"International Conference on 'Advancing Sustainable Development: Building a Resilient Future "

Clean and Green Sustainable Development Initiatives: EU-India Cooperation

Presented by Mr. Dinesh Chand Sharma

Agenda

➢About Project SESEI

➢Sustainable development, Circular Economy and SDGs

➢The SDGs in EU policies and Standardization work

  ➢European Green Deal, Circular Economy Action Plan etc.

➢Indian Government policies and standards in support on Circular Economy

  ➢Strategy paper on Resource Efficiency, National Resource Efficiency Policy, 2019 etc.

➢Conclusion

Project is a permanent presence in India

SESEI (**S**econded **E**uropean **S**tandardization **E**xpert in **I**ndia) *is a local face for the European standardization community in India: Dinesh Chand Sharma*

Why SESEI: India is a major trade partners for Europe, Increasing role of standards to gain market access and Evolving & complex nature of regulatory and standardization landscapes, sharing best practices, and work together on topics of mutual interest..

Priority Sectors/topics:

Digitization: Strategic technologies, digital governance, and digital connectivity

Smart Cities/Urban Development, ITS, Quantum Technologies, **Smart Grid/Meter**, Artificial Intelligence, 5G/6G, Open RAN, M2M/IoT (Cyber-Physical Systems), DECT, Data Privacy, Satellite Communication, Blockchain, Digital Signature, Smart Manufacturing, e-Accessibility, cybersecurity, digital skills, digital platforms including Research and Innovation etc.

Green & Clean technologies : **Clean Energy, Energy Efficiency** (Green ICT), Environment, Circular Economy including Resource Efficiency, Waste Management, Energy storage technologies, Electric mobility, Green Hydrogen, Advanced biofuels including R&I etc.

Other topics of mutual interests such as Rail, Ropeways, Machinery Safety etc.

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Sustainable development and SDGs, Circular Economy and its benefits

What is Sustainable Development?

Sustainable development = development that **meets the needs of the present without compromising the** ability of **future** generations to meet their own **needs**

To achieve this, it is crucial to harmonize **three core elements**:
- ✓economic development,
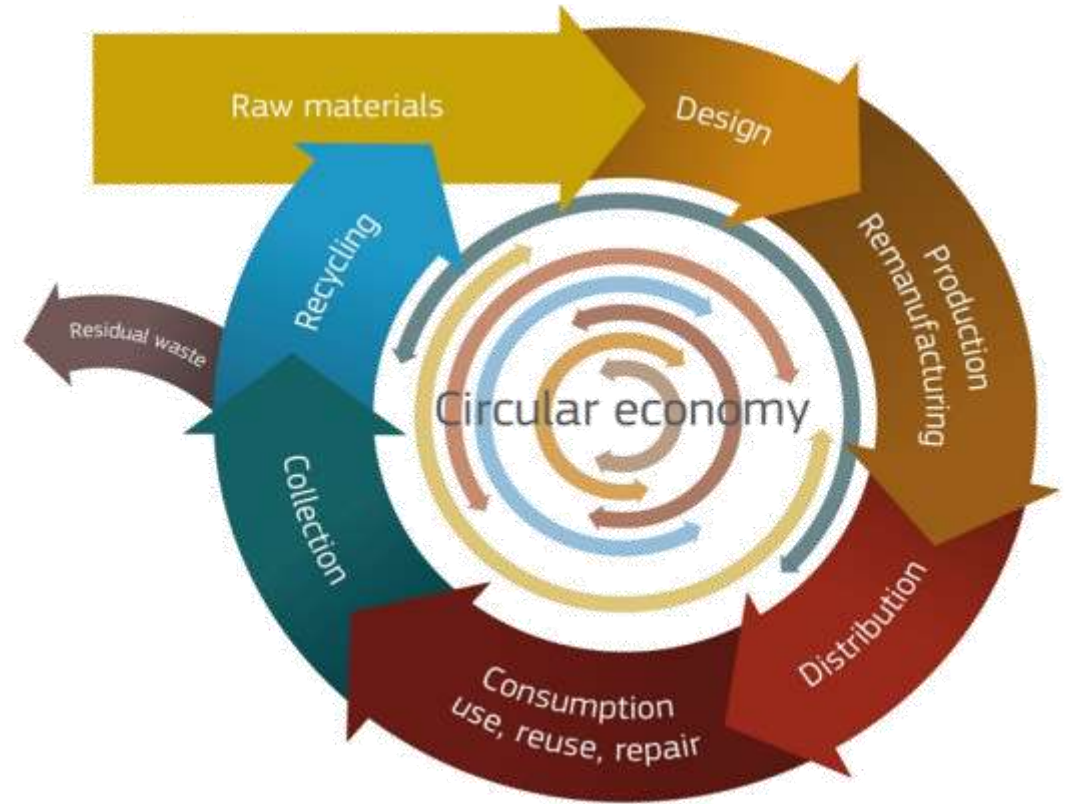- ✓social inclusion and
- ✓environmental protection.

