



TATA POWER-DDL

Towards a *Greener* Tomorrow

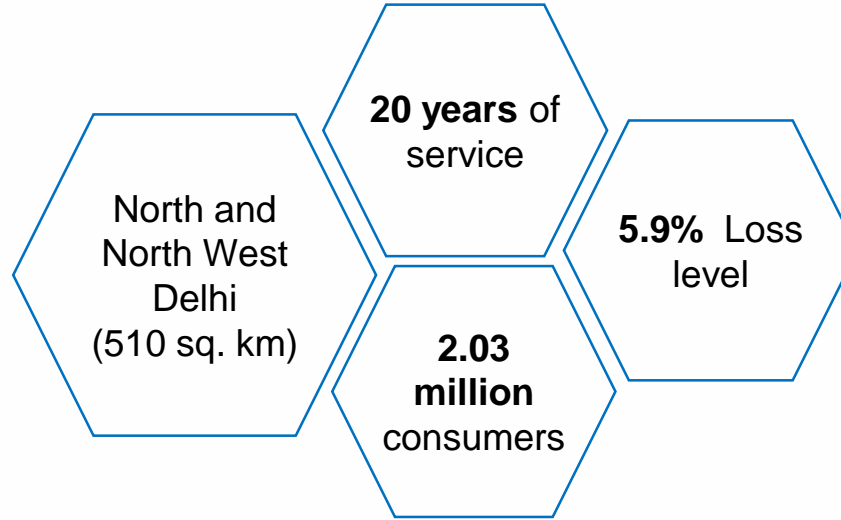
Demand Flexibility and DSM Initiatives

May 14, 2024

About Tata Power-DDL



51:49 Joint Venture
of The Tata Power Company Limited
(Tata Power)
and
the Government of Delhi
Formed on 1st July 2002



TATA Power-DDL's innovative & earnest efforts has reformed the Delhi Electricity service
- *Reducing losses from 53.1% in 2002 to 5.9% in March 2024.*



2002

power to the people 



TATA POWER-DDL

with you *Non-Stop*



TATA POWER-DDL

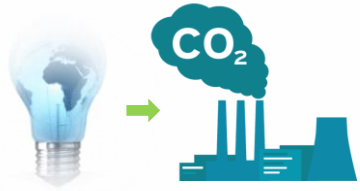
2022

Towards a *Greener* Tomorrow



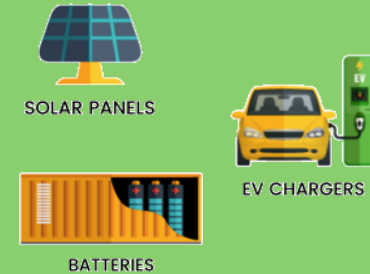
Towards a *Greener* Tomorrow

Demand Side Management – Phases



DISTRIBUTED ENERGY RESOURCE

Phase 3:
Enhancing usage of Solar, EV, BESS, Demand Response



ENERGY EFFICIENCY

Phase 2:
Promoting utilization of Energy Efficient Appliances



ENERGY CONSERVATION

Phase 1:
Awareness and Promotion to save energy



Journey of Demand Side Management

Phase I- Lighting Solution



2009-12

- Inception of DSM in TPDDL in 2009
- Incandescent bulb to CFL

- Awareness programs



2012-15

- Domestic Efficiency lighting Program (DELP)* with EESL

Phase II- Cooling Solution



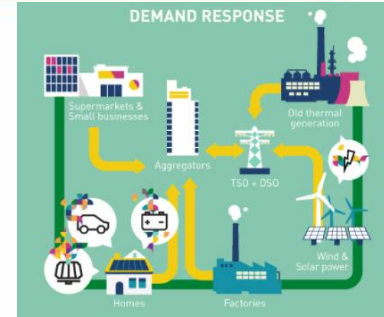
2016-18

- Unnat Jyoti by Affordable LED for All (UJALA) program with EESL
- AC replacement Program



