

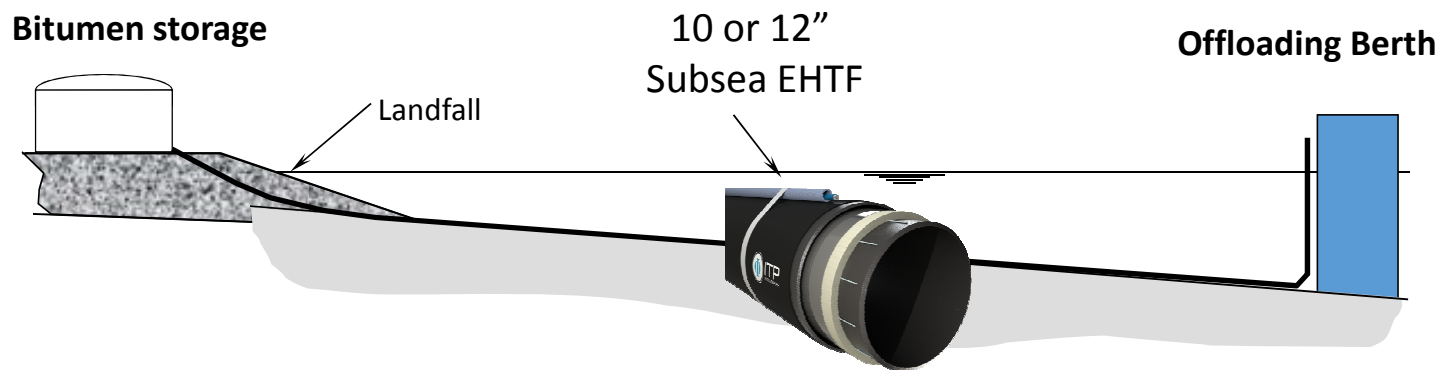
Business Case – Subsea Import Bitumen line



Challenge : A terminal operator is willing to import through an existing loading berth hot bitumen (160°C). This loading berth is located 1km offshore with no trestle connected to the shore. The operator looked originally at standard solutions with steam heating and expansion loops on a trestle. This latter was valued around 100MUSD and triggered emotional reactions from local fishermen who did not want to change their coastal traffic habits. The project was therefore neither economically viable nor accepted by local communities.

ITP technical proposal : subsea EHTF (*Electrically Heat Traced Flowline*) operating at 160°C with low power/voltage 100kW and <300V

ITP value proposal : eliminating the need of a costly trestle allowed to **save >80MUSD** rendering the project viable and made local populations satisfied as there was **no coastal traffic disruption**



Business Case – Export Bitumen line in congested area



Challenge : A Refinery operator is willing to extend his services to export hot bitumen (160°C). Due to the **congestion of the existing plant**, new storage facilities can only be located in a very specific area. The challenge is then to export the stored bitumen to the quayside through a very narrow & complex corridor. How to deal with standard aerial expansion loops while maintaining access ?

ITP technical proposal : buried EHTF (*Electrically Heat Traced Flowline*) operating at 160°C with low power/voltage 100kW and <300V

ITP value proposal : burying the export line is an enabler in terms of costs and safety rendering the project viable.