Circular Economy & its benefits?

Circular Economy is a model of production and consumption:

- ✓ involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.
- ✓ In this way, the life cycle of products is also extended.

Why do we need to switch to a circular economy: benefits?

- ✓ To protect the environment
- ✓ To reduce raw material dependence
- ✓ To create jobs and save cost - consumers money

What are the SDGs?

- **Sustainable Development Goals (SDGs)** were adopted by all United Nations Members in 2015

  ✓ A universal **call to action** to end poverty, protect the planet and ensure that all people enjoy peace and prosperity **by 2030**

  ➢ **Includes 17 Goals => 169 targets**

    ✓ It's a blueprint to achieve a better and more sustainable future for all,

    ✓ It also address the global challenges we all as a humanity face: poverty, inequality, climate change, environmental degradation, peace and justice

- Implementation and success will rely on all stakeholders including the **standardization communities**.

The SDGs in Europe

European Commission is committed to implement the 2030 Agenda while mainstreaming the 17 SDGs goals and related targets across all its policies and its programmes

SDGs: 6 European Commission's priorities

- **European Green Deal**: Europe aims to be the first climate-neutral continent by becoming a modern, resource-efficient economy.

- **An economy that works for people**: The EU must create a more attractive investment environment, and growth that creates quality jobs, especially for young people and small businesses.

- **Europe is fit for the digital age**: The EU's digital strategy will empower people with a new generation of technologies.

- **A stronger Europe in the world**: The EU will strengthen its voice in the world by championing multilateralism and a rules-based global order.

- **Promoting European way of life**: Europe must protect the rule of law if it is to stand up for justice and the EU's core values.

- **A new push for European democracy**: We need to give Europeans a bigger say and protect our democracy from external interference such as disinformation and online hate messages.