2019-20

- Introducing BLDC Fans
- Energy Audit for 72 Industrial Customers

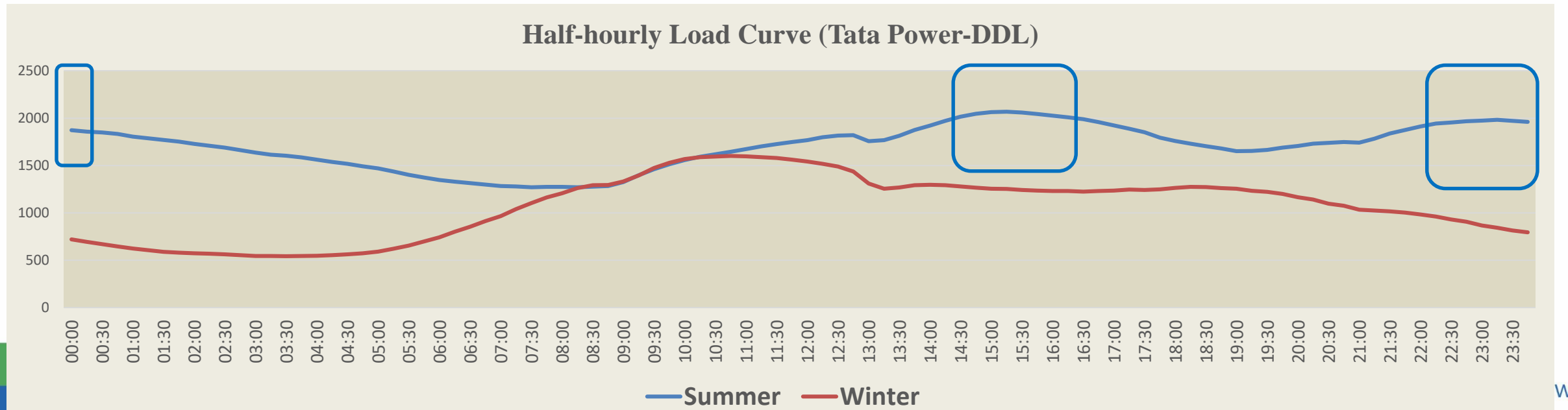
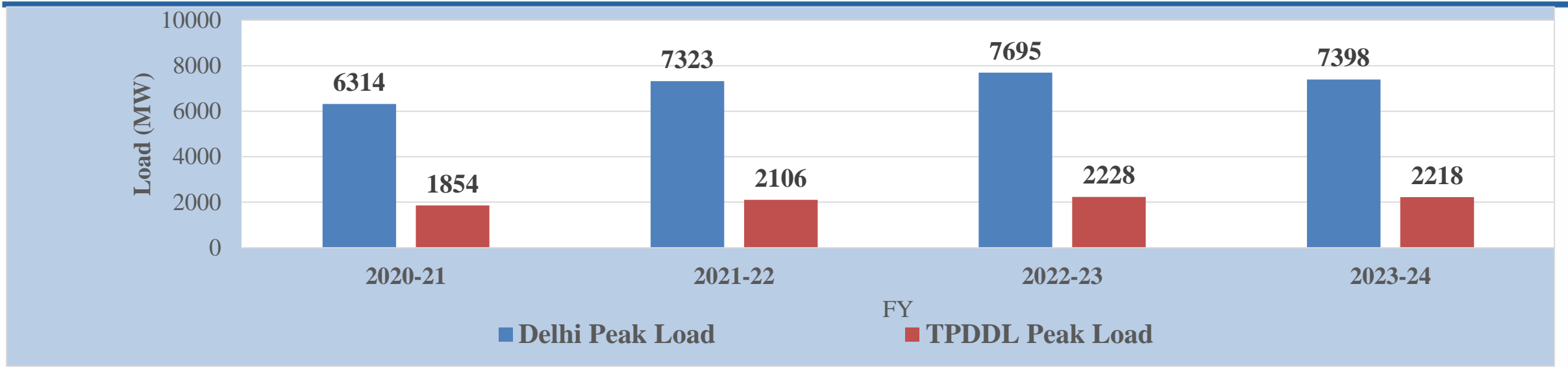


2021-24

- Beyond the Meter Offerings: APFC, Solar, Harmonics, AMC of transformer, SEM,
- DR program

* The scheme was announced as "Domestic Efficient Lighting Program (DELP)" on 5 January 2015, urging the people to use LED bulbs in place of incandescent bulbs, tube lights and CFL bulbs as they are more efficient, long lasting and economical in their life cycle duration.

