



TECHNOLOGY READINESS LEVEL ASSESSMENT AT CSIR-NIScPR



CSIR-National Institute of Science Communication and Policy Research, Dr. K.S. Krishnan Marg, New Delhi-110012

FROM Lab Innovation to Societal Impact



What is TRL?

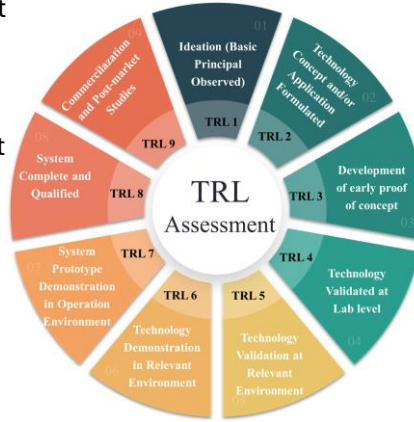
Technology Readiness Level (TRL) is a systematic measurement framework used to assess the maturity level of a technology from the stage of basic scientific research to full-scale commercialization and operational deployment.

Why TRL Assessment?

- Evaluation of technology maturity
- Informed decision-making for funding and investment
- Identification of gaps and reduction of risks
- Enhanced commercialization potential
- Support for evidence-based innovation policy

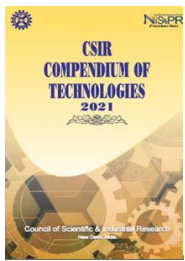
TRL Assessment at CSIR-NIScPR

- Development of Generic TRL Assessment Framework
- Development of Sectoral TRL Assessment Frameworks
- SOPs and Guidelines for TRL Assessment
- Validation and Standardization of TRL Assessment Framework and technologies
- Expert-led Technology Assessment
- Strengthening Technology Commercialization
- Capacity Building and Awareness



- Supports national missions like Atmanirbhar Bharat and Viksit Bharat @2047
- Builds a national network of domain experts for framework validation
- Supports CSIR labs, universities, academia, startups, and industries
- Strengthens India's innovation and commercialization ecosystem
- Facilitates evidence-based innovation and policy decisions

CSIR Compendium of Technologies 2021



- CSIR Compendium of Technologies 2021 consists of 313 CSIR Technologies with validated TRL scale
- Technologies listed at TRL 6 & above in Eight CSIR themes
- Listed promising (TRL 6 & 7) and market-ready (TRL 8 & 9)

NETRA-National Establishment for Technology Readiness Assessment

- CSIR-NIScPR has joined hands with NRDC for establishing a Technology Readiness Assessment facility at NRDC, New Delhi on December 2023 (MoA Signed between CSIR-NIScPR and NRDC)
- Deployable Model for TRL Assessment in India using CSIR-NIScPR's TRL Assessment Framework

Academic, R&D and Industry Partners Benefitted

R&D/Academic Institution

- DSIR
- NRDC
- TIFAC
- C-DOT
- IIT-Jammu
- IIT-Madras
- IIT Delhi
- IIT Roorkee
- IIT (ISM) Dhanbad
- Alliance University
- MS Ramaiah University of Applied Science
- Kumaun University
- Tamil Nadu Agricultural University

Industry/Start-ups

- AHODS Technologies India Pvt. Ltd.
- Pi Green Innovations Pvt. Ltd.
- Genelek Technologies Pvt. Ltd.
- Quantumzyme LLP
- Skytark Innovative Products LLP

Industry Partner



National Research Development Corporation (NRDC)

Strengthening Collaboration for technology assessment, commercialization and scaling of innovation for societal Impacts

KEY IMPACT AREAS

