

P09: Building inventory	
Maturity score	
Mean: 2.6	STD: 0.64
<u>Constraints and limitations</u>	
<ul style="list-style-type: none"> • Cloud presence • Urban areas across the world can have different building styles, densities, and layouts, which can make creating universally applicable methods challenging. • Tall buildings or structures can cast shadows making it challenging to accurately identify their characteristics, and occlusion might hinder the detection of buildings behind vegetation or other structures. 	
<u>Relevant user needs</u>	
UN47: Need up-to-date geospatial data on residential and industrial infrastructures locations	
<u>R&D gaps</u>	
<ul style="list-style-type: none"> • Cost of VHR satellite imagery which is essential for the product. • Generality of the models used in one region to another. • Using satellite imagery for building inventory might raise legal and privacy concerns, especially when dealing with sensitive areas or personal property. 	
<u>Potential improvements drivers</u>	
<ul style="list-style-type: none"> • Provide more training data for different regions of the world with different building characteristics. • Price models for commercial EO data. 	
Utilisation level review	
Utilisation score	
Mean: 2.14	STD: 0.64
<u>No utilisation:</u>	
<ul style="list-style-type: none"> • Unavailability of freely available sources of the EO product. • Not aware of any product from which this could be extracted directly. 	
<u>Low utilisation</u>	
<ul style="list-style-type: none"> • Higher cost of using the commercial EO product. • The current method (manually counting for a sample area and multiplying up to estimate the whole area) is considered good enough in terms of accuracy, reliability, and price. • Ground truth data is not sufficient for counting individual trees. 	
<u>Medium utilisation</u>	
The product already satisfies the technical and usability requirements.	
<u>High utilisation</u>	
Critical gaps related to relevant user needs	
Utilisation gap	

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