Peak Demand – Delhi and Tata Power-DDL

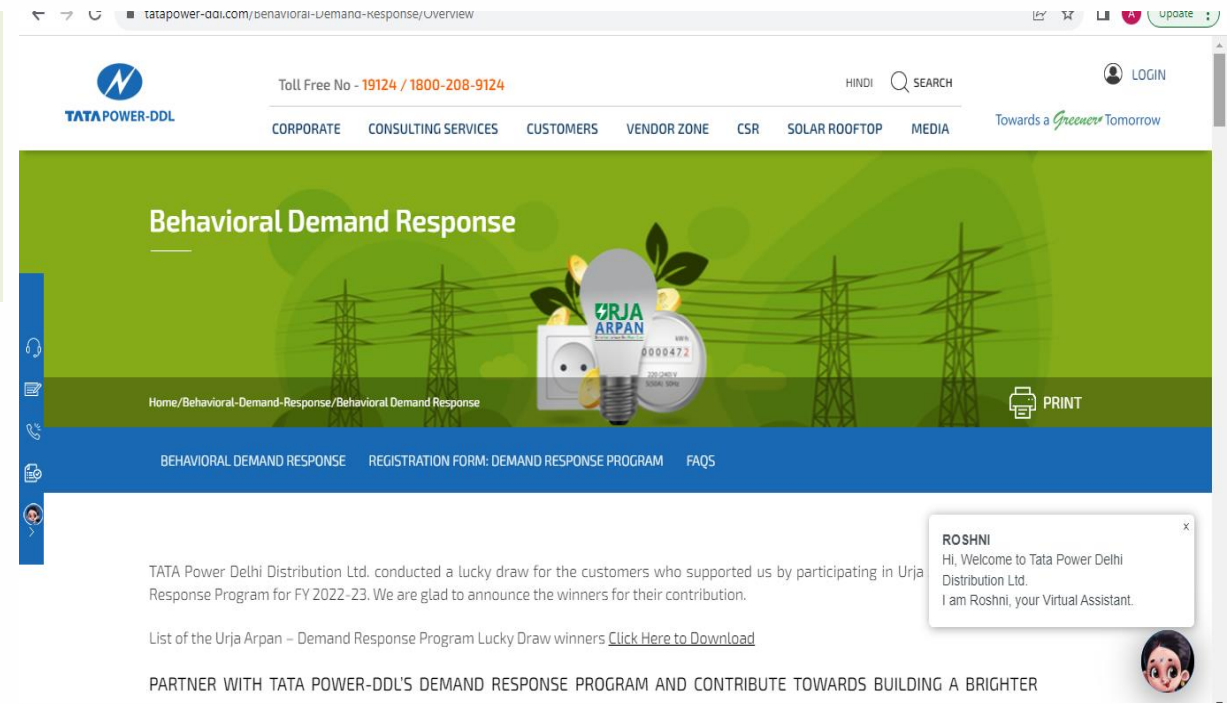


Behavioral Demand Response (BDR) – An **energy load management program**

- Seeks to manage electricity demand at consumer's end by encouraging them to decrease their consumption
 - With incentives (Critical Peak Rebate) or
 - With penalties (Critical Peak Pricing)

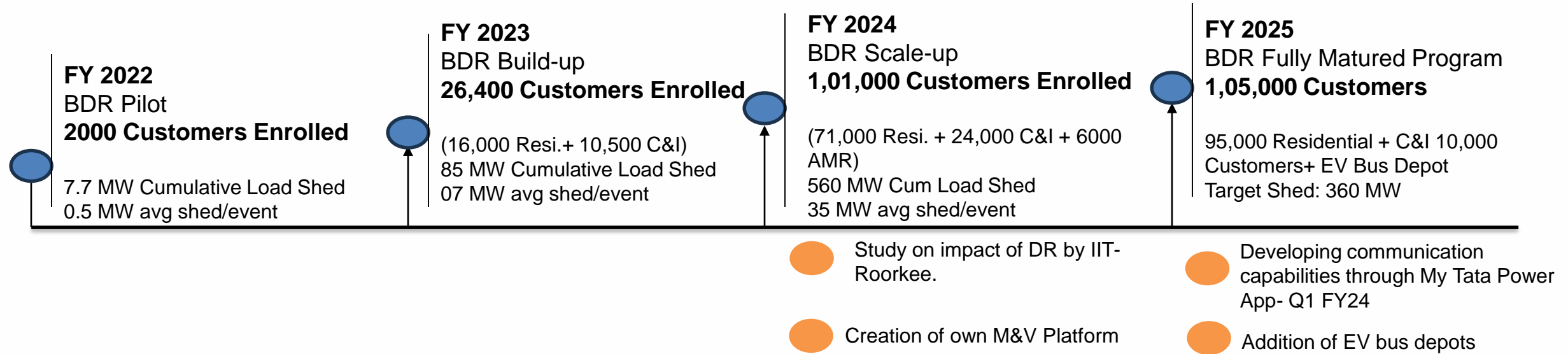
Tata Power-DDL was “first” in India to initiate BDR at High Scale

- Extensively engaged with customers
- Assessed capability to Manage peak demand through voluntary contribution



