without electricity access.
- Based in Syracuse and the 5<sup>th</sup> best rising startup city in the world - Riga.
- Multicultural We are targeting America, Russia and Europe.



## **Competitive Advantage**



#### **Meet our Team**





Anastasija Cumika

Le Moyne College '19
Physics major with math minor
Physics Capstone project:
Studying TEG's

Solution and Design Engineer



Dariya Semenkova

University of Economics and Culture '19 Finance Major

Finance Manager, Accounting

### **Milestones**

Fall/Winter 2018

Studying TEGs

#### **Summer 2019**

- Develop the products
- Start Instagram page and website
  - Launch Kickstarter
  - First 30 customers

#### Spring 2019

- Developed ides for application and business model
- Won Dolphin Tank
   1<sup>st</sup> place award
- Work on the first prototype

#### **Fall 2019**

- Develop more solutions based on the market needs
- Expand the market to 100 customers

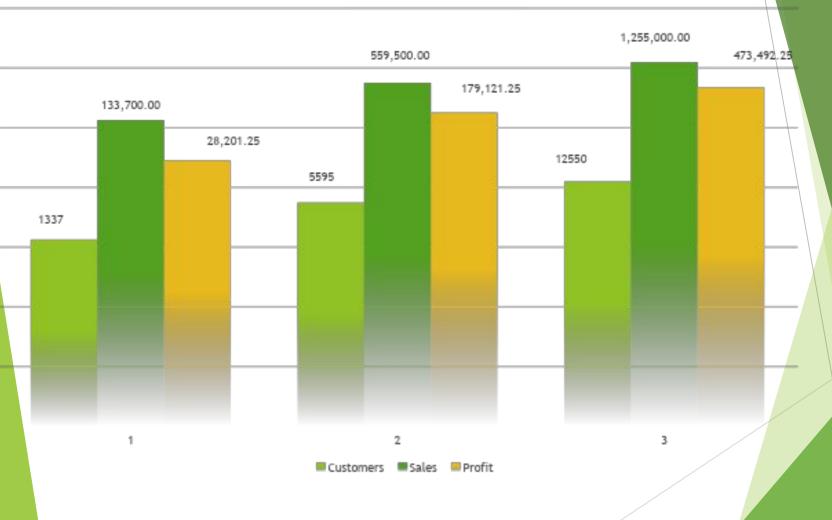


2020-2021

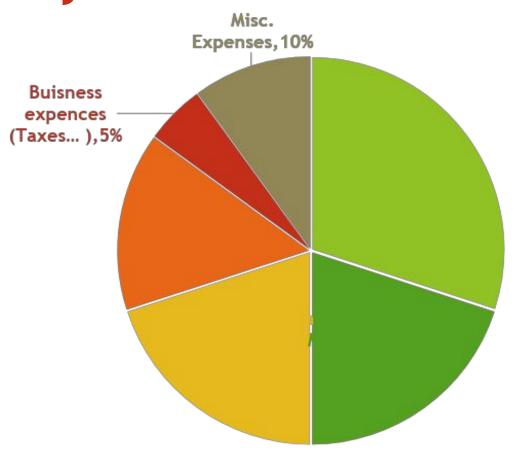
TEG application in houses and cities



#### Finantial Projection



How we use awarded money



App



# Wasted heat into



In Camp

In the cities



At home



