



Upcycling to create Fire Extinguisher Cabinets!

The team of 100MW TPREL Solar Power Plant Raghnesda, Gujarat upcycled the project scrap to create a cabinet for **FIRE EXTINGUISHERS**. This cabinet protects the Fire Extinguisher from direct sunlight and rain.

A difference of over 5 degrees Celsius between indoor and outdoor temperatures is anticipated to increase the shelf life of fire extinguishers.

Benefits:

1. Improved life of fire extinguisher
2. Cost reduction and resource saving.

Green Heroes: Amin Shahu, Mayur Joshi, Shrangesh Shrivastava, Haresh Thakor, Sandip Karande and Aditya Khirade



Reusing metal scrap for safe disposal of metallic and non-metallic scrap!

Handling and shifting of scraps from different elevation of boiler to boiler '0' metre is tedious, unsafe and time taking. With a variety of scrap such as Ash, refractory, boiler tubes, shields etc. generated in the boiler during shutdown, it was important to come up with a solution that was safe, cost effective and saved man-hours.

Reusing a scrap 10 inch ash slurry disposal pipe, a scrap disposable chute was created with multiple openings at different elevations. This ensured that scrap weighing more than 1 ton was reused effectively.

Benefits:

- Supported the Greenolution drive by reusing 1000 kg + of metal scraps .
- Saved cost, ₹60K (Approx.)
- Improved safety by reducing the hazards of manual shifting of scrap
- Upliftment of employee morale
- Safety & environment awareness in the workmen.

Green Heroes: Tapas Mahato, Rahul Kumar, Vaibhav Grover and M/s Steelcon



Recycling RO reject water for gardening!

The water rejected from a home RO water filtration system is alarming. To ensure effective use of water, Jitendrakumar Patel, residing in CGPL, drilled a hole in a window frame and collected the rejected water in a water drum kept outside the window.

This water is then used for gardening purposes by Jitendrakumar. By doing this he has effectively reused 10,000/- litres of water in a year. We hope more will follow his example and save water for the future generations.



Green Hero : Jitendrakumar Ishvarbhai Pate



Implementation of Digital Timer Module Based Street Light Operation!

A digital timer module sensor acts on the principle of sensing low visibility of the surrounding areas for automatic operation of street lights.

Our W.R.E.L 50 MW THALAK KARNATAKA SITE team has implemented the digital timer module based street light in the whole site. This prevents manual operation of the street light from the light junction box and contributes to the auxiliary power savings of the plant.

Since the implementation of the Digital Timer Module, the lights automatically turn ON at 18:50 PM and turn off at 5:50 AM.

Benefits:

1. Power Saving
2. Safety from incidents of electrocution by reducing human involvement.

Green Heroes: A.R.G.MULLA and Mr. SHIVRAJ . P



Green Hero from Kalinganagar!

During the testing of Unit-3 Main Oil Tank (MOT) oil quality, it was found that the lube oil contained a high proportion of water. It was found that the oil can be reused if the impurity, i.e water, was separated from it.

To achieve this, oil flushing was carried out manually and the oil sample collected was tested several times. Post sampling for 87 times, almost 348 litres of flushing oil was collected separately which contained water as an impurity. The water from the Main Oil Tank was separated through the Centrifuge LVDH system and the oil, nearly 330 litres of pure lube oil, was reused.

Safety and Environmental Impact:

1. Re-usage of flushed lube oil minimised the negative impact on the environment.
2. Contamination of soil, groundwater, and animals was avoided.
3. Prior to re-using the flushed lube oil, it was stored in a storage facility with fire hazard prevention measures in place.

Savings:

O&M cost of Rs. 46,292/-
330 litres of lube oil reused.

Green Hero: Shah Sanjay