## Hatfield-5307: Assess coastal environment for infrastructure planning

Assess coastal environment for infrastructure planning

## Challenge

| Challenge ID:  | HCP-5307  |   | Originator:          | Onshore: Hatfield |  |  |
|--|---|---|----------------------|-------------------|--|--|
| Title:   | Assess coastal environment for infrastructure planning.   |   |                      |                   |  |  |
| Theme:   | ON 5.3: Logistics planning and operations - Facility siting, pipeline routing and roads development |   |                      |                   |  |  |
| Consortium Lead:   | Hatfield  |   | Interviewed Company: | Hatfield          |  |  |
| Geography:   | ON.REG.00   | ON.REG.00 - Generic onshore                         |                      |                   |  |  |
| Challenge Description  |   |   |                      |                   |  |  |
| What is not possible / not adequately addressed at present?  |   |   |                      |                   |  |  |
| Mapping of coastal habitat and coastal areas is required for infrastructure planning and impact mitigation for operations in coastal areas. The dynamics of the coastline and coastal erosion rates need to be determined. |   |   |                      |                   |  |  |
| What effect does this challenge have on operations?  |   |   |                      |                   |  |  |
| Reduce environmental impacts of infrastructure development, as well as the risks from the dynamic coastal environment to infrastructure.   |   |   |                      |                   |  |  |
| Thematic information requirements:   |   | Land cover Distribution of habitat and biodiversity |                      |                   |  |  |
| What do you currently do to address this challenge? How is this challenge conventionally addressed?  |   |   |                      |                   |  |  |
| Aerial and high-resolution imagery. Ground-based surveys.  |   |   |                      |                   |  |  |
| 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?   |   |   |                      |                   |  |  |
| Are you currently using EO tech? If not, why not?  |   |   |                      |                   |  |  |
| Feasible with high-resolution imagery over coastal areas.  |   |   |                      |                   |  |  |
| CI II CI   |   |   |                      |                   |  |  |

| Challenge Classification             |              |  |                             |  |  |  |  |
|--------------------------------------|--------------|--|-----------------------------|--|--|--|--|
| Impact on Lifecycle ((4=high):       | )=none,      | Climate / Topography / Urgency:              |                             |  |  |  |  |
| Pre-license:                         | 3            | Climate class:                               | Generic climate             |  |  |  |  |
| Exploration:                         | 1            | Topographic class:                           | Wetland                     |  |  |  |  |
| Development:                         | 4            | Seasonal variations:                         | Any season                  |  |  |  |  |
| Production:                          | 2            | Impact area:                                 | Environmental               |  |  |  |  |
| Decommissioning:                     | 1            | Technology urgency:                          | 3 - Immediately (0-2 years) |  |  |  |  |
| Challenge Information Requirements   |              |  |                             |  |  |  |  |
| Update frequency:                    | Snapshot     |  |                             |  |  |  |  |
| Data currently used:                 | Aerial image | y, optical imagery, LiDAR, field assessments |                             |  |  |  |  |
| Spatial resolution: License          |              |  |                             |  |  |  |  |
| Thematic accuracy:                   | Not specific |  |                             |  |  |  |  |
| Required formats: Not specific       |              |  |                             |  |  |  |  |
| Timeliness (Vintage): Reference date |              | ta   |                             |  |  |  |  |

| Geographic extents: | License |
|---------------------|---------|
| Existing standards: | None    |

## Relevant products

## Content by label

There is no content with the specified labels