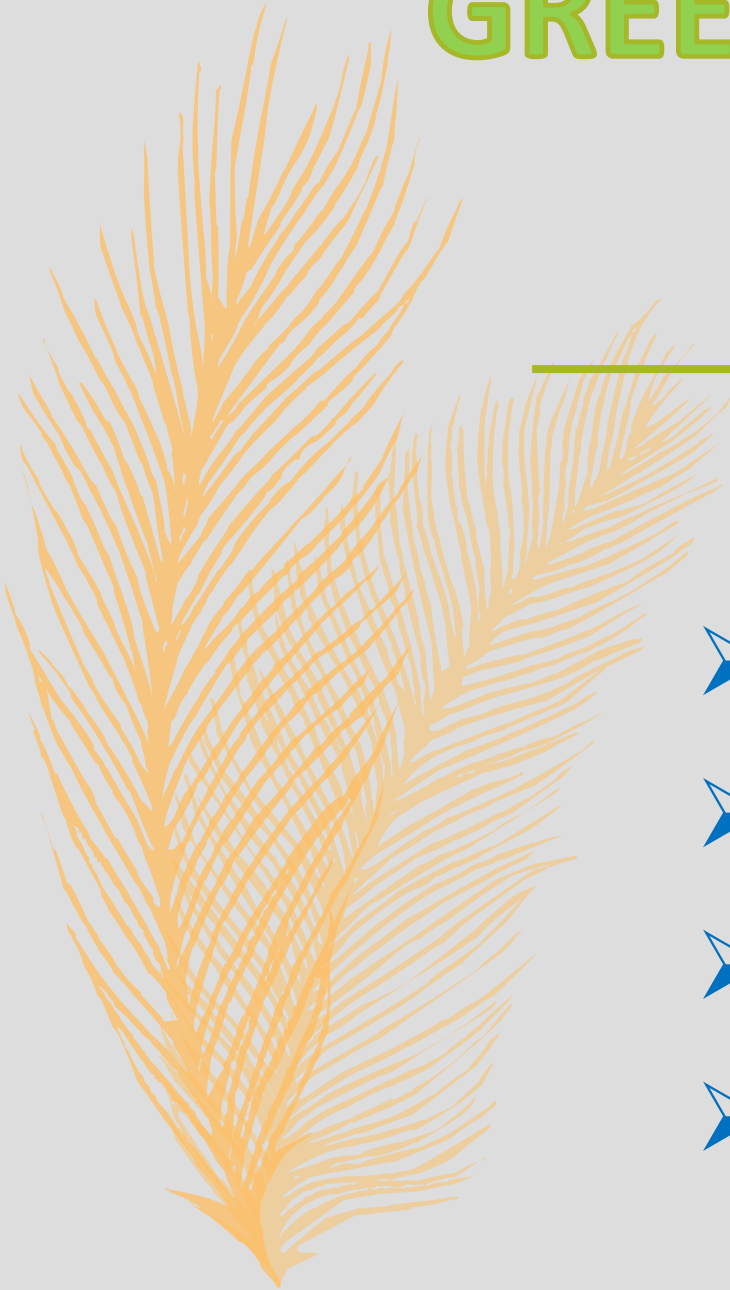# GREEN-A-THON PRESENTATION 2018

Green Dream

GROUP MEMBERS

➢ Devendra Kumar Chaudhary (Leader)

➢ Anjamul Haqe

➢ Nihar Seth

➢ Prasad Bhimraj

PROBLEMS

- Our generation face a critical problem of pollution.
- Transportation System is in Very disastrous condition.
- The source of energy i.e. petrol and diesel, which we use is not suitable for environment.
- The water which we can use are wasted away in the form of polluted water.

Affected Community:

- Due to environment pollution human being and animals gets affected by the various diseases such as lung cancer, heart problem, stress, blood pressure etc.

- Due to disastrous condition of transportation system, it cause the accident.

- After the combustion of fossil fuel there are various poisonous substances releases gradually and it causes the pollution of environment, which is also harmful for the living beings.

How long we are working on this idea and why?

- We are working on this project since last two months but we couldn't get any chance to represent our idea for the future of our nation.

