Carbon Watch App: Chandigarh

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Why in News

Chandigarh became the first state or Union Territory in India to launch **Carbon Watch,** a mobile application **to assess the carbon footprint of an individual.**

> A **carbon footprint** is the **total amount of greenhouse gases**—primarily carbon dioxide—released into the atmosphere by a particular human activity.

Key Points

- **About the App:**
    - The app focuses on individuals' actions and **calculates carbon footprint on the basis of Transport, Energy, Waste and Water consumption.**
    - It will **also provide information such as the national and world average of the emission,** and the individual's level of emission generation.
    - It **encourages people to be Climate-Smart Citizens** while making them capable of accessing their carbon footprint, along with providing them with steps to reduce it.
    - It also **sensitizes people about their lifestyle emissions,** their impact and possible countermeasures to mitigate the same.
- **Carbon Footprint:**
    - According to the **World Health Organization (WHO)**, a carbon footprint is a measure of the impact people's activities have on the amount of carbon dioxide (CO_2) produced through the burning of fossil fuels and is expressed as a weight of CO_2 emissions produced in tonnes.
    - It is **usually measured as tons of CO_2 emitted per year,** a number that can be supplemented by tons of CO_2-equivalent gases, including methane, nitrous oxide, and other greenhouse gases.
    - It can be a broad measure or be applied to the actions of an individual, a family, an event, an organization, or even an entire nation.

- **Carbon Footprint vs Ecological Footprint:**
  Carbon footprint is **different from ecological footprint.** While the carbon footprint measures the emission of gases that contribute to global warming, the **ecological footprint** focuses on measuring the use of bio-productive space.
- **Effects of Higher Carbon Footprint:**
  - **Climate change** is the ultimate effect of large carbon footprints. Greenhouse gases, whether natural or human-produced, contribute to the warming of the planet.
    - From 1990 to 2005, carbon dioxide emissions increased by 31%. By 2008, the emissions had contributed to a 35% increase in radiative warming, or a shift in Earth's energy balance toward warming, over 1990 levels.
    - According to **World Meteorological Organization (WMO)** records, 2011-2020 was the warmest decade on record, in a persistent long-term climate change trend.
  - **Depletion of Resources:** Large carbon footprints deplete resources on large scales, from a country's deforestation activities to one home's increased use of air conditioning.
- **Methods of Reducing Carbon Footprint:**
  - **Adopting the 4 R's-** Refuse, Reduce, Reuse, Recycle.
  - Driving **more-efficient vehicles** (or making sure that current vehicles are properly maintained), taking public transportation.
  - Individuals and companies can also offset some of their carbon dioxide emissions by **purchasing carbon credits,** the money from which can go into projects such as planting trees or investing in renewable energy.
  - Implementation of the Climate change conventions like the **Paris Agreement** and **Indian initiatives** for the same must be fast forwarded.
    Indian initiatives include **Nation Action Plan on Climate Change (NAPCC), National Wetland Conservation Programme,** etc.

Source: IE