

LoRaWAN[®], AN AFFORDABLE MEANS OF AUTOMATION

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LoRaWAN[®] Live!
New Delhi, India
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Broadening the
conversation about
a sustainable future



Few Path Breaking LoRaWAN® Solutions for Sustainability

Saving Water for Future..

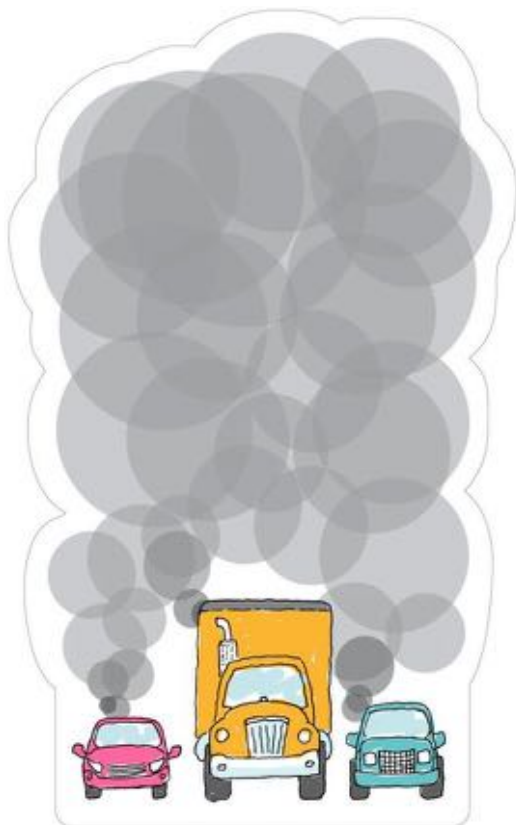


- Rivers across the world are mothers of civilizations but we are polluting them dangerously across the Globe.
- This pollution is a threat for downstream living beings including humans as well as aquatic organisms in oceans.
- Water Quality Sensors powered by LoRaWAN® installed across the length of river can alert the exact location of pollution, thus helping in achieving clean river mission.
- It can also be used to alert floods in advance, saving many lives.
- SSTPL is working with academia to bring the solution live on river Ganga and intends to implement on other holy rivers.



- Forest are precious and reason for life on earth.
- Technology can help in saving them.
- LoRaWAN® being very low power technology can be used to track illegal cutting & trafficking of trees.
- Since almost of its life-time tracker remains in sleep, there is no harmful exposure of radiation to forest.
- SSTPL is proud to be a part of automation in forest conservation across India through the innovation in IoT and exploring to replicate it across the Globe.





- Vehicles are most big reason for air pollution on earth.
- IoT can help Governments to check the health of vehicles in complying pollution norms
- A LoRaWAN® enabled sensor fitted at exhaust pipe checks the pollute level and transmit the parameters to environmental authorities if the threshold crossed.
- It can be also used to alert the owner for service schedules ahead of time
- SSTPL is committed to reduce the emission of poisonous gases thru this automation of pollution check

Few More Affordable LoRaWAN® solutions for Sustainable Growth



Energy



Water



Gas



Street Light



Parking

- LoRaWAN® based Energy Meter AMR/AMI can help in predicting precision Load requirement and preventing burn of distribution transformers hence saving carbon emission in manufacturing of transformers.
- It can also pinpoint the distribution loss scenarios & improvement opportunities helping energy conservation
- A proper energy audit containing Load, Supply & Demand can help Govt. to plan more renewable energy system eliminating Coal based Thermal Power System
- SSTPL is providing Retrofit Energy Meter AMR on LoRaWAN® to many customers across India.



Retrofit Energy Meter AMR

- Flow Rate Information helps in achieving optimum water distribution
- Leak Detection alert helps in preventing wastage of water resources
- Consumption Data can help Governments to charge premium for excess uses thus encouraging water conservation
- Consumption & Distribution Data Analytics can help Smart City to achieve sustainable growth.
- SSTPL is happy to share, it has implemented many Smart Water Meter AMR on LoRaWAN® across India.



Water MeterAMR

- Smart Gas Meter AMR on LoRaWAN® helps in making Central Gas Distribution smarter and safer
- It also provides flow rate information helping optimization of Gas Distribution
- With the benefits of real time billing, Gas Companies are encouraged to implement large level Centralized Gas Distribution which helps in reducing carbon emission from transportation of Gas Refills.
- SSTPL is partnering with various ecosystem players for LoRa® based Gas Meter AMR across India.



Gas Meter AMR

- LoRa® based Smart Parking is a solution which is cost efficient as well as enabler for Sustainable Smart City
- It can help Traffic Authorities in tracking No Parking Zones which can result in lesser traffic jams hence reducing pollution significantly
- At the same time it can guide the vehicle to pre allotted parking lot hence saving time in reaching the parking lot, resulting lesser carbon emission.
- It do not need any large Cable or Camera Sub System, saving cost for other Smart City Tracks



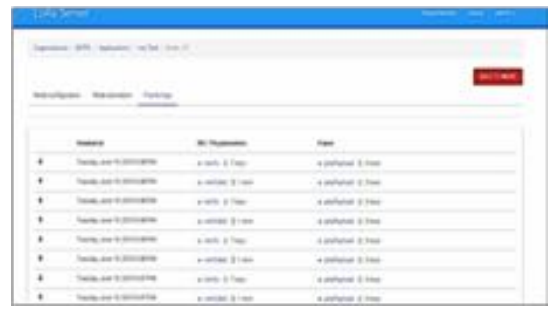
Smart Parking Sensor

- Smart Streetlight Solution on LoRaWAN® is ideal low cost & energy saving replacement of existing legacy streetlight system
- Uniquely identifiable and addressable lights for real-time operation on individual lights
- Easy retro fitting in existing LED streetlights to start energy savings immediately
- Remote On-Off and dimming level 10-90 helps in reducing energy consumption substantially
- SSTPL has implemented large scale LoRaWAN® based Smart Street Light System in the State of Odisha.





LoRa® Modules



LoRaWAN® Network Server



LoRaWAN® Gateway



Energy



Water



Gas



Street Light



Parking

LoRaWAN® Use Cases



Waste



Environment



Healthcare



Industrial



Agriculture

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