- The conventional source of energy which we use harms our environment at that time we thought about how can we overcome the pollution.

- Regarding to the solution of this problem, we thought about the GBEB project.

About our ideas:

✓ **Our idea is focused towards the re-establishment of new electric buses.**

✓ **We can establish new pipe line track for continuous flow of the current.**

✓ **To resolve the problem of waste water we will use whirlpool technology in our project.**

Brief overview of our ideas

❑ **Intelligent transport system**

**The transport System should be very clear and separate for every vehicle
And controlled by the smart traffic signal...**
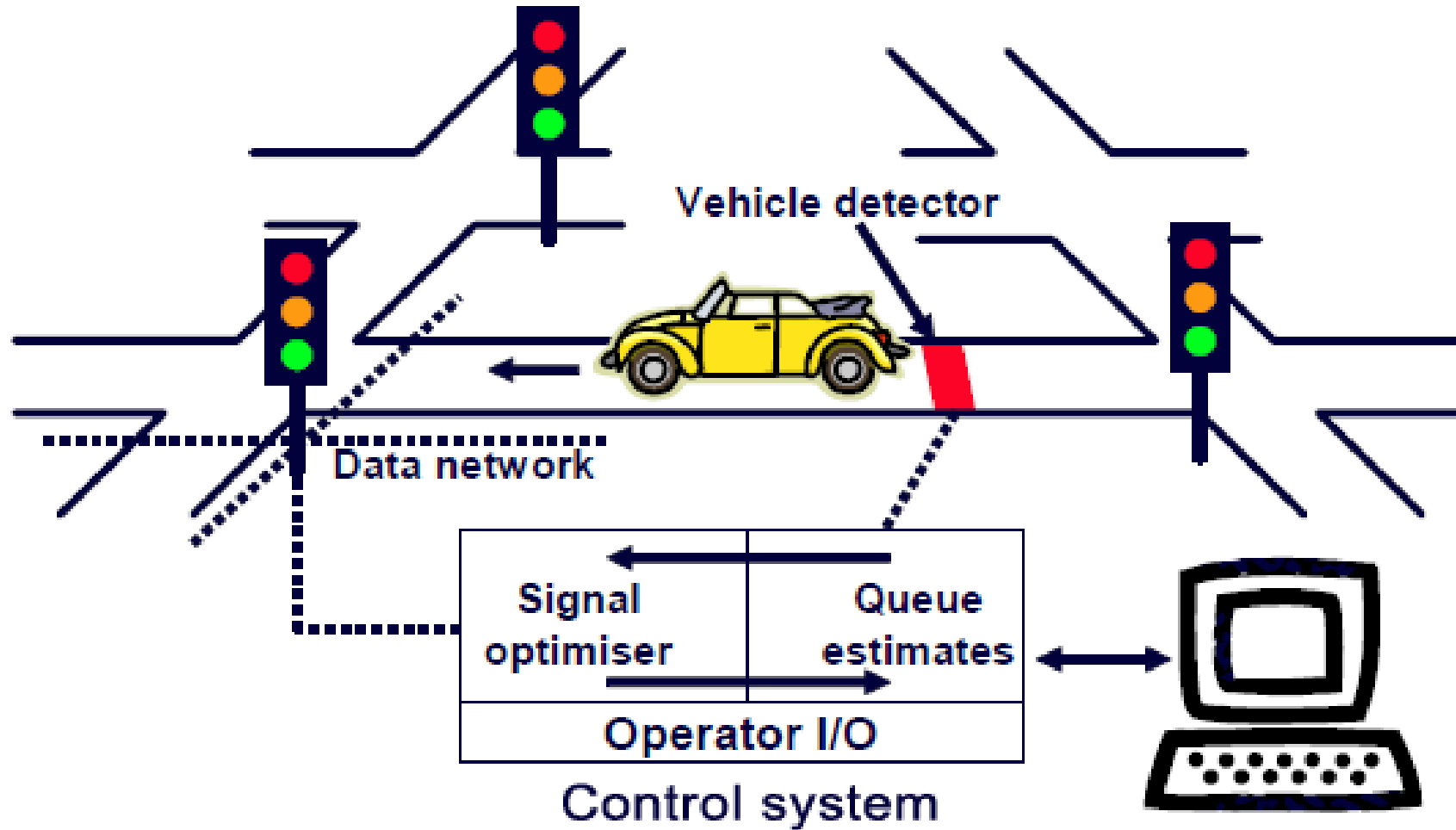
Smart patrolling and monitoring System

