



NSSA

الهيئة الوطنية لعلوم الفضاء
National Space Science Agency

CO2SAT Project

Presented by:

Yaqoob Alqassab

yagoob.khalid@nssa.gov.bh

October 2024

NSSA's Space and Earth Sustainability Activities



NSSA's involvement in the 'Arab 813' satellite mission

Research studies about space debris localization and identification



The NSSA collaboration with Star.vision and Oman Lens focus on developing AI-based remote sensing algorithms

Utilizing Earth observation data for sustainability



CO2SAT space mission in collaboration with University of Leicester and Geospatial Insights

Space for Sustainability program in collaboration with MBRSC

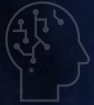


NSSA's Space and Earth Sustainability Activities



NSSA's involvement in the 'Arab 813' satellite mission

Research studies about space debris localization and identification



The NSSA collaboration with Star.vision and Oman Lens focus on developing AI-based remote sensing algorithms

Utilizing Earth observation data for sustainability

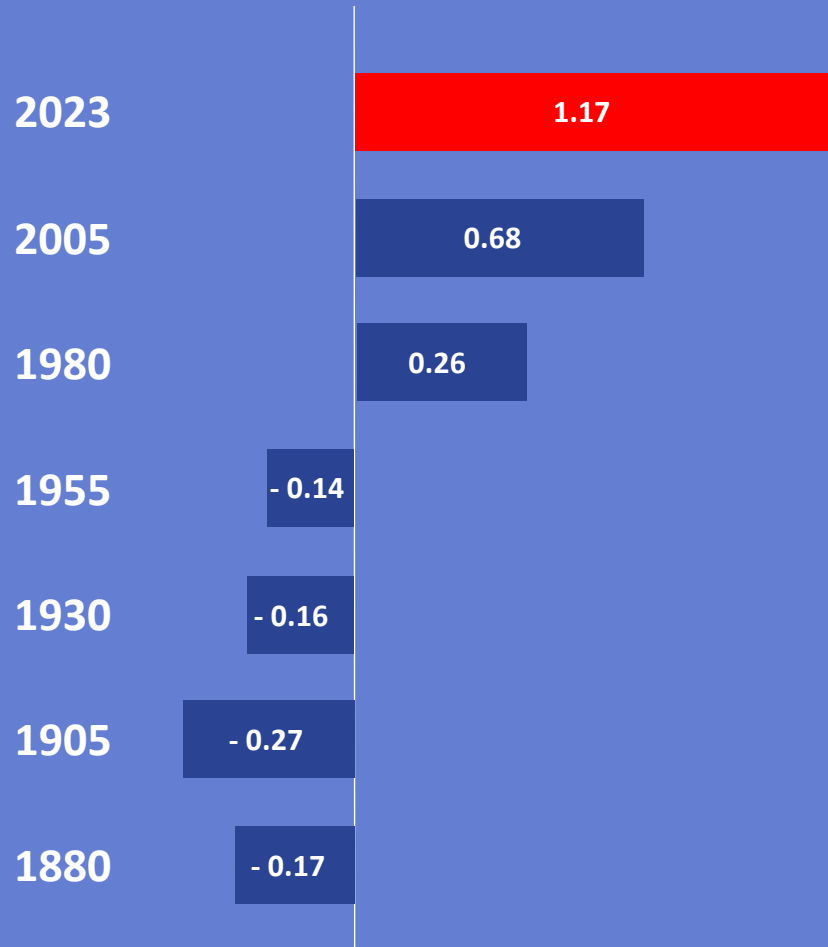


CO2SAT space mission in collaboration with University of Leicester and Geospatial Insights

Space for Sustainability program in collaboration with MBRSC



Why is this the **Right Time**?



Change in Global Surface
Temperature (°C)

Source: climate.nasa.gov

4°C

Increase in global
warming expected by 2100

Up to
\$43tr

Value at risk due to climate
change by 2100

<\$9.2tr

Required investment to
reach net zero by 2050



Massive push for legislation
such as carbon taxes

CO2SAT

The satellite aims to detect, measure and monitor point source emissions of carbon dioxide (CO₂).



