



## Challenge: LCBA – Telus on sustainable solutions for recycling or upcycling fiber optic cable

### Challenge Statement/Synopsis:

TELUS is committed to circular economy principles and responsible resource use. As TELUS works to expand its PureFibre Network, fibre optic cables represent a growing waste stream that is currently going to landfill.

As a result, TELUS is looking for sustainable solutions for recycling or upcycling fibre optic cables.

### Context for the Challenge:

At TELUS, we aim to be a leader in the circular economy by creating efficient systems that **minimize waste generation**, prioritizing reuse internally and externally and maximizing our diversion from landfill. We are embracing **circular economy principles** and best practices internally and investing in a number of projects to help us achieve circularity. At the same time we are helping our communities to implement similar strategies to encourage responsible resource use.

TELUS is making significant ongoing investments in our leading PureFibre network. These efforts are further expanding our PureFibre network in B.C., Alberta and Eastern Quebec, expediting the roll-out of our national 5G network across urban and rural Canada. Additionally, we continue to focus on connecting Indigenous communities to support long-term prosperity. As a result of this expansion, fibre optic cable waste presents a growing, industry-wide challenge. **Fibre optic cables are challenging to recycle** due to the complexity of their composition. Many materials are used to construct fibre optic cables, including but not limited to plastics, glass, and metals. This is an industry wide problem, and recycling solutions may be contingent upon modifying the design of these products. In the near-term, **TELUS is looking for sustainable solutions that will divert fibre optic cables from our landfills.**

### Response Criteria:

Please provide the following information in your application/response form.

- Description of upcycling or recycling process
- TRL
- Cost (capital & operational costs) and unit economics at different stages of operation (e.g. sorting, shredding, pulverization)
- Scale/volumes required
- Feedstock specifications
- End product details and its environmental impact during useful life and after EoL
- Current market demand for this type of end product



- Potential revenue

### **The Opportunity:**

As part of the LCBA Canada Project you may have the opportunity to:

- Pilot or deploy your solution with TELUS, if your solution is selected and deemed to be a sustainable solution.
- Meet new customers and explore new markets for your solution.

### **About TELUS:**

TELUS is a dynamic, world-leading communications technology company with **\$17 billion in annual revenue** and **17 million customer connections** spanning wireless, data, IP, voice, television, entertainment, video and security over our award-winning networks. We leverage our global-leading technology and compassion to drive social change and enable remarkable human outcomes. Our long-standing commitment to putting our customers first fuels every aspect of our business, making us a distinct leader in customer service excellence and loyalty.