A European Green Deal

In December 2019, European Commission unveiled its European Green Deal (EGD), an ambitious plan to transform the EU's economy into a fair, sustainable, and prosperous one.
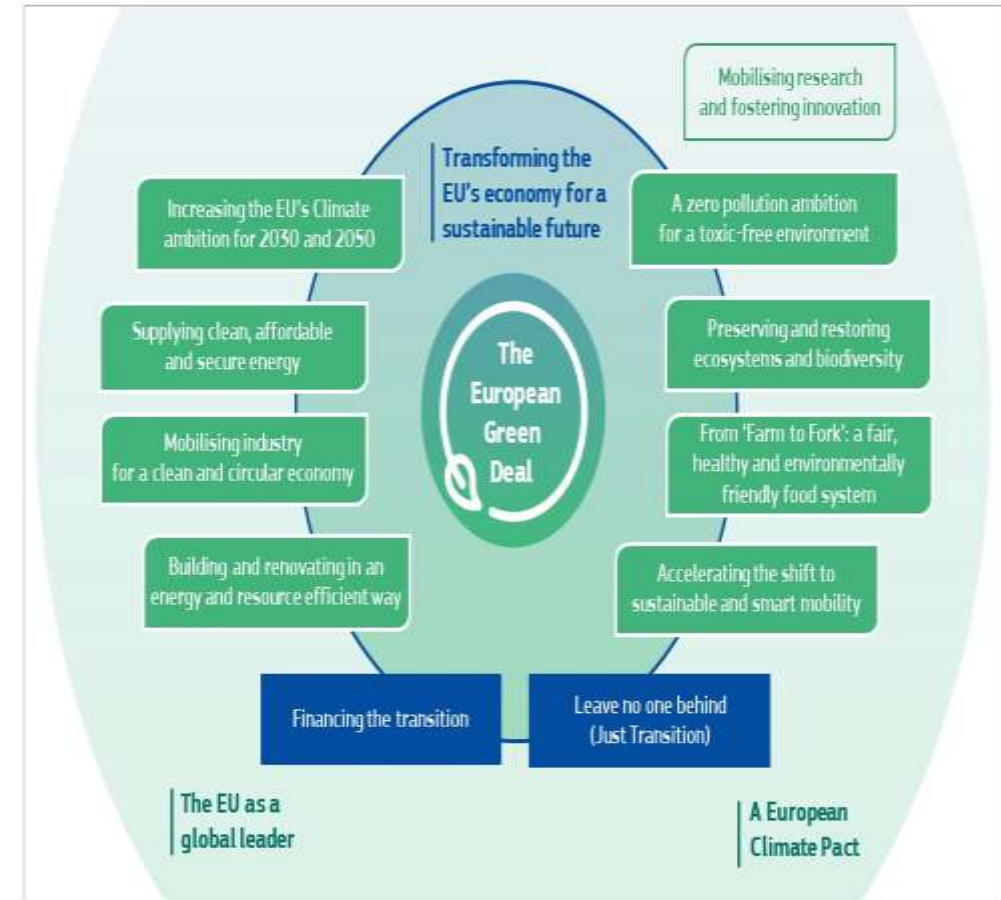
EGD provides an action plan, to boost efficient use of resources by moving to a clean, circular economy and to restore biodiversity and cut pollution.

 ✓ It covers all sectors of the economy, notably transport, energy, agriculture, buildings, and industries such as steel, cement, ICT, textiles and chemicals.

It also sets imp. policy goals to further advance the sustainable transition of the packaging value chain:

 ✓ Ensuring that all packaging in the EU market is reusable or recyclable in an economically viable manner by 2030.

 ✓ Define measures to reduce packaging waste.

 ✓ Promoting a robust Single Market for secondary raw material to increase recycling.

Commission has estimated that achieving 2030 climate and energy targets will require EUR 260 billion of additional annual investment, about 1.5% of 2018 GDP.
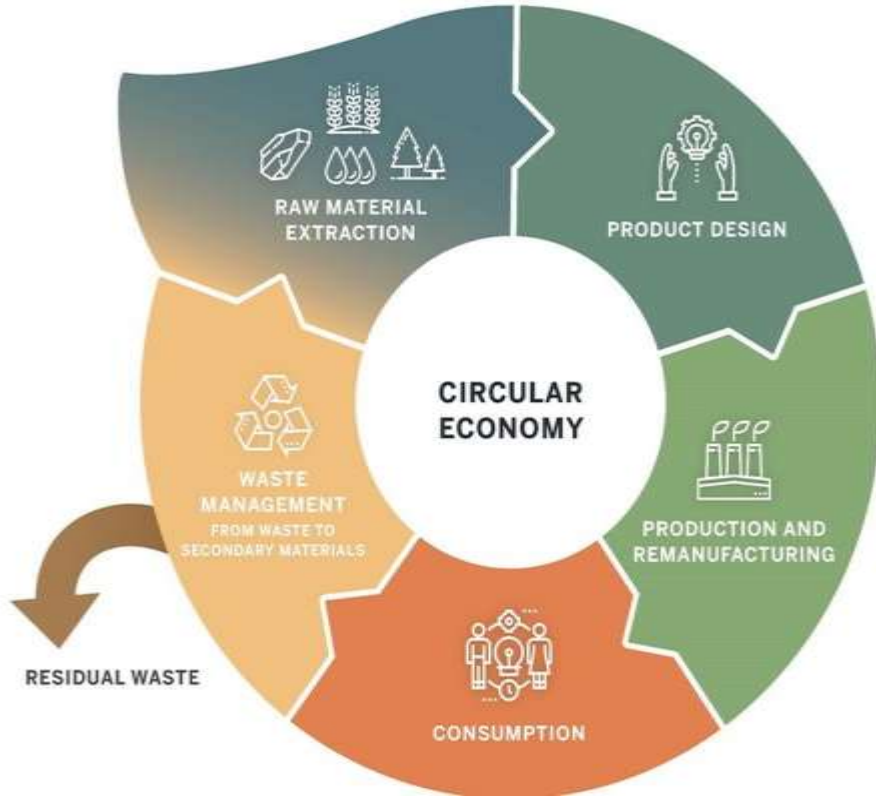
Circular economy action plan