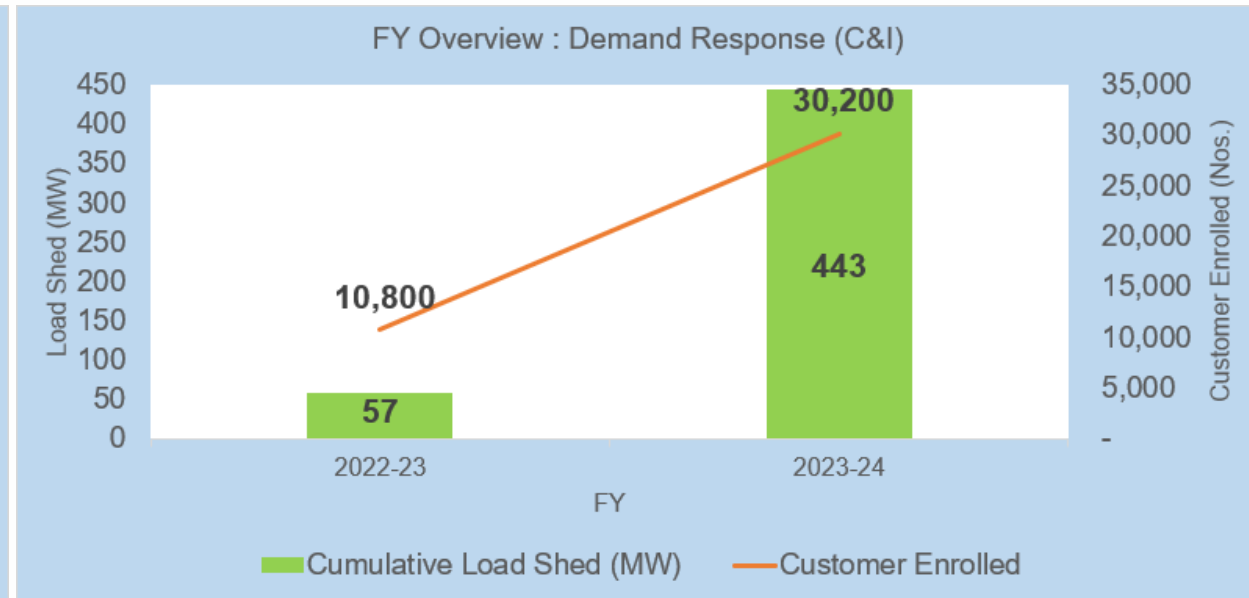
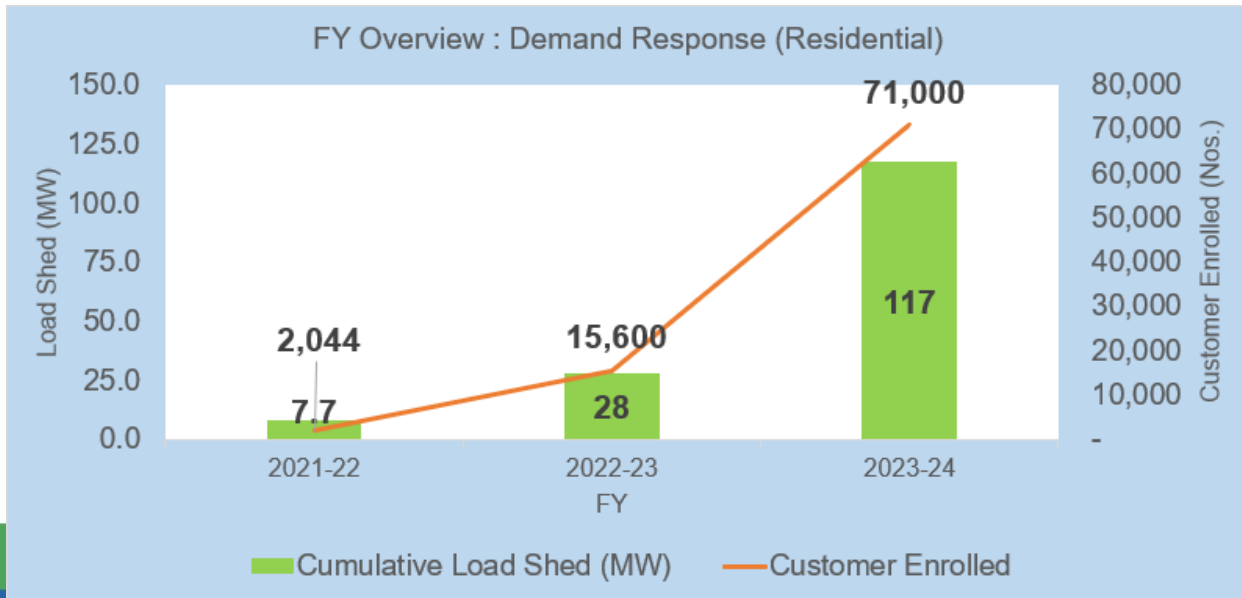
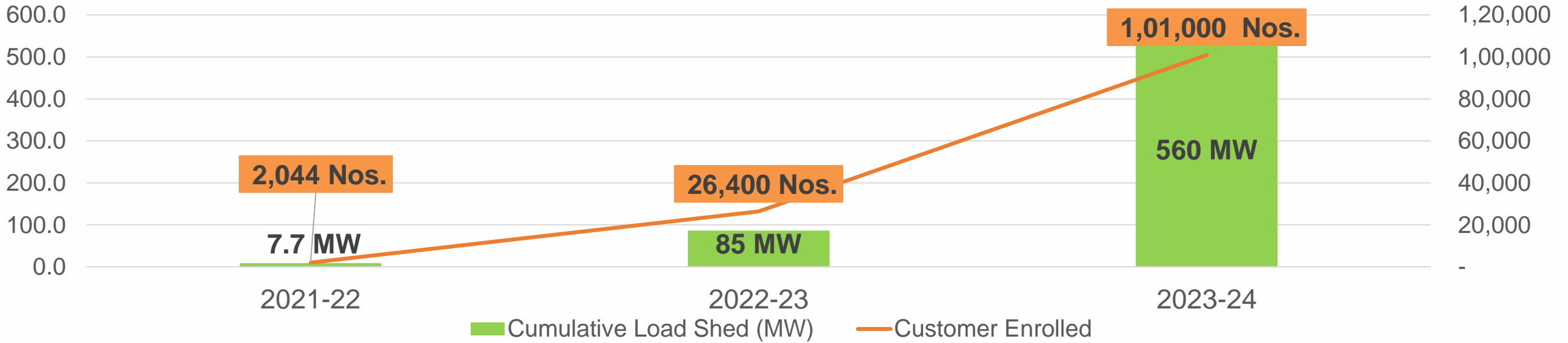
The screenshot shows the Tata Power-DDL website for Behavioral Demand Response. The page features a green header with the Tata Power-DDL logo, toll-free number (19124 / 1800-208-9124), and navigation links for Corporate, Consulting Services, Customers, Vendor Zone, CSR, Solar Rooftop, and Media. The main content area is titled "Behavioral Demand Response" and includes a graphic of a lightbulb with a plant growing from it, symbolizing green energy. Below the header, there are links for "BEHAVIORAL DEMAND RESPONSE", "REGISTRATION FORM: DEMAND RESPONSE PROGRAM", and "FAQS". A notification box on the right side of the page reads: "ROSHNI Hi, Welcome to Tata Power Delhi Distribution Ltd. I am Roshni, your Virtual Assistant." At the bottom, there is a link to "List of the Urja Arpan – Demand Response Program Lucky Draw winners Click Here to Download" and a footer that says "PARTNER WITH TATA POWER-DDL'S DEMAND RESPONSE PROGRAM AND CONTRIBUTE TOWARDS BUILDING A BRIGHTER Tomorrow".

