



Solar RO – UV Solution

A solution that addresses water and energy crises in rural areas

Drinking Water Crises in Rural areas

/Crisis de agua potable en zonas rurales



**Lack of access
to treated tap
water**



Time Poverty



**Lack of
purchasing
power to buy
packaged water/
purification
technology**



**Lack of access
to reliable
energy to
purify water**

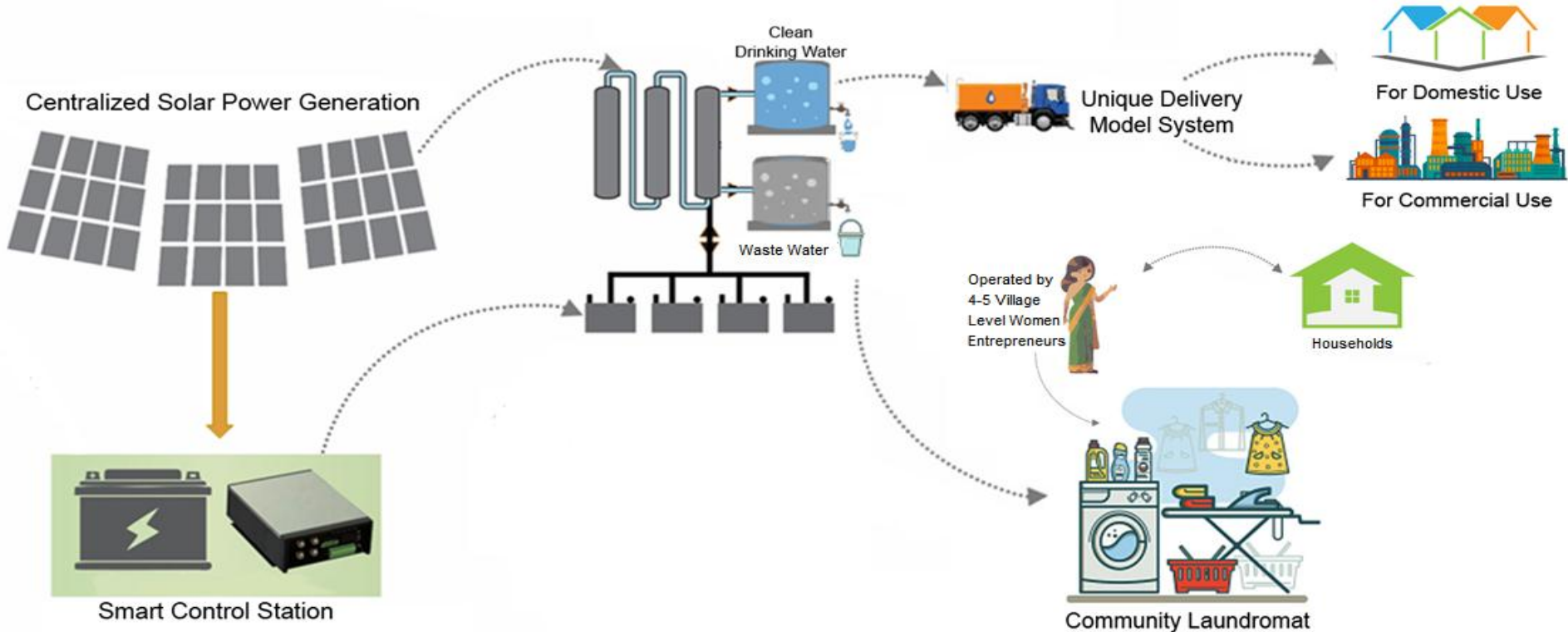


**High
maintenance
cost of
residential RO**

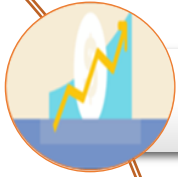


Our Solution/Nuestra solución

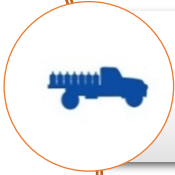
SOLAR RO-UV WATER FILTRATION PLANT



Business Model/Modelo de negocio



Self sustaining model



Self collection and delivery system



