

# **INTEGRATION OF ELECTRICITY AND CITY GAS DISTRIBUTION UTILITIES**

**Presented by**  
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- IGL is already in collaboration with DISCOM's in sharing resources / facilities on common meter reading , walk in center etc.
- This may be extended in many other areas like :
  - ☐ Data sharing of customers for
    - ✓ KYC
    - ✓ Demand assessment
    - ✓ Customer profiling
    - ✓ Penetration in charged areas
  - ☐ Sharing of best industrial practices in areas of digitization and automation
  - ☐ Sharing and engaging third party services like O&M, ROW, Patrolling, Safety, Trainings etc.
  - ☐ Standardization of procurement of certain items of common interest like HDPE ducts, smart meters .
  - ☐ Smart City Projects

# Few recent initiatives:-

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1. Solar power
2. Bio Gas plant
3. E-Vehicle charging station
4. Green Hydrogen
5. Common utility services

- Installation of solar power facility at IGL locations like IGL Bhawan, stores and pipeline SV's.
- IGL is initially installing solar plant of 500 KW for cowshed area under smart Gaushala project, later same will be scaled up to 5 MW.
- Net metering through solar will lead to contribution towards cleaner fuel and also have financial savings.

- IGL has already signed an agreement with a Gaushala in Delhi for setting up a Bio Gas plant using cow dung as the feedstock.
- Bio gas could be utilised for any of the two options:
  - ❖ Purified to achieve a minimum percentage of Methane and compressed for dispensing to automobiles or injection in to pipeline network of IGL
  - ❖ Un-purified or purified to lesser degree could be used in Gas Genset to produce power. Produced power will be utilized for captive consumption of Gaushala, CBG plant and excess power can be sold to DISCOM.

- IGL is stepping in to provide battery charging facilities for Electric Vehicles.
- Two models have been considered for said facility:
  - ❖ Fixed battery EV charging
  - ❖ Battery swapping station
- Initially said activity is being carried out at existing IGL CNG stations.

## ***BATTERY SWAPPING MODEL***



1. Occupies size of a refrigerator
2. Have 14 charging slots
3. Charged batteries readily available for swapping
4. It requires Less space.
5. Load requirement of around 30 KW per charger
6. Multiple vehicles can be catered.

## ***FIXED CHARGING MODEL***



1. One Vehicle can be charged at a time
2. Approx. time to charge a vehicle through fast charger (DC): 1-1.5 hr.
3. AC charger takes around 6-8 hrs. for full charging.

# PLAN FOR 1<sup>ST</sup> YEAR....



$$50 + 5 = 55$$

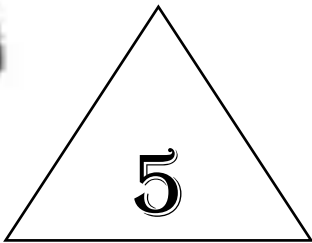
✓ IGL CNG Stations



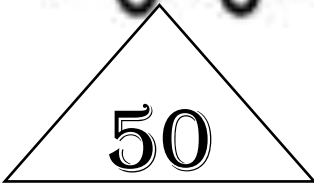
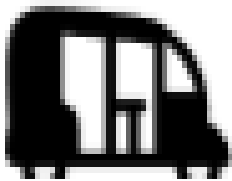
## Pubic EV Chargers- DC Charger



- 1) Cabs
- 2) Private Cars



## Battery Swapping Facility





- IGL is exploring production of green hydrogen in its area of operation for :
  - ❖ Captive usages for producing hydrogen enriched CNG (HCNG)
  - ❖ Blending of hydrogen in entire natural gas network for which independent study on technical compatibility and safety aspect is being done.
  - ❖ Collaborating with demonstration of hydrogen based FCEV.

IGL is in discussion with RE power producer for collaborating and sourcing green power for proposed hydrogen production facility

- For common point of contact of customers with power distribution companies and for IGL (PNG connection); walk in center of M/s TPDDL is being utilized at 2 locations (~50 customers on daily basis).
- Initially common meter reading of both electricity and PNG connections was done for 10,000 customers. Based on satisfactory performance, same is being done for 52,000 connections at present (Area under Rohini and Pitampura)
- This activity has led to ease to customer for bill payment, query resolution at common center; which had also resulted into financial benefit to both IGL and TPDDL.
- Exploring options for new customer acquisition, common courier services / bill printing services / call center / defaulter payment recovery.
- IGL is in discussion with other DISCOMs also for similar common activities.

# Thank You

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