Objectives



Provision of precise data on CO₂ concentrations—a capability previously unavailable in our region



CO₂SAT is a planned satellite constellation aiming to detect 80% of the CO₂ globally



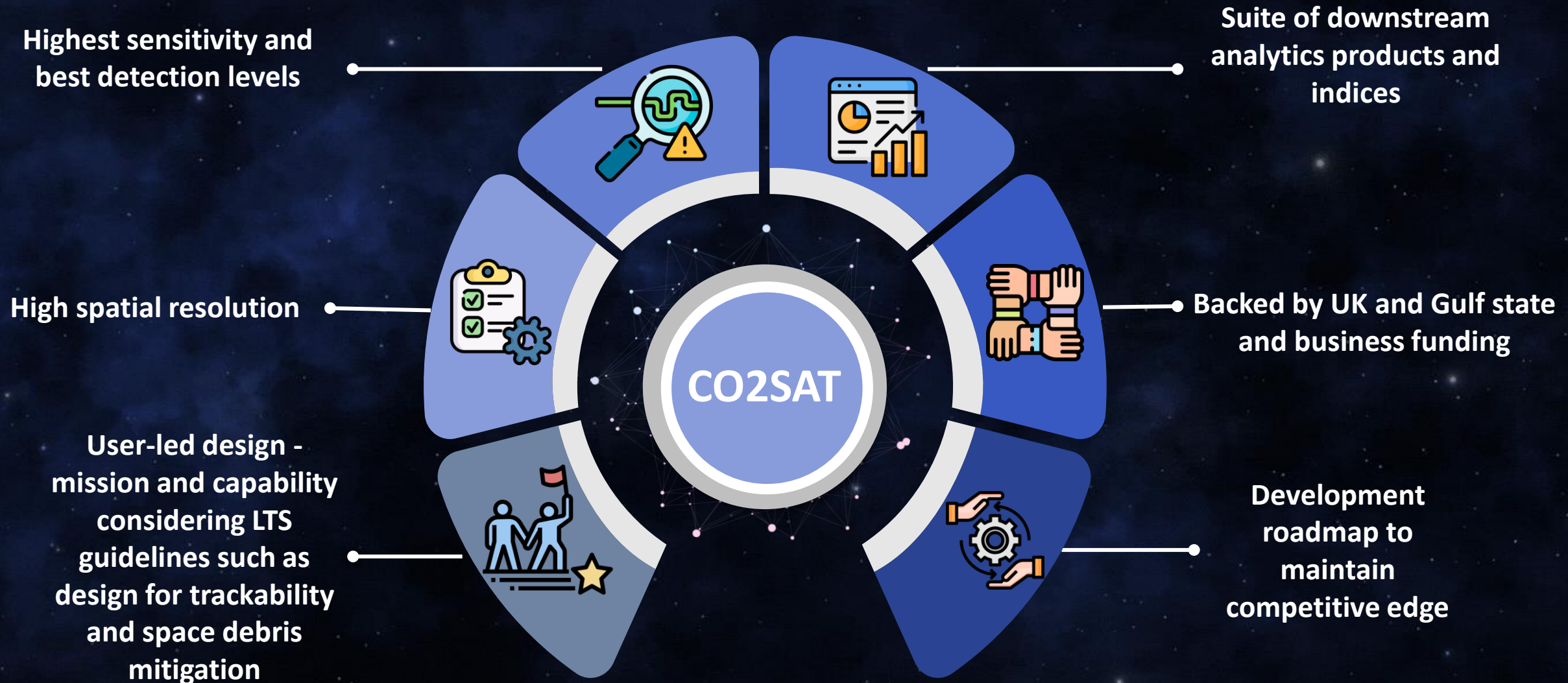
Enhancing international cooperation



Phase 2 Duration

1 year

How Does this Project **Stand Out**?



Contact Us

yagoob.khalid@nssa.gov.bh



Scan Now



NSSA

الهيئة الوطنية لعلوم الفضاء
National Space Science Agency