Journey So Far: Behavioral Demand Response



YoY Results of BDR				
Description	UoM	FY22	FY23	FY24
Customers Targeted	Nos	4,417	64,000	1,33,000
Customers Enrolled	Nos	2,044	26,400	1,01,000
Cumulative Load Shed	MW	7.69	85.0	560 (Target-300)
Average Participation in an Event	Nos	880	7,300	27,050
Minimum & Maximum Participation in an Event	Nos	630 & 1,300	4,600 & 11,300	12,250 & 44,850
No. of Events Successfully Executed	Nos	16	12	16
Unique Customers Participation	Nos	1,990	19,900	91,300

Y-o-Y Performance



Webpage

Dedicated Webpage & Information on Mobile App

SMS

•33+ Lacs number of SMS

WhatsApp

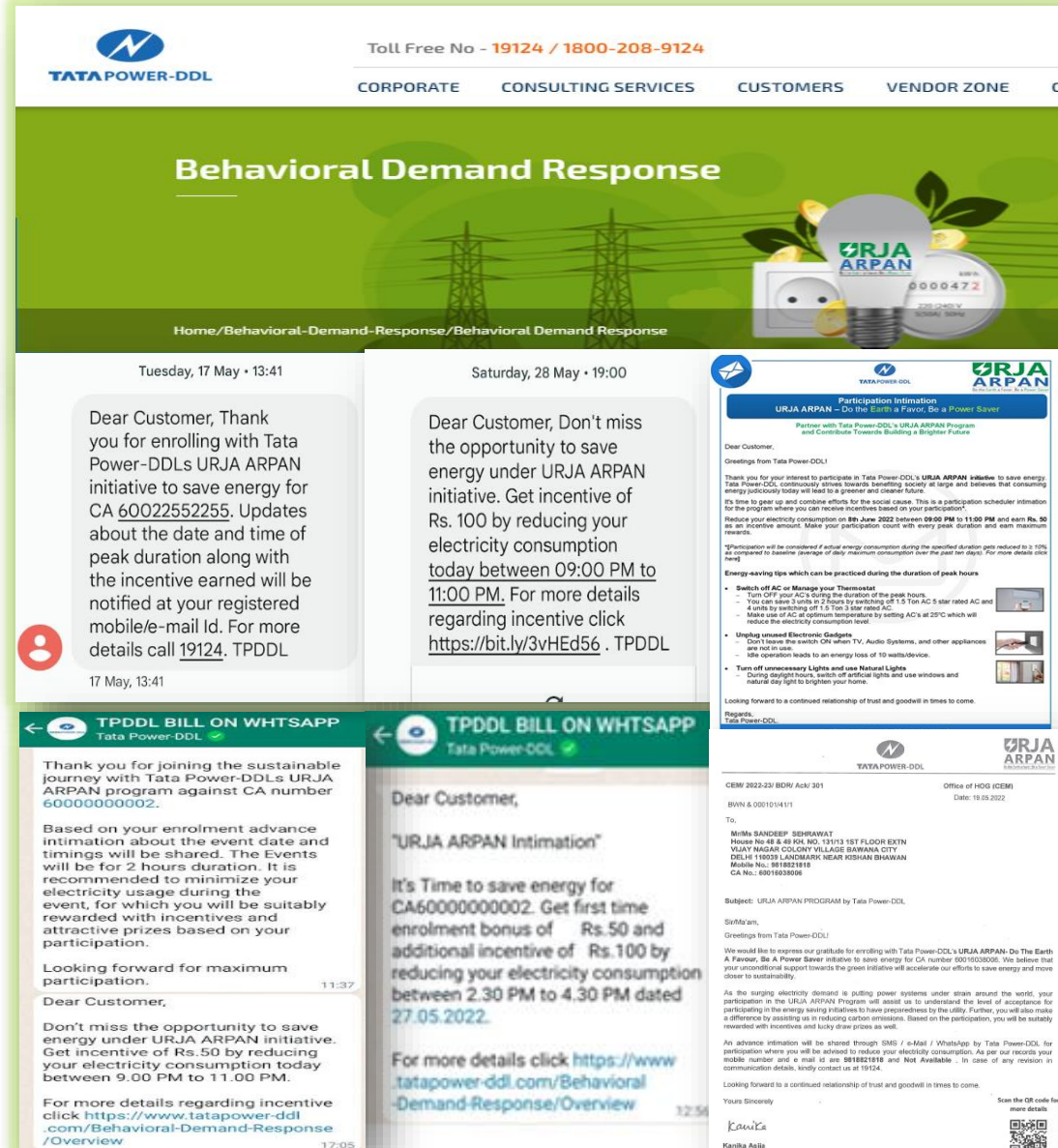
•5+ lacs number of messages

One to One Calling

2.20+ Lacs number of calls

Connect with RWAs

Engagement with 10+ Residential Welfare Associations (RWAs)



The image shows a collage of digital communication materials for the URJA ARPAN program. At the top is the Tata Power-DDL website header with navigation links for Corporate, Consulting Services, Customers, and Vendor Zone. The main heading is "Behavioral Demand Response". Below this is a promotional graphic for URJA ARPAN featuring a smart meter and a leaf, with the tagline "Do The Smart & Eco-Friendly. Be A Power Saver".