European Commission released its new Circular Economy Action Plan (CEAP) in support of European Green Deal on 11th March 2020.

- ✓ One of main building blocks of European Green Deal for setting Europe's new agenda for sustainable growth.

35 actions during the entire life cycle of products:

- ✓ make **sustainable products** the norm in the EU

- ✓ **empower** consumers and public buyers

- ✓ **focus on key product value chains**: electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients

- ✓ ensure **minimal waste**

- ✓ make circularity work for **people, cities** and **regions** and **lead global efforts** on circular economy

Green Claims Directive proposal

1. **Protect consumers and companies** from greenwashing and enable consumers to contribute to accelerating the green transition by making informed purchasing decisions based on credible environmental claims and labels;

2. **Improve the legal certainty as regards environmental claims** and the functioning of the internal market, boost the competitiveness of economic operators that make efforts to increase the environmental sustainability of their products and activities, and create cost saving opportunities for such operators that are trading across borders.

3. The proposed Green Claims Directive together with proposal on common rules promoting the repair of goods make up the third package of circular policies that deliver on the Commission's commitments in the Circular Economy Action Plan.

   ✓ The first package included the proposal for Eco-design for Sustainable Products Regulation (ESPR), the EU Strategy for Sustainable and Circular Textiles, and the proposal for Empowering consumers for the green transition.

   ✓ The second package included the proposals for the Packaging and Packaging Waste Regulation, the communication on biodegradable, biobased and compostable plastics and the proposed EU Certification for Carbon Removals Regulation.

Ecodesign in Europe: Standardization

- **EN Standards** are tools to support the transition to a Circular Economy while supporting EU legislation and climate targets, promoting best practices, optimizing installations & systems and improving energy efficiency

- **Under Ecodesign Directive (2009/125/EC) having requirements on reducing energy consumption,** many **standards have been developed which:**

  - ✓ provides manufacturers with dedicated methods for enabling them to measure the **performance/energy efficiency** of their products against the requirements imposed by the Regulations
  - ✓ Legislation requesting standards to support **ecodesign** requirements for **material efficiency aspects** of energy-related products (**ErP**):
    - Extending product lifetime;
    - Ability to re-use components or recycle materials from products at end-of-life;
    - Use of re-used components and/or recycled materials in products

Ecodesign for **S**ustainable **P**roducts **R**egulation [ESPR]

"Make sustainable products the norm"

The Sustainable Product Initiative (**SPI**) will **revise** the **Ecodesign Directive** and propose additional legislative measures as appropriate (like the "**D**igital **P**roduct **P**assport")

Consumers, the **environment** and the **climate** will benefit from products that are more:
durable, reusable, repairable, recyclable, and energy-efficient

In March 2022:

* Proposal for a **new Ecodesign for Sustainable Products Regulation**, building on the 'Ecodesign approach' to set product-level requirements

* Proposal for a new strategy to make **textiles** more durable, repairable, reusable and recyclable

* Proposal for the revision of the **Construction Product Regulation**

ESPR scope is extended to cover also <u>non-energy related</u> products like textiles and construction products and more.