Clean drinking water @ 0.007 USD per liter



Sales revenue is used to cover operating expenditure

Operational Model/Modelo operacional

RO Plant

- Domestic Clients
- Commercial Clients

DISTRIBUTION

- Self Collection
- Home Delivery

PRICING

- 0.007 USD per liter for Domestic use
- 0.010 USD per liter for commercial use



Payback under 2 – 2.5 years

Employment for 10 people



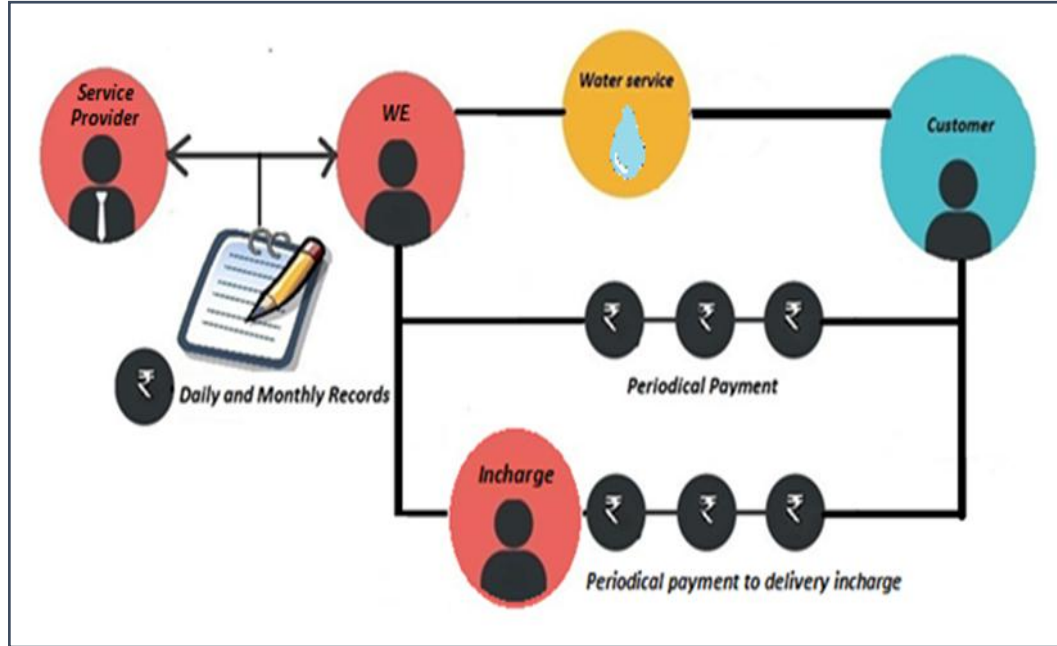
Remote monitoring for data management



Digitalized payment method



Revenue Model/Modelo de ingresos



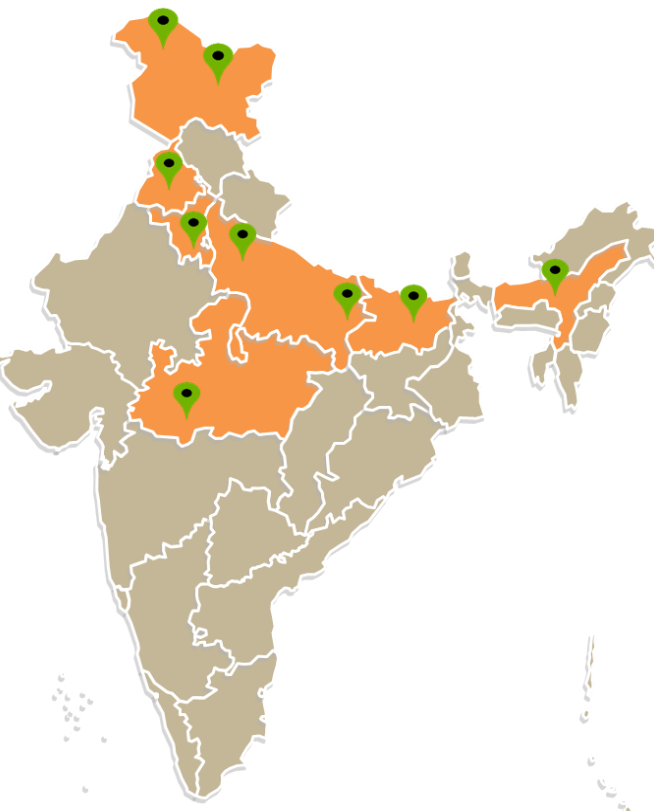
Subscription:

A subscription card for every user at a nominal charge

Payment Mode:
Pre- paid mode of payment will be followed.

