GREEN FINANCE

CCP CHAPTER 22 MODULE

GREEN FINANCE ♻️

- **Green Finance** refers to the financing of **eco-friendly** projects aimed at **sustainable development**.
- This concept is based on the principle that **Earth's resources** are meant for both current and **future** generations.
- **Sustainable development** attempts to **prevent** or **minimize** these ecological side effects.

22.2 WHY GREEN FINANCE? 🌱 💰

- **Erratic weather** affects **food production**, causing **price volatility** and **financial instability**.
- **Extreme climate events** (floods, droughts, storms) harm infrastructure, produce **economic losses**, and raise the risk of **loan defaults**.
- **Massive investments** are needed to **combat** global warming. Public funds alone are **insufficient**.

- **Institutional finance** plays a **vital** role in supporting **climate-friendly** projects, ensuring **sustainable** growth. Hence, the critical importance of **green finance**.

22.3 GLOBAL SCENARIO 🌍

Global warming is man-made warming of Earth's atmosphere. **Climate change** refers to **natural** shifts in climate. However, nowadays, both terms are used **interchangeably** because **human-induced warming** strongly **affects** the climate.

Key Milestones in Climate Action 🏛

1. **Montreal Protocol (1987)**: This was the **first global agreement** to protect the **ozone layer** by **phasing out ozone-depleting substances (ODS)** like **CFCs (chlorofluorocarbons)** used in refrigeration and aerosols.

2. **UN Framework Convention on Climate Change (1994) :** A global treaty aimed at stabilizing greenhouse gas (GHG) emissions to prevent dangerous climate change.
3. **Kyoto Protocol (1997):** The first international treaty to set legally binding targets for developed countries to **reduce Greenhouse Gas emissions**.

4. **Paris Agreement (2015)**: A landmark global pact where all countries **committed to taking climate action.** Aim to keep global warming well below **2°C**.
5. **Kigali Amendment to Montreal Protocol (2016)** : Strengthened the Montreal Protocol by adding a **commitment to phase down hydrofluorocarbons (HFCs)**, which are powerful greenhouse gases used in refrigeration and air conditioning.

Circular Carbon Economy (CCE) 🌱 🔄

Focus on a **technology-neutral**, holistic approach for **energy stability**, economic growth, and **sustainability**. The **4 R's** of CCE:

1. **Reduce**: Use lower-carbon fuels and mitigation options.
2. **Reuse**: Capture and utilize **carbon** without chemically altering it.
3. **Recycle**: Convert carbon into **new** value-added products (by chemical changes).
4. **Remove**: Capture and store carbon (CCUS), or direct air capture and natural sinks.

Global Programs for Green Finance 🌐

- **Equator Principles** (EP) for financial institutions :
- **United Nations Environment Programme** (UNEP)
- **Principles for Responsible Investment** (PRI)

- **Sustainable Stock Exchanges**: Some stock indices track firms using **Environment, Social, and Governance (ESG)** principles (e.g., BSE & NSE in India).

These initiatives encourage **financial** and **non-financial** entities to adopt **eco-friendly** financing.

GLOBAL GREEN FINANCE REGULATORY FRAMEWORKS ⚖️

Commonly, these policies fall into **four** broad categories:

1. **Sustainability Disclosures**
    - **Financial** and **non-financial** firms must regularly **report** on their **ESG-related** risks.
    - Inspired by **G20** efforts and **Task Force on Climate-related Financial Disclosures (TCFD)**.
2. **Directed & Concessional Lending**
    - Banks/FIs refinance **renewable energy** and other **green** projects at **low interest** rates.
3. **Micro & Macro-Prudential Regulations**
    - **China (2006)**: Lending rules linked to **environmental** compliance.
    - **Lebanon (2010)**: **Differential reserve requirement** based on banks' green loans.

- **Brazil (2011)**: Adjustments in capital adequacy processes for environmental and social risk.

4. **Green Financial Institutions**
    - Many countries formed **special green banks** or used development institutions (e.g., **UK Green Investment Bank plc** set up in 2012).
    - **ADB**, **USAID** assist countries by offering **partial** credit/bond guarantees.

QUICK RECAP 📌

1. **Green Finance** supports **eco-friendly** projects for **sustainable** development.
2. **Climate crises** create **financial risks** (e.g., credit defaults, infrastructure losses).
3. **Global efforts** (Montreal Protocol, Kyoto, Paris Agreement) aim to contain **temperature rise**.
4. **Circular Carbon Economy** provides a **systemic** approach: Reduce, Reuse, Recycle, and Remove carbon.
5. **Institutions** dedicated to **green finance** (public or private) play a critical role in funding large-scale **environment-friendly** initiatives.

22.4 INDIAN EXPERIENCE

India began emphasizing **green finance** in **2007** with an **RBI notification** on *"Corporate Social Responsibility, Sustainable Development and Non-Financial Reporting – Role of Banks"*. This was likely the first official document in India highlighting **global warming** and **climate change** in the context of **sustainable development**.