CEN-CENELEC Guides

- **CEN Guide 4** - Guide for addressing environmental issues in product standards
  - **Environmental Checklist** - The reference tool for standards writers to include environmental aspects in their standards.

- **CEN Guide 15** - Guidance document for the development of service standards
  - **Service Environmental Checklist**

- **CEN Guide 16** - Guide for addressing **chemicals** in standards for **consumer-relevant products**

- **CEN-CENELEC Guide 32** - Guide for addressing climate change adaptation in standards

- **CEN-CENELEC Guide 33** - Guide for addressing environmental issues in testing standards
  - **Checklist for Testing standards**

- Under revision to align with latest **EU environmental policy and directives**

Indian Government policies in support of Circular Economy

Strategy Paper on Resource Efficiency

- In November 2017, Govt. think tank NITI Aayog along with EU Delegation to India had prepared a **Strategy paper on Resource Efficiency**.

- As a follow up, a status paper titled "Resource Efficiency & Circular Economy – Current status and Way forward" was also prepared & released:

  ✓ Status paper is based on findings from sectoral strategy papers on **steel**, **aluminium**, **E-waste and Construction and Demolition waste** as prepared by concerned ministries/departments in association with **NITI Aayog** and other key stakeholders including **EU delegation to India**.

  ✓ It brings out **30 recommendations** out of which following recommendations have identified as priority actions.

    ▪ Formulation of a National Policy on RE/CE,
    ▪ Mainstreaming RE&CE in existing flagship missions like Swachh Bharat Abhiyan, Smart Cities, Make in India, Start-up India, Digital India etc.
    ▪ Establish a national coordinating body - Bureau of Resource Efficiency (BRE) to implement and achieve national RE/CE goals.
    ▪ A Modern Recycling Industry with level playing between primary and secondary producers,
    ▪ R&D for development of scalable technologies for RE & CE, and
    ▪ Development and promotion of skill and capacity building programmes for informal sector.

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National Resource Efficiency Policy, 2019 (Draft)

- **Ministry of Environment, Forests and Climate Change** prepared a **National Resource Efficiency Policy 2019** (draft)

  ✓ National policy is to drive the country towards **circular economy** through efficient use of available material resources, based on principle of 6R and 'green public procurement'.

     ✓ *The 6R stands for reduce, reuse, recycle, redesign, re-manufacture and refurbish*

  ✓ It also pitches for moving towards '**zero landfill'** *approach* in the country, hinting at possibility of imposing 'landfill taxes' and 'high tipping fees' for bulk generators of waste so that they can move towards optimal use of materials and better waste management.

  ✓ Suggest establishment of **a National Resource Efficiency Authority (NREA),** *which* would be supported by an **Inter-Ministerial National Resource Efficiency Board** to guide on the critical aspects for policy implementation.

  ✓ It plans to **offer tax benefits** on recycled materials, green loans to SMEs and soft loans to construct waste disposal facilities, apart from setting up **Material Recovery Facilities (MRF)**.

  ✓ Manufacturers and service providers would be required to use more recycled or renewable materials and awareness would be created among consumers to indicate the shift.

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Committees to expedite transition from linear to circular economy

- 11 committees for 11 focus areas headed by the concerned line ministries, officials from Ministry of Environment, Forests and Climate Change (MoEFCC), Govt. think tank - NITI Aayog, domain experts, academics and industry representatives:

S. No.	Focus Area	Concerned Line Ministry
1	Municipal Solid Waste and Liquid Waste	Ministry of Housing and Urban Affairs
2	Scrap Metal (Ferrous and Non-Ferrous)	Ministry of Steel
3	Electronic Waste	Ministry of Electronics and Information Technology
4	Lithium Ion (Li-ion) Batteries	NITI Aayog
5	Solar Panels	MNRE
6	Gypsum	Department for Promotion of Industry and Internal Trade
7	Toxic and Hazardous Industrial Waste	Department of Chemicals and Petrochemicals
8	Used Oil Waste	Ministry of Petroleum and Natural Gas
9	Agriculture Waste	Ministry of Agriculture and Farmers' Welfare
10	Tyre and Rubber Recycling	Department for Promotion of Industry and Internal Trade
11	End-of-life Vehicles (ELVs)	Ministry of Road Transport and Highways

- **Focus areas includes end-of-life products**, recyclable materials, wastes that either continue to pose considerable challenges or are emerging as new challenge hence must be addressed in a holistic manner.