The patrolling and monitoring System should be done by the hi-tech cameras

Smart Street Lightening

❖ **Smart street light management resolves issues like power wastage, road accidents and works on sensor detectors. Dims when no activity is detected and brightens when movement is detected.**

Smart Traffic Signal

The smart traffic signal can be solved in smarter way. It will improve with the ACS(Adaptive Control Solution) technology. It is a intelligent transportation solutions and will be done in digitalized way for issue quality of life.

Benefits of Smart Traffic Signals

▶ **22% reduction in travel time.**

▶ **49% reduction in traffic delays.**

▶ **50% reduction in stops along the traffic corridor.**

▶ **Annual benefits to citizens 10 crore 90 lacs 76 thousand rupees.**

Utilization of Wind energy into electric Energy

We can also install the wind mill around the cities which provide reasonable amount of energy for the productivity of the electricity.

Detail of our project GBEB (Ground Base Electric Bus)

1. Concept:-

- **The GBEB (Ground Base Electric Bus) System is made by using the pipe and metallic ball which help to provide the electricity to the bus.**

- **In GBEB the current is flow through by the insulated (from external part) pipe line and a metallic ball is move in the pipe together with the bus.**

- **This bus is required a particular track for running but it is simple from the railway track.**

2. Methods:-

- **We Supply the electricity through the pipe line and the ball knob is connected with appropriate mechanism which allow to pass the electricity at the pole of the tyre.**

- **Now the electricity which is on the pole of the tyre i.e. directly provided on the bus electric engine.**

- **Now when electric engine get electricity then the engine get started and wheels are ready to rotate.**

3.Feasibility:-

- **The GBEB (Ground Base Electric Bus) model is easy to installed in any city.**
- **Easy to available at a fix place on a fixed time.**
- **This is under affordable price for each and every people.**
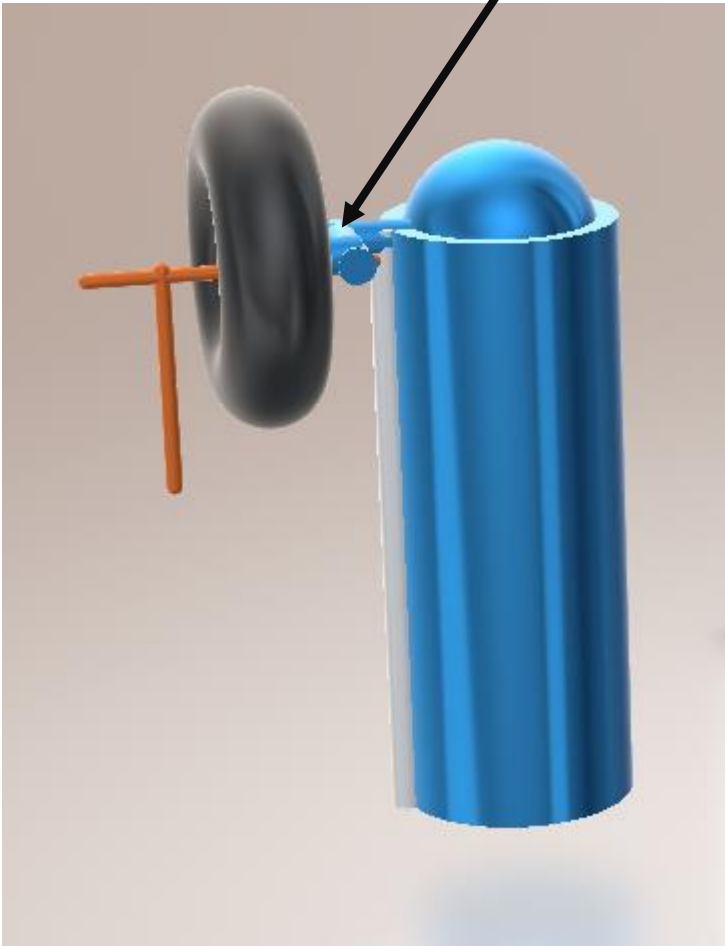- **Less time consuming transport system.**