Two WhatsApp messages are shown. The first, dated Tuesday, 17 May at 13:41, thanks a customer for enrolling and provides details about the program's goal to save energy for CA 60022552255, including updates on dates and incentives. The second message, dated Saturday, 28 May at 19:00, encourages participation by offering a Rs. 100 incentive for reducing electricity consumption between 09:00 PM and 11:00 PM, with a link to more details.

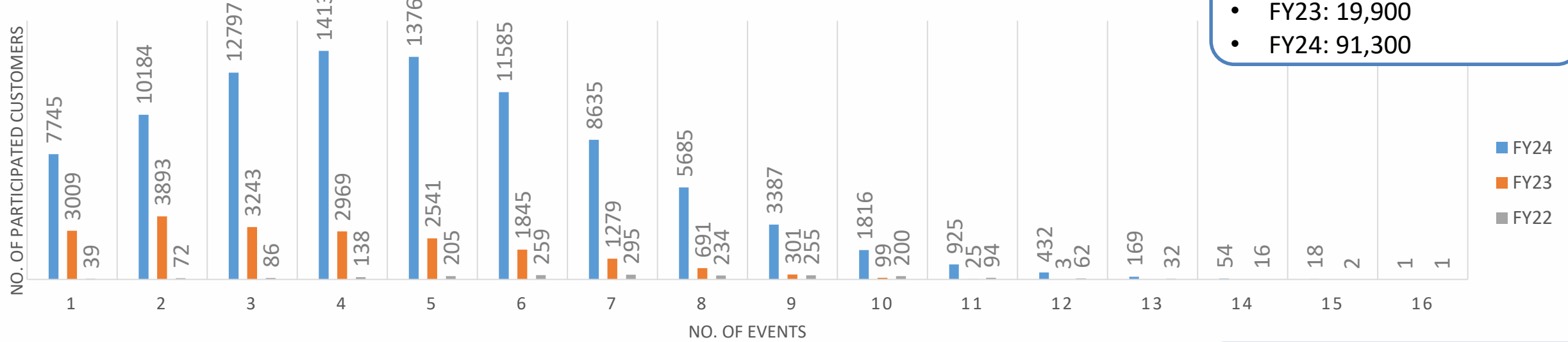
Below the messages is a screenshot of a WhatsApp chat titled "TPDDL BILL ON WHATSAPP". It contains a message about joining the sustainable journey with the URJA ARPAN program, followed by a detailed "URJA ARPAN Intimation" message. This intimation explains the program's goal to save energy for CA 60000000002, offers a first-time enrollment bonus of Rs. 50 and an additional incentive of Rs. 100 for reducing consumption between 2:30 PM and 4:30 PM on 27.05.2022, and provides a link to the program overview page.