* WE-Women Entrepreneurs

Our Reach/Nuestro alcance



Seven States
In 3 years

Our Projects



Solar powered Water RO solution for rural areas facing water and energy insecurity



Solar Microgrids for residential and commercial use and Solar Home Lighting Systems



Distribution of solar lanterns for energy starved regions



Solar Thermal solutions for urban and military areas

Existing Project in Ugalan, Haryana



25,000 liters of water every day

Installed a 10kW solar micro-grid with battery storage



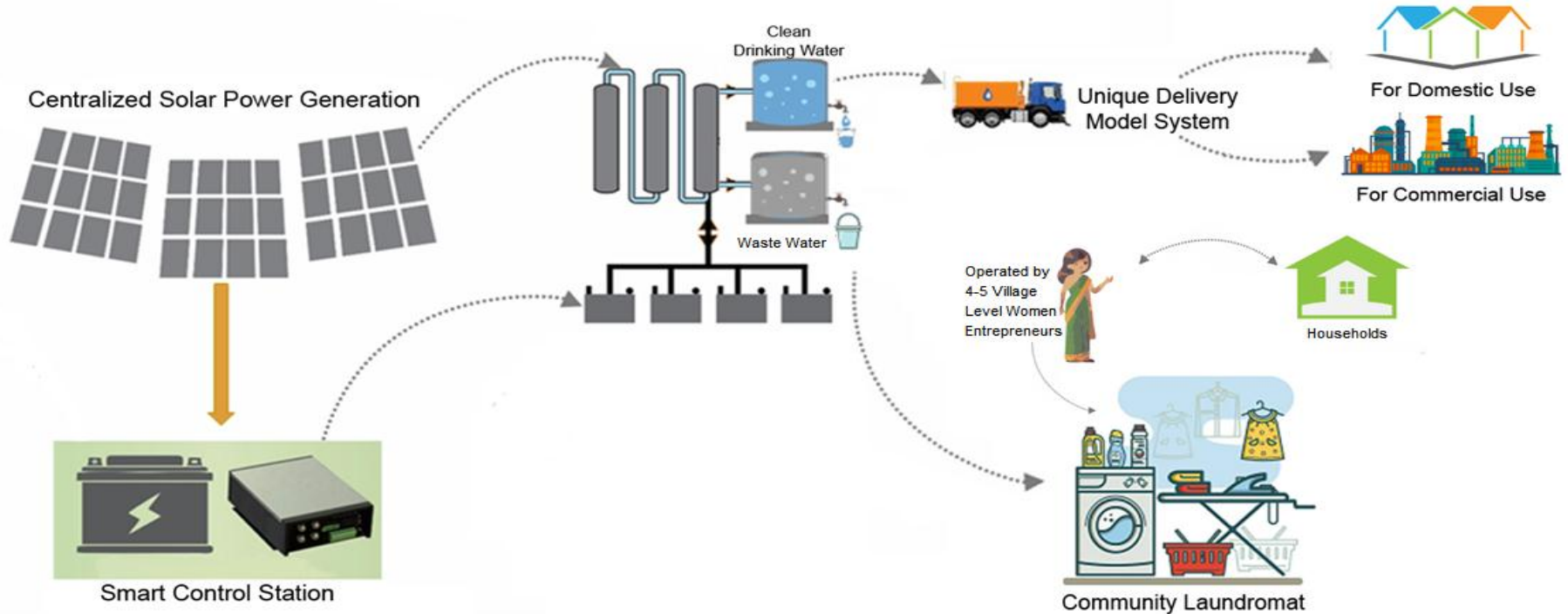
Both self collection and home delivery was available at the plant

Generated for 2-3 people in the village



Project under construction in Mullanpur Garibdass, Punjab

SOLAR RO-UV WATER FILTRATION PLANT



Impacts/Impactos



**Women
Empowerment**

**Access to
Cleaner Source
of Energy**

Jobs Creation

**Infrastructure
Development**

**Access to Clean
Drinking Water**

Improved Health

Promote Renewable Energy

Our uniqueness/Nuestra singularidad

S.No.	Basis of uniqueness	G.R.I.D. Pvt. Ltd.	WATER ATMs
1.	Capacity	25-30 K liters	Produce 5-700 liters only
2.	Consumer size	Community level clean drinking water provision	Cannot cater for entire village.
3.	Procurement of water by consumers/locals	Both home delivery and self collection available	Only self collection available
4.	Capacity of one time procurement of water	20-40 liters	Only 1 liter
5.	Employment Scenario	12-15 People in the rural areas	One individual
6.	Service charge	0.007 USD/liter	Min 0.14 USD/ liter
7.	Payback period	Under 3 years	N/A
8.	Business Model	Innovative, commercially viable and profitable	Grant model based intervention
10.	Usage of clean energy	Solar power	N/A (runs on grid power)
11.	Carbon emissions	Reduction upto 22.4 metric tons of carbon	Not any

Achievements/Logros

2016: Rewarded with prestigious Echoing Green Fellowship in the United States of America



2017: Member of The Energizers group for our expertise in global energy markets.