- Committees to prepare **comprehensive action plans** for transitioning from linear to circular economy in their respective focus areas.

- Carry out the necessary **modalities to ensure the effective implementation** of their findings and recommendations.

Policy on Circular Economy in Electronics and Electrical Sector (Draft)

- In May ,2021, Ministry of Electronics and Information Technology (MEITY) floated a **policy paper** that intends to replace the current **linear system** of 'take-make-dispose' in the electrical and electronics manufacturing sector to become **circular.**

- It **focuses** on the **life cycle of electronics** including

    - stages of raw material acquisition, design, manufacturing/production stage, consumption to end of life (e-waste) management, and secondary raw materials utilization.

- **recommends regulation** to increase sectorial warranty from 2 to 6 years, measures against planned obsolescence, legal warranty of second hand products and promoting green public procurement (GPP) by government agencies.

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Standardization in support of CE/RE: India

In India, Bureau of Indian Standards (BIS) is the National Standard Organization and is addressing the subject of CE and RE through its various Technical Committees:

- **ETD 43: Standardization of Environmental Aspects for Electrical and Electronic Products**

  - ✓ IS 16584: 2017 & IEC/TR 62635 : 2012 Guidelines for End-of-Life Information Provided by Manufacturers and Recyclers and for Recyclable and for Recyclability Rate Calculation of Electrical and Electronic Equipment

- **CHD 33: Solid Waste Management Sectional Committee**

  - ✓ (a) Specifications, Terminology, methods of sampling and characterization of solid waste (Excluding Bio- Medical & Nuclear Waste), (b) Codes of Practices on reduction, recycling, reuse and treatment of Solid wastes (Excluding Bio-Medical & Nuclear Waste), (C) Guidelines and codes of practice for Solid waste disposal (Excluding Bio-Medical)

- **PCD 12: Plastics**

  - ✓ (1) IS 14534: 1998: Guidelines for the recovery and recycling of plastic waste, (2) IS 14535: 1998: Indian Standard for Recycled plastics for the manufacturing of products – Designation

- **LITD 31:Cloud Computing, IT & Data Centres**

  - ✓ Assessment methods, design practices, operation and management aspects to support **resource efficiency, resilience and environmental sustainability** for and by information, data centres and other facilities and infrastructure necessary for service provisioning.

EU-INDIA initiatives

EU-India Clean Energy and Climate Partnership

- In 2016, the EU and India established the **EU-India Clean Energy and Climate Partnership** **(CECP),** which promotes access to and dissemination of clean energy and climate-friendly technologies and encourages research and the development of innovative solutions.

- Current areas of collaboration include activities in offshore wind energy, rooftop solar and solar parks, integration of renewable energy and storage, smart grids, biofuels and energy efficiency in buildings.

EU-India Summit to roadmap & meeting

- Endorsed "**EU-India Strategic Partnership: A Roadmap to 2025**" as a common roadmap to guide joint action and further strengthen the EU-India Strategic Partnership.

- Through this roadmap, both sides have agreed on many provisions to support and strengthen cooperation between India and EU including CE/RE provisions:

  - ✓ Strengthen cooperation on environmental matters through JWG on **Environment** as well as Environmental Forum

  - ✓ Strengthen dialogue and establish an **EU-India Partnership on RE and CE** - engagement and partnership between green businesses, particularly SMEs.

  - ✓ Contribute to RE & CE strategies, formulating guidelines on aspects related to collection, handling, processing and recycling of waste.