On the right side, there is a formal "Participation Intimation" document. It includes the program name, a greeting, a detailed explanation of the program's objectives, a participation schedule for June 2022, and a list of energy-saving tips such as switching off ACs, using energy-efficient appliances, and turning off unnecessary lights. It also includes contact information for the program and a QR code for more details.

Impact : Y-o-Y Behavioral Change

Increase in multiple event participation in CFY without incentive is indicative of behavioral change

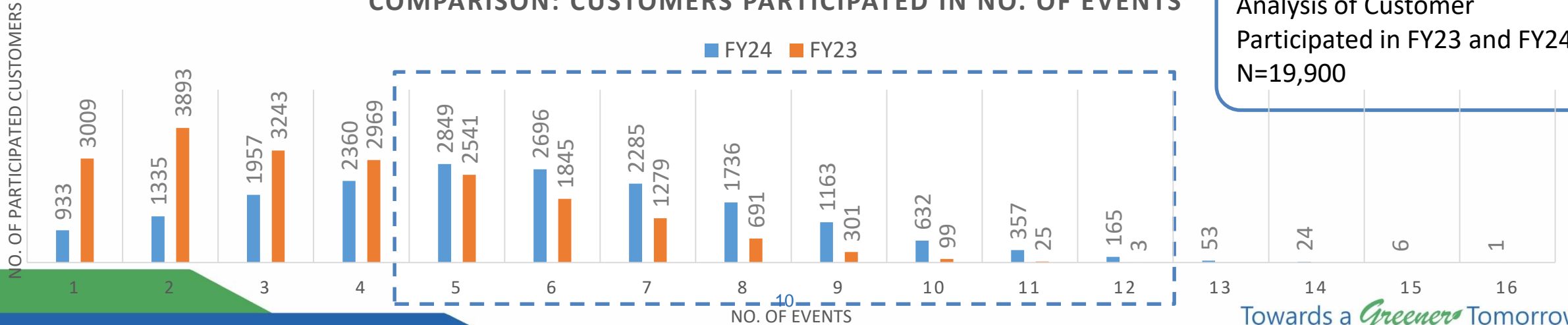
CUSTOMER PARTICIPATION IN NO. OF EVENTS



Total Participated Customers

- FY22: 1,990
- FY23: 19,900
- FY24: 91,300

COMPARISON: CUSTOMERS PARTICIPATED IN NO. OF EVENTS



Analysis of Customer Participated in FY23 and FY24
N=19,900

Customer Feedback

The Behavioral Demand Response Program is a great initiative by Tata Power Delhi Distribution under which we can save energy through optimum utilization. The energy saved can be used for essential requirements.



Vishal Vadhera
Pitampura

We received SMS from Tata Power-DDL regarding the Behavioral Demand Response Program which involved energy saving during the peak demand periods. My family used to switch off all extra lights, fans, ACs and sit in one room using single AC during the event.



Dr. Veeta
Malkaganj, New Delhi

We were excited to be a part of Tata Power-DDL's Behavioral Demand Response Program as this was a first-of-its-kind initiative that was being carried out. I used to switch off the television, and listen to music on my mobile phone during the designated events.



Shreya
Pitampura

The Demand Response Program helped us save energy through minimum use of power during the designated slots. This is a great way towards building a brighter future for our country. After the completion of each of the events, we got confirmation about our successful participation.