Implementation of Ground Base Electric Bus
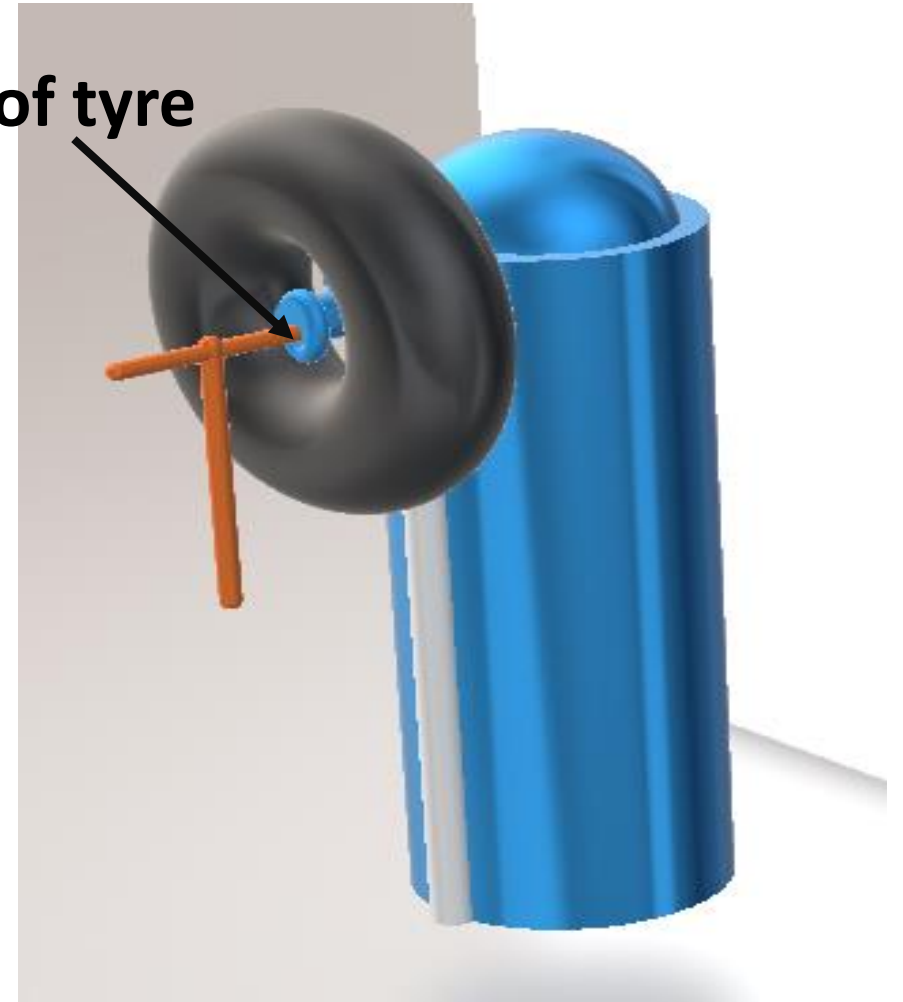
The basic structure of GBEB: Part-1

