

P26: GHG emissions monitoring	
Maturity score	
Mean: 2.3	STD: 0.78
<u>Constraints and limitations</u>	
<ul style="list-style-type: none"> • Cloud presence • Distinguishing between anthropogenic (human-caused) GHG emissions and natural sources (e.g., wetlands, volcanic activity) can be complex 	
<u>Relevant user needs</u>	
<p>UN15: Need to monitor the carbon intensity of portfolio assets.</p> <p>UN26: Need to monitor GHG emissions of projects funded.</p>	
<u>R&D gaps</u>	
<ul style="list-style-type: none"> • Satellite sensors may have limitations in spatial resolution, making it challenging to capture emissions from small sources or accurately distinguish between localized emissions and background levels. • Vertical sensitivity as satellite measurements generally provides information on total column concentrations of GHGs. While this is useful for many applications, it may not provide a complete understanding of vertical distributions, which are essential for certain scientific studies and policy decisions. • Current missions are not capable of monitoring emission points. • The monitoring system in place does not answer the possibility of assessing the GHG emitted or C intensity of the funded projects. 	
<u>Potential improvements drivers</u>	
<ul style="list-style-type: none"> • Complementary use of commercial datasets to derive GHG emissions. • New missions are required to capture GHG emissions at a project level. • Improved monitoring capabilities for reliable observations over emission points at high spatial resolution • Longer archive 	
Utilisation level review	
Utilisation score	
Mean: 2.33	STD: 0.94
<u>No utilisation</u>	
<ul style="list-style-type: none"> • Users' lack of EO knowledge and skills to utilize the EO product. 	
<u>Low utilisation</u>	
<ul style="list-style-type: none"> • Unawareness of the existence of commercial EO products with better specifications • Higher cost of using the commercial EO product • Only aware of its use as a proxy of macro-economic indicators. There were trials of using it to track emissions of specific assets, but it was difficult to reconcile the results against the reference estimations. 	
<u>Medium utilisation</u>	
<ul style="list-style-type: none"> • This EO product is still being refined so utilisation is not high yet. 	
<u>High utilisation</u>	
Critical gaps related to relevant user needs	

R&D gap

UN15: Need to monitor carbon intensity of portfolio assets.

UN26: Need to monitor GHG emissions of projects funded.