2017: Part of Initiative for Sustainable Energy Policy (ISEP) in Johns Hopkins University for global energy policy



2018: Awarded as '50 Most Influential Solar Leaders in the world' at World CSR Day



2018: Selected as a finalist at Schneider Electric Bold Idea Challenge in APAC region



2016: Our founder & CEO, Mr. Manik M. Jolly was conferred with REX Fellowship in India



2017: Awarded 'Delhi Solar Energy Leadership Award' in 2017 for creating viable solutions in affordable parameters for holistic growth of rural ecosystem



2018: Selected by Miller Center, USAID led program for upcoming startups



2018: Selected as Technical Evaluators and Advisors in EU led 3 year study, Horizon 2020

In the News/En las noticias

Forbes

Featured in Forbes, we presented our solar solutions that can be replicated and scaled across rural India where the water crises are most severe.



Featured in Medium, a worldwide online publishing platform mentioning our first-of-its-kind pilot project of RO water filtration system with 10 KW PV mini-grid and power storage in Haryana, India.



In Reuters, we shared our aim of providing more sustainable and sizable electricity in rural areas.

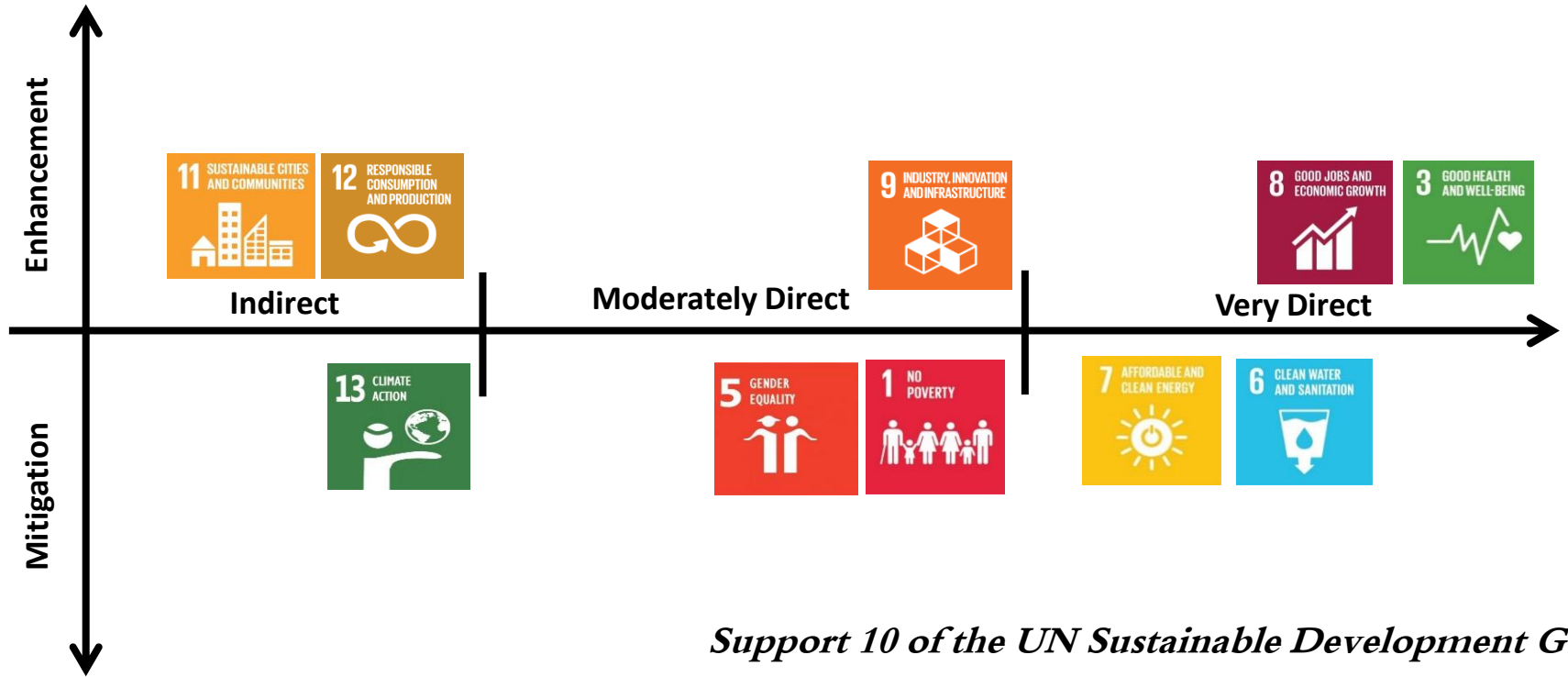


G.R.I.D's clean energy and water initiative was covered by Public Utilities Fortnightly Magazine.



