

1. What is the CanaPux™ solid bitumen pellet?

Heavy crude oil (bitumen) is combined with polymers, a form of recyclable plastic that both thickens the crude oil into a solid shape and encases it with a protective shell. The pellets move best in open topped gondola railcars, similar to how we move coal.

2. What are the environmental safety benefits of solid bitumen pellets?

The pellet is not flammable or explosive, will float in water and nothing can leach or dissolve into the environment. It does not create dust.

3. What happens to the pellets in the event of a derailment?

They will simply need to be picked up. That could be done by hand, with construction equipment, nets, booms or vacuums.

4. What are the economic benefits of solid bitumen and this potential supply chain?

- It has the potential to diversify Canada's energy markets and contribute to the economic growth of Alberta, British Columbia, and Canada.
- Diversification to offshore markets reduces discounting by U.S. refiners.
- Investment, job creation and increased utilization of existing West Coast port terminals.
- Increased government revenues through royalties and taxes.

5. Can this technology be used on all types of crude oil or even on refined products such as diesel?

While it may be possible to solidify lighter crude oils or refined products using this technology that has not yet been explored. This technology has been designed for bitumen.

6. What are CN's next steps in developing the technology and seizing market opportunities?

The initial patent filing was made in March 2016. When the patents are obtained (expected to be in the fall of 2017), CN plans a commercial roll out of its proprietary solid bitumen pellet technology in collaboration with a range of industry participants.

7. Why did you choose InnoTech Alberta to partner with on this project?

InnoTech Alberta has a long history and a deep understanding of heavy crude oil. They have a strong knowledge of the resource sector with a dedication to innovation and excellence. That makes them the ideal partner for CN.

8. Will bitumen in diluted or neat form still be transported by CN?

Yes, and ultimately the choice of how bitumen is moved will be up to the shipper to determine.

9. Will this replace pipelines?

No, solid pellets are a niche market that we believe will be of particular interest to companies that are not pipeline connected.

10. Won't this take capacity on your rail line away from other products?

CN has existing capacity to move additional carloads and we continue to invest in our network to handle future business safely and efficiently.