Key Steps:

1. **National Action Plan on Climate Change (NAPCC, 2008)**: Outlined broad policy for **mitigating climate impacts**.
2. **Climate Change Finance Unit (CCFU, 2011)**: Established by the **Finance Ministry** as a nodal agency coordinating institutions for green finance.
3. **SEBI Initiatives**:
    - Made **sustainability disclosure** compulsory for **top 100 listed entities**.
    - Issued **green bond** disclosure guidelines in **2017**.
4. **Companies Act, 2013 – Section 135**: Requires certain large companies to spend at least **2%** of average net profits (of the preceding 3 years) on **Corporate Social Responsibility (CSR)**.

RBI's Measures:

- In **2015**, RBI brought certain **renewable** or **non-conventional energy** projects into the **priority sector lending** (PSL) category.
- RBI uses **reports** and **communications** to raise **awareness** among public, investors, and banks regarding **green finance**.

Government of India:

- **FAME (Faster Adoption & Manufacturing of Hybrid & Electric Vehicles)**:
  - Launched in **two phases** (2015 & 2019) to support credit flow and reduce upfront vehicle costs (e.g., building charging stations).
- **SBI's Green Car Loans**: Offers **lower interest** (by 20 basis points) and **longer repayment** for **electric vehicles**.
- **Production Linked Incentive (PLI)**: The **Production Linked Incentive (PLI)** scheme is a **government initiative** that provides **financial incentives** to manufacturers for producing **high-efficiency renewable energy components**, such as **solar modules and batteries**.

Further RBI Action:

- **Expanded PSL for Renewables**:

  - Loan limit for firms in **renewable energy** from **₹15 crore** to **₹30 crore**.
  - Households can get up to **₹10 lakh** for **renewable projects**.
- **National Target**: 450 GW of **renewable energy** generation by **2030**.

22.5 METHODS OF GREEN FINANCING ♻️ 💰

22.5.1 Green Lending: It refers **to loans and advances provided by banks and financial institutions** to projects that meet environmental sustainability criteria.

22.5.2 Green Bonds 🌎

- **Fixed-income** instruments specifically for **climate/environment-related** projects.
- Funds raised are used for **renewable energy, clean transportation, pollution control, and climate adaptation**.
- Often come with **tax incentives** to attract investors.
- **World Bank** is the largest issuer as of 2020 (164 bonds worth US$14.4B).
- ~76% of India's green bonds (since 2015) are **USD-denominated**.

22.5.3 Sustainability Bonds 🤝

- **Sustainability bonds** are **fixed-income financial instruments** issued to finance projects that have both **environmental and social benefits**.
- They combine the features of **green bonds** (focused on environmental projects) and **social bonds** (focused on social development).

22.5.4 Sustainability-Linked Bonds 🤝 🔗

- **Sustainability-Linked Bonds (SLBs)** are a type of bond issued by companies that **commit to achieving specific sustainability performance targets**.
- Unlike **green or sustainability bonds**, which are tied to specific projects, **SLB proceeds can be used for general corporate purposes**.

22.5.5 Social Bonds 🏘️

a) **Social bonds** are **fixed-income financial instruments** issued to raise funds for projects that deliver **positive social outcomes**, especially for vulnerable or underserved communities.

b) Funds are used for initiatives like **affordable housing, healthcare, education, job creation, and food security**.

22.5.6 Climate Bonds 🌍 🔥

- These are a type of green bond specifically issued to **finance climate-related projects** that help combat climate change and promote environmental sustainability.
- Specifically aimed at **carbon emission reduction** or **climate change** mitigation/adaptation.
- All **climate bonds** are green, but **not all** green bonds are climate bonds.

Blue Bonds 🌊

These are type of sustainability bond specifically **issued to finance ocean and water-related projects** that promote marine conservation, sustainable fisheries, and clean water management. All **blue bonds** are **green**, but **not** all green bonds are blue.

22.6 GREEN ECONOMY 🌐

A **green economy** reduces **environmental risks** and **ecological** deficits, fostering **sustainable** growth without harming nature.

22.7 GREEN MONEY / GREEN DEPOSITS 💸

RBI Circular **DOR.SFG.REC.10/30.01.021/2023-24** (April 11, 2023) introduced a **framework** for **green deposits**:

- Encourages **Regulated Entities (REs)** to offer green deposits to customers.
- Aims to **protect** depositors' interests and help **fund** more **green** projects.
- Proceeds must align with India's **official green taxonomy**—e.g., activities promoting **energy efficiency**, **reduced greenhouse gases**, **climate resilience**, and **natural ecosystem** protection.

Green Money or **Eco-Currency**: Funds set aside for **environmental** upkeep/upgrades, often discussed in the context of a **green economy** or **low-carbon** society.

22.8 GREENWASHING 🚫

Greenwashing refers to the misleading practice **where companies or institutions falsely claim to be environmentally friendly** to attract consumers or investors, while their actual business practices harm the environment.