  - ✓ Enhance cooperation on **standardization** and sharing of best practices in fostering an efficient and sustainable use of natural resources, notably by promoting more recycling and resource recovery, in formal and informal economy.

  - ✓ Implement Partnership for **Smart and Sustainable Urbanisation**, namely supporting smart and sustainable cities, promoting investments in sustainable urbanization, promoting climate action and disaster risk reduction in cities, developing effective solid waste management & treatment and promotion of circular economy, developing effective water supply & sewage system and innovation in housing.

- **Virtual meeting in May'2021**: EU also invited India to join the Global Alliance on Circular Economy and Resource Efficiency.

  - ✓ Accelerate the implementation of new CE & RE Partnership intensify bilateral exchanges on relevant regulatory approaches, market-based instruments and business models.

EU-India Trade Technology Council (TTC)

Prime Minister of India and EU Chairman agreed to set up Trade and Technology Council (TTC) in February 2023.

- ✓ **WG-1 on Digital & Strategic Technologies** : Global interoperable standards,- 5G/6G, IoT, Machines to Machines (M2M) communications, AI, quantum communications and network security, O-RAN, Microelectronics & supply chain resilience, Digital Skills, Digital Public Infrastructure, High-Performance Computing & Quantum Technology, Telecom and ICT standardisation

- ✓ **WG-2 on Green & Clean Energy Technologies**: Waste-water management, Recycling of Batteries for Electrical Vehicles, Standards in the Research Domain

- ✓ **WG-3 on Trade Investment and Resilient Value Chains**: Resilient Value Chains, resolve bilateral market access issues, exchange information on mechanism for FDI screening, address global and multilateral trade issues

Ministerial meetings of the TTC at least once a year, with the venue alternating between the EU and India.

- • 1st EU-India ministerial meeting took place in Brussels on 16 May 2023. The next ministerial meeting is planned for early 2024 in India.

- • WG-2 meeting with MNRE, PSA and DST held on 10th and 11th October covering R&D and Standards around the topics of Waste to Green Hydrogen, Marine Plastic Litter and Wastewater, E-Mobility – Circularity aspects of batteries & interoperability of Charging Infrastructure.

EU Project on Resource Efficiency Initiatives (EU-REI) for India

- Supporting India in the implementation of **United Nations global Sustainable Consumption and Production (SCP)** agenda by way of adopting European/international standards and best practices in the business on resource efficiency and fostering the efficient and sustainable use of natural resources.

- Project works towards creating a dialogue on the need for resource efficient approaches in India among key government and non-governmental organisations, businesses, students, media and the general public

- Primary sectors of interest are mobility, buildings and construction, renewable energy (photovoltaics), and resource recovery from waste (e-waste and plastics and packaging).

- EU-REI also undertaken a study to explore the adaptation of European/international standards for e-waste management to the Indian context to further the objective of better management of e-waste through responsible collection, transportation & storage, depolluting and recycling.

  - Focus on IT equipment in line with the Indian "Strategy on Resource Efficiency in the Electrical and Electronic Equipment Sector".

- Activities:
  - ✓ RE strategy (Nov. 2017)
  - ✓ EPR Sectoral Study on E-waste and Plastics (Sept. 2018)
  - ✓ EEE Strategy (MeitY and Niti Aayog, Jan. 2019)
  - ✓ Circular Economy Mission Sept. 2018
  - ✓ MeitY E-waste Awareness Scheme – Monitoring and Evaluation support

Conclusion

- EU and India are taking necessary actions towards achieving sustainable development goals (SDGs) set by the United Nations (UN) which aim to end poverty, protect the planet, and ensure peace and prosperity for all (UN, 2015).

- Circular economy has the potential to contribute significantly to SDGs

- Harmonized/International standards play an important role in implementing the sustainable use of resources and energy while protecting consumers, workers and the environment.

- India-EU cooperation in the SDG Era needs to be strengthened to unlock the Potential of a Development Partnership in Transition

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