Insulated pipe

Tyre

Insulated electric wire

Movable ball
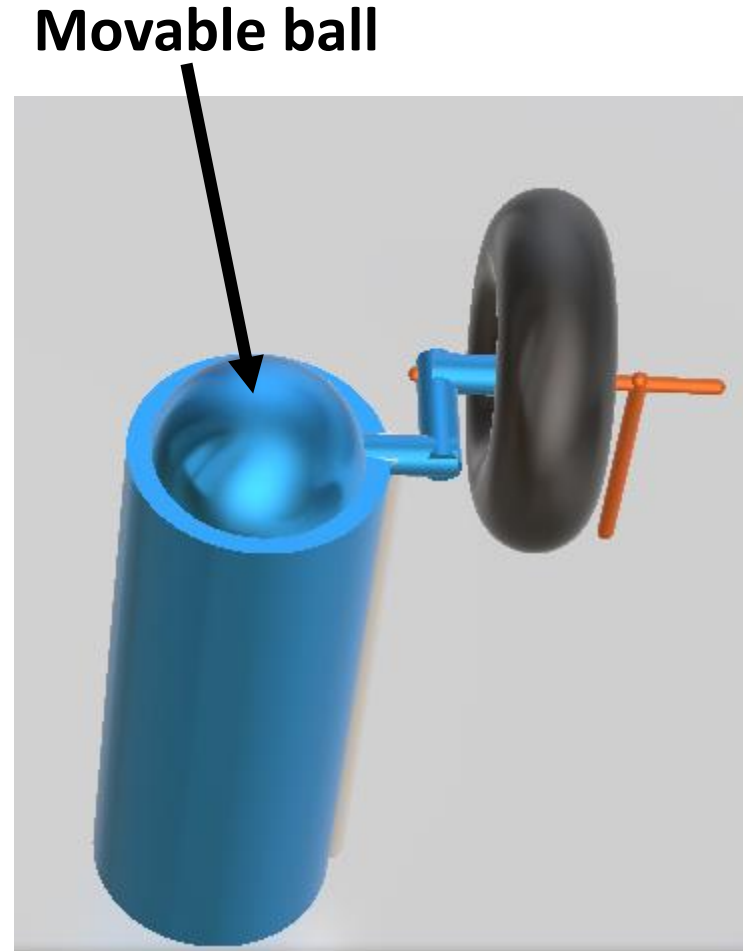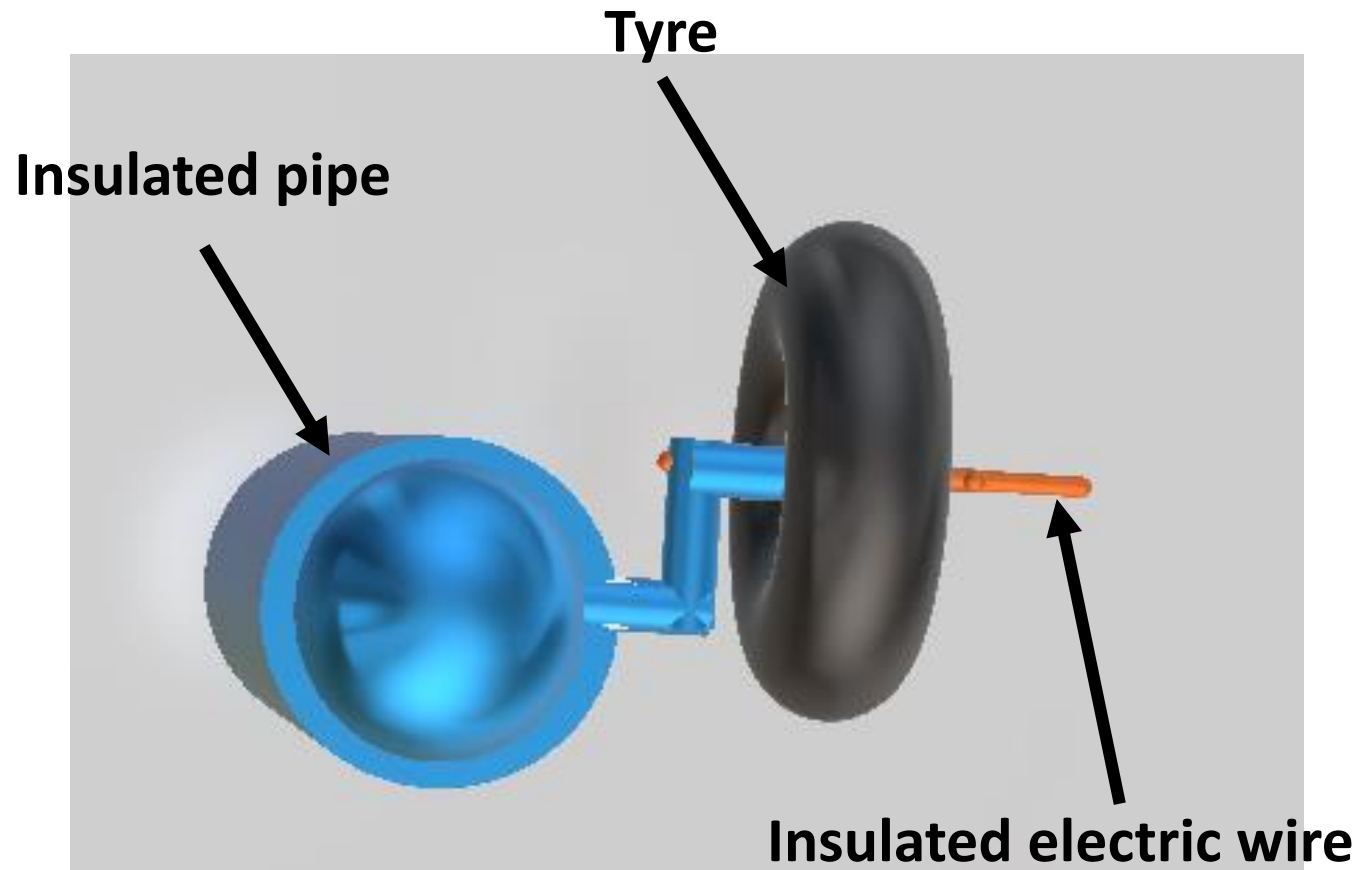
The basic structure of GBEB: Part-2

