# Hatfield-5101: Obtaining baseline land use for pipeline route planning

## Obtaining baseline land use for pipeline route planning

## Challenge

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| **Challenge ID:** | HCP-5101 | Originator: | Onshore: Hatfield |
| **Title:** | **Obtaining baseline land use for pipeline route planning.** | | |
| Theme: | ON 5.1: Logistics planning and operations - Baseline mapping of terrain and infrastructure | | |
| Consortium Lead: | Arup | Interviewed Company: | Arup |
| Geography: | ON.REG.00 - Generic onshore | | |

| **Challenge Description** |
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| What is not possible / not adequately addressed at present? |
| Need detailed baseline land cover and land use maps to support pipeline route planning - extensive linear corridors have specific data requirements. |
| What effect does this challenge have on operations? |
| Reduce planning costs by determining optimal or most favourable pipeline route alignment based on land use constraint analysis. |

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| Thematic information requirements: | Land use<br>Land cover |

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| What do you currently do to address this challenge?<br>How is this challenge conventionally addressed? |
| Aerial surveys and satellite imagery. |
| What kind of solutions do you envisage could address this challenge? |
| High resolution optical images |
| What is your view on the capability of technology to meet this need?<br>Are you currently using EO tech? If not, why not? |
| Mature technology with lots of choice of sensors |

| **Challenge Classification** | | | |
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| Impact on Lifecycle (0=none, 4=high): | | Climate / Topography / Urgency: | |
| Pre-license: | 1 | Climate class: | Generic climate |
| Exploration: | 2 | Topographic class: | Not specific |
| Development: | 4 | Seasonal variations: | Any season |
| Production: | 1 | Impact area: | Environmental |
| Decommissioning: | 2 | Technology urgency: | 3 - Immediately (0-2 years) |

| **Challenge Information Requirements** | |
|---|---|
| Update frequency: | Snapshot |
| Data currently used: | Landsat, ASTER, GoogleEarth, RapidEye, aerial photography |
| Spatial resolution: | Regional |
| Thematic accuracy: | Not specific |
| Required formats: | Not specific |
| Timeliness (Vintage): | Within six months |
| Geographic extents: | License |

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| Existing standards: | None |

## Relevant products

**Content by label**

There is no content with the specified labels