



National Grid

BMP Distribution and ONE Future Partner Since 2016

nationalgrid

Background

National Grid is committed to promoting environmental sustainability by adopting best practices in resource management and implementing mitigation and adaptation measures. The company is committed to a target of reducing greenhouse gas (GHG) emissions from its operation by 80% by 2050, and reducing methane emissions is an integral component of that target and National Grid's overall climate change strategy.

Historical Highlights

Replacement of Leak Prone Pipes (LPP)

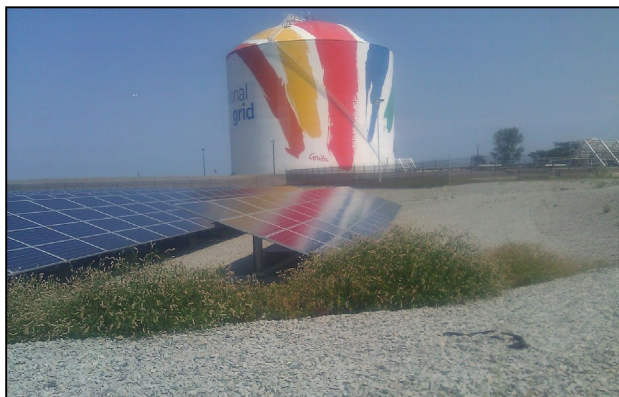
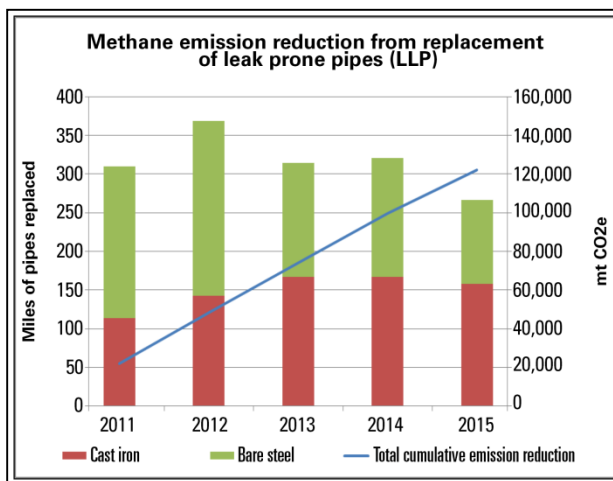
Between 2011 and 2015, National Grid has replaced over 1,500 miles of leak prone cast iron and bare steel pipes with plastic. This replacement effort has resulted in reducing methane emissions by 122,175 mt CO₂e per year.

LNG Plants

LNG operations have implemented various initiatives that have led to GHG reductions of 2,600 tons of CO₂e per year. Those initiatives include:

- Energy efficiency improvements for boil-off gas systems using various technologies at different plants
- Modified cooling water systems that use less energy
- Installed microturbines with combined heat and power
- Energy efficiency upgrades for lighting, air conditioning, heaters and compressors

Please note that the reduction of emissions will increase as these initiatives are rolled out and implemented at remaining stations.



National Grid Historical Fact Sheet

Cast Iron Sealing Robots (CISBOT)

CISBOT is used as an anaerobic sealant for live gas cast iron pipes. Using CISBOT for sealing joints means there is no service interruption, less number of excavations and lower carbon footprint. National Grid was one of the companies that helped develop CISBOT technology. More than 10,000 joints have been sealed with CISBOT technology since 2009. National Grid has sealed more than 2,000 large diameters cast iron joints in various regions of the company.



Metering and Regulating Stations

National Grid has implemented the following company wide:

- Programmed elimination of mechanical couplings and drip pots
- Implemented new technology including use of low-bleed or no-bleed pilots
- Installed SCADA control to monitor control station

Third-Party Damages / Dig-ins

In order to reduce number of dig-ins, National Grid has been:

- Actively promoting the national Call Before You Dig Number (811)
- Educating excavators on the industry-wide best practices surrounding Safe Digging around correctly marked facilities
- Working to improve the company's Locate and Mark staff (in-house and contracted forces)
- Working to improve locate techniques, maps and records ,etc
- Integrating new technology and procedures when industry improvements are made