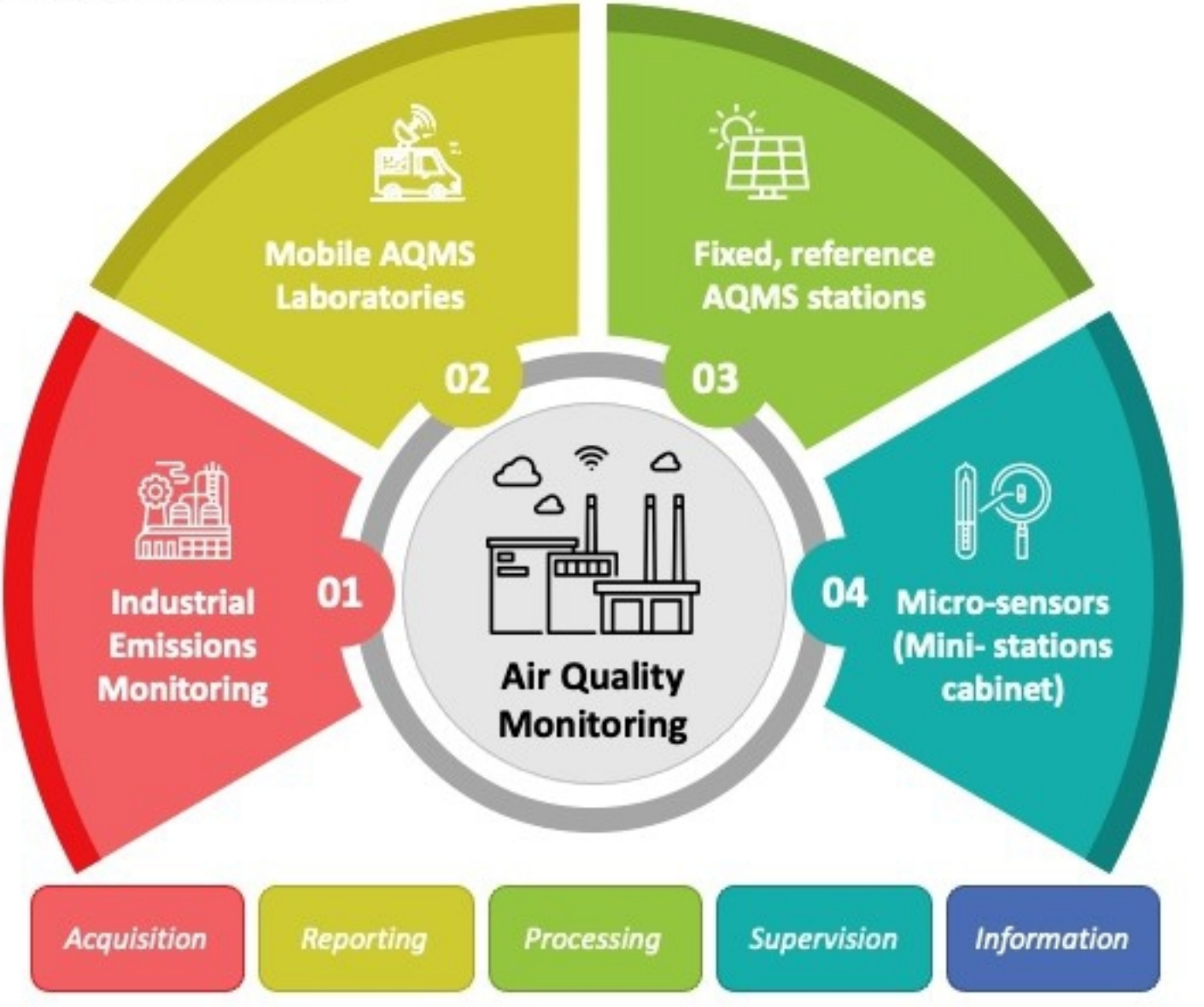
A Presentation On

Air Quality Monitoring System


Mobile AQMS Laboratories
02
Fixed, reference AQMS stations
03
Industrial Emissions Monitoring
01
Air Quality Monitoring
04
Micro-sensors (Mini- stations cabinet)
Acquisition
Reporting
Processing
Supervision
Information

Air Quality Monitoring

- **Monitoring Considerations**
  - Manual vs. automated (real-time, continuous) monitoring
  - Sampling time
  - Federal reference method (FRM) vs. equivalent method (EM)
- **Monitoring of Ambient Air Pollutants**
  - SO_2, NOx, CO, O_3
  - Hydrocarbons
  - PM_{10}, $PM_{2.5}$
- **Source Sampling and Monitoring**
  - Sampling train
  - Isokinetic sampling
- **Quality Assurance Programs**
  - Quality Assurance
  - Quality Control
- **Air Quality Monitoring Network**

4.1. Air quality standards

- The **National Ambient Air Quality Standards** (**NAAQS**) are standards established by the United States Environmental Protection Agency under authority of the Clean Air Act (42 U.S.C. 7401 et seq.) that apply for outdoor air throughout the country.

- Primary standards are designed to protect human health, with an adequate margin of safety, including sensitive populations such as children, the elderly, and individuals suffering from respiratory diseases.

- Secondary standards are designed to protect public welfare from any known or anticipated adverse effects of a pollutant.

4.2. Air quality monitoring

- The ambient standards is applicable for only two areas viz.
  - Industrial , Residential , Rural, and other areas
  - Ecologically Sensitive Area

- Ambient air quality data generated under National Ambient Air Quality Monitoring Programme (NAMP) has been compared with revised national ambient air quality standards