

IndianOil StartUp Fund

TPRE & BPRE Themes for Round 3 Applications for
online application of the portal <https://startupfund.indianoil.in>
(Last Date 30th June 2021)

ROUND 3 –TPRE Themes

1. Cost effective production of Ethanol / Methanol from Coal / Biomass etc.

2. Development and demonstration of Solid Oxide Electrolysis Cell (SOEC) cells for Green Hydrogen Production

3. Development and demonstration of High power density fuel cell stack for Drones

4. Modular solar based water treatment (desalination, detoxification, wastewater treatment etc.) System

5. [Novel Solar Cooking system](#)

6. Solar Based Cold Storage System

7. [Cost effective IoT enabled online Lubes Condition Monitoring tools](#)

ROUND 3 –TPRE Themes

8. Cost effective purification technology for Ethanol / H₂ / CBG

9. [Novel usage of Graphene for any Process / Product](#)

10. Novel usage of Carbon Nano Tubes (CNT) for any process / product

11. [Cost effective Carbon Capture Systems from Industrial Off Gases](#)

12. Novel usage of IndianOil products such as LPG, LDPE, HDPE, PET LLDPE etc.

13. [Pipeline Intrusion Detection Warning System \(PIDWS\)](#)

14. Theftnet type system – For early detection of pilferage

ROUND 3 –TPRE Themes

15. [Sensors to identify 'Passing Valves'](#)

16. Sludge Treatment inside Tanks

17. Development of robotics tools for internal tank cleaning and inspection

18. [Development of tools for online monitoring of Cathodic Protection \(CP\) current/ potential and coating condition](#)

19. Novel Battery swapping Systems

20. [High Thermal Efficiency Burners for Gaseous fuels](#)

21. IoT enabled solutions for Logistics Accountability / Optimization / Flexibility

ROUND 3 –TPRE Themes

22. Cost Effective and Eco-friendly Process / Technologies for Used / Spent Lube Oil

23. [Faster Crude Assay Predictive Tools](#)

24. Development of Cost-effective Adsorbent for capturing oxides of Sulphur & Nitrogen (Sox / Nox) from Furnace Stacks of Refinery and Petrochemical Plants

25. Innovative utilization of CO₂ emitted from Mono Ethylene Glycol (MEG) plant to reduce environmental impact

26. [Low Cost Filter Monitor for Aviation Refueller](#)

ROUND 3 –TPRE Themes

27. Development of suitable paste for detecting presence of Ethanol-Water in EBMS/Gasoline Tanks

28. Cost effective synthesis and commercial production of water detecting capsules for detecting moisture in ATF at field locations

29. Development of Cost-effective field test method for qualitative and quantitative determination of methanol with C3 and C4 Alcohols in M15 Fuel

30. Novel Cost-effective Automatic Tamper Evident Seal Dispensing Unit for LPG cylinder

Additionally, candidates may also suggest any other project pertaining to Energy Domain or of Societal Relevance

Round 3 - BPRE Themes

1. Novel Non-Fuel business proposition for touchpoints of IndianOil

2. Development of Low-cost Inflatable tanks (Max. 2500-liter (2.5 KL) capacity, with chambers less than 1000 litres) with delivery mechanism for HSD

3. Novel Cost-effective Automatic Safety Cap Counting Machine for LPG cylinder

4. Novel cost-effective LPG auto leak detection system

5. Operation of LNG facilities at ROs

6. Dispensing of IOC ClearBlue at Retail Outlets

7. Anti Counterfeiting solution for Servo Retail Packs

Round 3 - BPRE Themes

8. Data analysis of tank bottom and forecasting failure probability

9. SMART Township

10. Industry 4.0 Start-up Technologies for Oil & Gas Sector

11. Intelligent 3D modeling of Projects for Oil & Gas Sector

12. Development of Common Software for Terminal Automation System (TAS)

13. Mechanized Tank Cleaning at Retail Outlets

Additionally, candidates may also suggest any other project pertaining to Energy Domain or of Societal Relevance