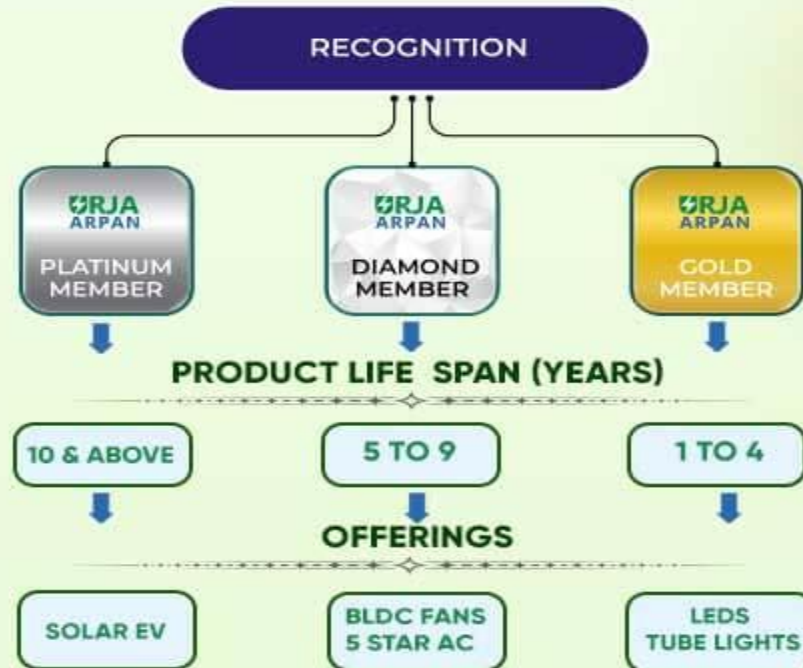


Sumesh
Pitampura

“URJA ARPAN” FRAMEWORK



DO THE EARTH A FAVOUR, BE A POWER SAVER



*ESCO- ENERGY SERVICE COMPANY; BLDC- BRUSH LESS DIRECT CURRENT; EE- ENERGY EFFICIENT

URJA ARPAN CAMPAIGN TARGET

TARGET TO ACHIEVE UNDER URJA ARPAN CAMPAIGN



SAVING OF 100 UNITS IS EQUIVALENT TO REDUCTION OF 79KG CO₂, RESULTING IN SUBSIDING THE BURDEN OF 3 MATURED TREES IN A YEAR

Pledge for Urja Arpan to create pool of 1 Lakh Climate Conscious Citizens



Urja Arpan Pledge by 400 Students of CRPF School, Rohini



Urja Arpan Pledge by 400 Students of Prabhudayal School, ShalimarBagh



Urja Arpan Pledge by 400 Students of IIHM, Pusa

Customer Engagement

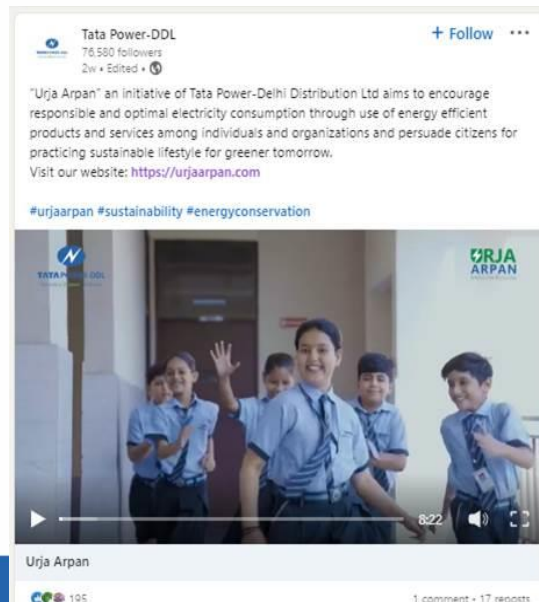
- **Digital Campaigns:** Weekly engagement on Social Media.
- **Physical Campaigns:** Regular interaction through camps, sessions and events at Schools, RWAs and IWAs.
- **Media Presence:** UA stories on print media.



Urja Arpan Initiative

Getting Customers Aboard on the Need to Commit to Energy Efficiency

The brain behind the Tata Power-Delhi Distribution Ltd's (TPDDL) Urja Arpan initiative in the National Capital Region (Delhi NCR) — **Rajeev Kharyal**, Head Customer Services, Key Consumer Group and Government Affairs, TPDDL, is a leader with his eye on an ambitious goal. Understanding that for a power distribution unit like the TPDDL, to be financially sustainable, consumer behaviour is key, he has introduced several energy efficiency initiatives. Apart from Delhi, this energy efficiency model is being replicated in Odisha as well under Demand Side Management (DSM) initiatives. Speaking to **Sushmita Malaviya**, he details the challenges of bringing down carbon emissions and the mission that TPDDL is on to double its efforts to reach 300 million units (MU) on three years.





Knowledge Partner

WHAT IS URJA ARPAN?

"Urja Arpan" an initiative of Tata Power-Delhi Distribution Ltd aims to encourage responsible and optimal electricity consumption through use of energy efficient products and services among individuals and organizations and persuade citizens for practicing sustainable lifestyle for a greener tomorrow

Read More

SAVING THROUGH URJA ARPAN



UNITS **209.12** MU_s



165204.8 TONS



TREES **6.27** MILLION

With Effect From April 2022

- Solar
- AC
- LED Lighting + BLDC Fan
- EV Cars
- LED Street Light
- Demand Response



TATA POWER-DDL

Towards a *Greener* Tomorrow



Thank You