

## Challenge #1:

### Design a revolutionary monopole transmission tower

In India, inadequate last mile connectivity is a major obstacle in supplying electricity to all.

The new-age transmission towers can help overcome this obstacle. The last innovation in these was the shift to monopole from lattice towers.

Design a cutting-edge monopole transmission tower that will be a game changer.

**Reference 1:** Watch this [video case-study](#) (by National Grid UK) to get a overview of what a monopole transmission tower is and its benefits

**Reference 2:** Also, go through this [link](#) to get a technical overview of the requirements and details of the category.

#### Basic requirements

**Design enhancements:** The solution should have more utilities and/or features than the existing monopole transmission tower design to turn it into a smart pole or a multi-purpose pole. It should also have a reduced footprint than the conventional monopole towers.

**Installation improvements:** Less time and cost for installation should be a key aspect of your solution.

**Production improvements:** The solution should involve more efficient production process by reducing wastage of materials. It should also offer an alternative to galvanising to prevent rusting of the monopole.

#### The solution needs to be:

- Scalable (easily replicable across India)
- Affordable (by using easily available materials)
- Easy to maintain

If you have any queries or need clarifications about the problem statement, please send an email to [info@navachar.in](mailto:info@navachar.in)