Insulated rod

Pole of tyre

Timeline for our project:-

- We will have to require resources in a given time.

- We will complete this project as soon as possible, but it will not take more than two years.

- To complete this project we will need required number of labour for civil construction working.

Challenges

- ❑ **Maintenance is quite harder**
- ❑ **It can not be run on simple road or highways, it's only can run on it's own track.**
- ❑ **Track should be fully insulated and warning should be mentioned clearly.**

MARKET COMPETITIVENESS

- We need to minimize the manufacturing of currently using buses, that reduces the pollution.

- Prices of fossil fuels will decrease gradually.

- People will take GBEB for far distances.

SOCIO ECONOMIC IMPACT

- **Lets take an example a person drive his car 15,000km/year**

|	fossil fuel vehicle	electric bus
Fuel use:	5L/100km	10KWh/100km
Average consumption:	75Rs/L	5Rs./KWh
Annual consumption:	56,255Rs.	7,500Rs.

The benefit of the social about 86.69% which is much more sufficient to increase the economical growth.

Probable Outcomes

- **Pollution will be gradually decreases by the use of GBEB.**

- **Traffic problems will be reduced.**

- **Electrical engine is more efficient than diesel engine.**

- **People will have to pay less amount for travelling in this bus and will also save the time.**

Waste water management

1. Whirlpool Technology:
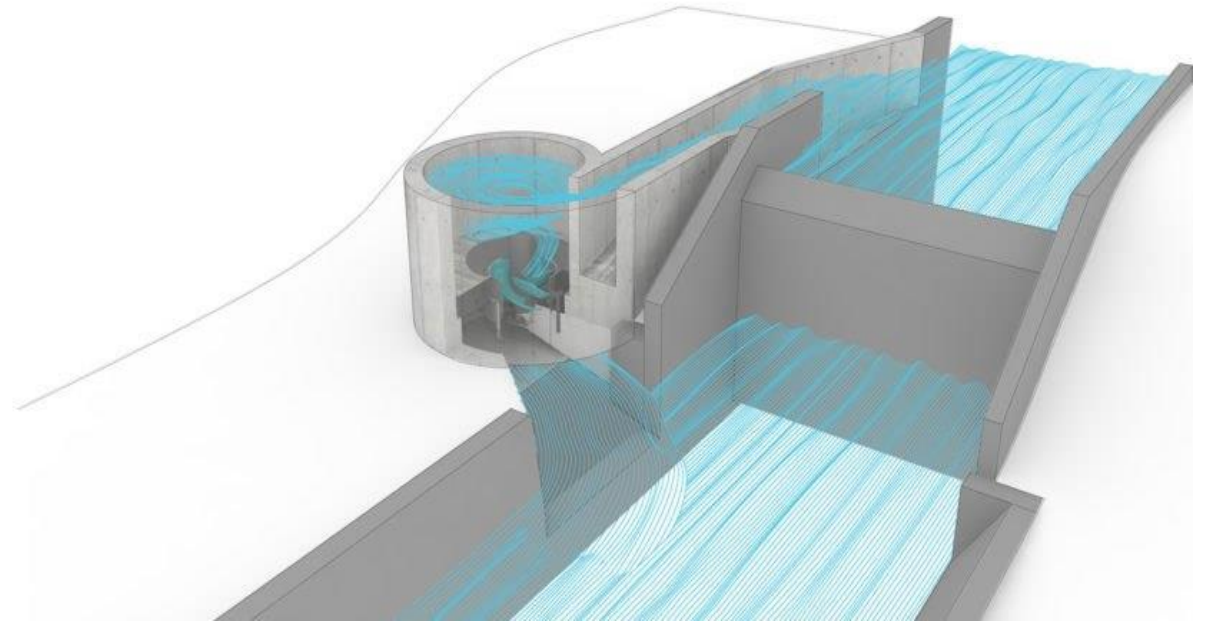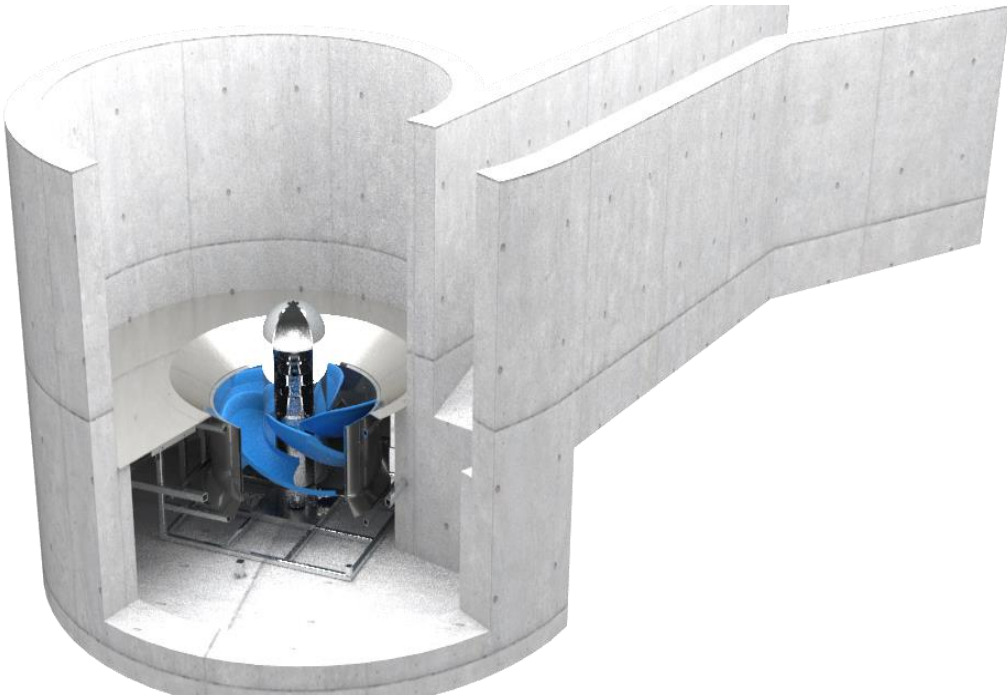
By whirlpool technology we can reuse the waste water to produce the electricity.

❖ In the whirlpool technology there is tubulant's nature inspired micro hydropower plant which can deliver the energy at low cost.

❖ The water is taken from waste water coming from the city.

❖ The whirlpool turbine makes use of small rapids or waterfalls to harmless energy.

❖ The land will take near the water source to the concrete basin.

❖ A generator and impeller goes inside the basin. Then a river wall is lifted so some of the river water will pour in to the basin.

❖ It produces limitless free energy as long as water is flowing.

There is a video which describes the whirlpool technology...