

# Hatfield-4209: Monitor onshore pipeline right of way (RoW) to evaluate successions of vegetation communities

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## Challenge

Challenge ID:	HCP-4209	Originator:	Onshore: Hatfield
Title:	Monitor onshore pipeline right of way (RoW) to evaluate successions of vegetation communities.		
Theme:	ON 4.2: Environmental monitoring - Continuous monitoring of changes throughout the lifecycle		
Consortium Lead:	Hatfield	Interviewed Company:	Hatfield
Geography:	ON.REG.08 - Papua New Guinea		
Challenge Description			
What is not possible / not adequately addressed at present?			
Environmental commitments and need to assess and monitor successional changes in vegetation along pipelines corridors.			
What effect does this challenge have on operations?			
Recurring inspections of existing infrastructure and RoWs have ongoing costs that could be reduced. Evaluating successional regrowth rates is an important factor in addressing environmental commitments.			
Thematic information requirements:	Land cover Distribution of habitat and biodiversity Distribution and status of infrastructure		
What do you currently do to address this challenge?			
How is this challenge conventionally addressed?			
Depending on access and remoteness issues, monitoring is done by field crews or aerial surveys. Some use of remote sensing.			
What kind of solutions do you envisage could address this challenge?			
Multi-spectral sensors to detect vegetation in combination with LiDAR to monitor vegetation type and height.			
What is your view on the capability of technology to meet this need?			
Are you currently using EO tech? If not, why not?			
Change detection is a mature process but improvements to mapping accuracy may be achieved with the addition of LiDAR.			
Challenge Classification			
Impact on Lifecycle (0=none, 4=high):		Climate / Topography / Urgency:	
Pre-license:	1	Climate class:	Generic climate
Exploration:	0	Topographic class:	Not specific
Development:	2	Seasonal variations:	Any season
Production:	3	Impact area:	Environmental
Decommissioning:	2	Technology urgency:	1 - Mid-Term (5-10 years)
Challenge Information Requirements			
Update frequency:	Annually		
Data currently used:	Field data, aerial photography, LiDAR		
Spatial resolution:	License		
Thematic accuracy:	Not specific		

Required formats:	Not specific
Timeliness (Vintage):	Annually
Geographic extents:	License
Existing standards:	None

## Relevant products

**Content by label**

There is no content with the specified labels