#### Content

Aim
Initially
Sustainable Energy Production
Global Energy Demand
Transport
BASF
Product ideas

#### Aim

- •The world is on the verge to be in deep shit and we need to act and find a solution.
  - •We adress the UN Nations Sustainable development goals.
- •Technology by itself can not save us. We need to change our habits and governments must make it beneficial for all to choose a more eco-friendly life style.

# Initially

- We need to assess which industries with significant contributions to the greenhouse gases, that cannot find a realistic solution in the nearest future.
- We need to assess existing sustainable energy technologies
- Political setting, World bank, Global trade deals.
- BASF ability to meet UN development goals at present and potential to meet them

# Sustainable energy production

- Technologies
  - Nuclear energy
  - Solar energy
  - Wind
  - Biomass
  - Hydropower
- Assess
  - Energy production per m2
  - Balance energy demand and production. Energy storage options.
  - Cost

# Global Energy Demand

- Transport
  - Shipping
  - Aviation
  - Private car
- Lighting
- Heating
  - Cooking
  - Industrial heat
    - Processes that require heat: cloth fabrication, chemical industry

### **BASF**

- Energy demand: Heat, electricity
- Recycling program: UN Goal 12
- Combine education and create divisions/factories in developing countries: UN Goal 9
- Present sources of energy and possible alternatives

# Product Ideas Beyond BASF

#### Consultancy:

- Complete models for governments to act upon, ensuring development goal 7
- Models can conclude ideas for transport, electricity demand, etc
- Technology:
  - Communication system monitoring energy distribution. A supergrid system.
  - Electricity storage by chemical energy
  - Nuclear power supplying energy for trains. That will take the market away from Maersk shipping

## **Transport**

- No solutions for cars, no solutions for ships.
- Solutions for trains. Trains can run on electricity, cars and ships only if storage batteries are involved.
- The global resentment between continents is of no good for sustainable transport if global trade should continue at a sustainable level
- Trains being the best solution require neighbouring continents to become more friendly towards each other. Trumps wall and Europes mediterranian chrisis are obstacles.
- Overseas trains are far from being realised, so improving train connections for trade options between neigboring continents is imperative for finding a solution.

## Nuclear energy

- Which energy demand can we meet
- Can we use nuclear powered trains for transport of goods.
- Where can place the waste until more clean solutions appear.