Awarded as the 'top small business of the year 2018' by Great Companies

Contribution to SDG's/Contribución a los SDG's



Support 10 of the UN Sustainable Development Goals

Our Projects/Nuestros proyectos



SOLAR RO-UV FILTRATION PLANT IN A VILLAGE

GRID installed a 10kW solar micro-grid with battery storage to meet the power needs of the water solution - allowing the water plant to run for 10-12 hours every day produces 6,600 gallons (25,000 liters) of water every day to serve the health need of approx. 1,000 village households *in Ugalan, Haryana*



SOLAR POWER PLANT FOR LIGHTING

G.R.I.D. has installed microgrid Power Plant for barracks *of Indian army in Jammu & Kashmir*. Indian army spends huge sum of money on diesel generators while operating in remote areas. Solar PV microgrid is cleaner and cost-effective alternative for energy needs of our brave Indian soldiers serving on border.



MODULAR SOLAR WATER PURIFIER FOR REMOTE LOCATIONS

G.R.I.D.'s modular water purifier is designed to overcome the obstacles and provide safe drinking water to remote areas using solar energy. It has a batter backup for 24 hours operations. G.R.I.D. is currently running 500 liters capacity Solar RO for *Indian Army in Gurdaspur, Punjab*

Our Projects/Nuestros proyectos (contd.)



SOLAR LANTERNS FOR ENERGY-STARVED REGIONS

G.R.I.D. launched 'Lighting Lives' campaign in *Mau, Uttar Pradesh* and distributed hundreds of solar lanterns to bring light to thousands of lives.



INSTALLED SOLAR THERMAL SYSTEMS FOR INDIAN ARMY

G.R.I.D. has installed solar thermal systems for *Indian Army in Bareilly, Uttar Pradesh* that provides 4000 liters of hot water every day.



COMMUNITY LIGHTING FOR SAFER NEIGHBORHOODS

G.R.I.D. provided solar based community lighting system in *Rajouri, Jammu & Kashmir* to a remote community staying at a high altitude and changed their lives for brighter future.



RO PLANT INSTALLATION IN BIHAR FOR RURAL COMMUNITIES

G.R.I.D.'s RO plant was installed in *Munger, Bihar* for Rural community. It has a capacity of *250 LPH*.

Our Projects/Nuestros proyectos (contd.)

On-going projects

- **Mullanpur, Garibdass Village project, Punjab** - Solar UV- RO solution with laundry system.
- **Majuli, Assam** – Solar Home lighting system and community street lighting.
- **Indian Military Academy**- Vertical gardens, solar thermal water heater system and solar PV rooftop plant .

Solar Energy is a viable, cleaner & cost-effective solution for off-grid and mini-grid installations in remote & inaccessible areas that can perform well even in extreme climatic variations like floods, earthquakes etc.

People Who Made it Happen



Manik M. Jolly- Founder & CEO

Recognized as ‘50 Most Influential Global Solar Leaders’ for his continued work in the field of energy access, micro grids and clean drinking water access in rural areas in 2018, Manik M. Jolly is the Founder and CEO of G.R.I.D. Pvt. Ltd, India.

As a subject matter expert on Energy Access Initiatives for Sustainable Energy Policies (ISEP) at Johns Hopkins University, Manik is actively engaged in working on policy, finance and project development for global energy access plans. He was awarded by prestigious Echoing Green Fellowship in 2016, REX fellowship in 2015 and was recognized as the WWF (UK) Global Green Game Changer in 2013. He co-authored ‘Global Status report on Renewable 2015 – REN 21, Paris (Energy Access)’ and has been associated with United Nations, International Finance Corporation, World Bank, Ministries of Power and Renewable Energy in India, Asian Development Bank, Alliance for Rural Electrification and ISEA as a Consultant, Speaker and Trainer. He also started and executed ‘Eradication of Darkness’ campaign with Ministry of Power India

Siddhartha Kashyap

Director- Business Development

Nikhilesh Sharma

Head - Projects

Dhriti Pande

Manager- Innovative Solutions

Anurag Jadli

Manager- Social Impact

Varun Kumar Duggal

Advisory Innovation

Srishti Sharma

Assistant Manager- Research & Policy

Gayatri Chawda

Assistant Manager- Environmental Impact

Gaurav Balani

Assistant Manager-Design and Engineering

Join Us in Solving the Big Problems

QUESTIONS ?

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