



Project Benefits



JOBS, ECONOMY & INFRASTRUCTURE

- The SMPP will require about 80 to 90 full-time employees (annual payroll of approximately ~\$9 million)
- Potential for two additional indirect jobs for every direct job (additional 170 jobs)
- Contracting opportunities during construction of ~\$76 million
- Annual operational expenditures of ~\$25 million (~\$525 million over the project life)
- Diversification of the economy in Saskatchewan, including the potential for secondary industries to be built around the SMPP (e.g. specialty batteries, recycling of battery materials)
- The construction of a power line to the facility
- The paving of 800 m of Schultz Road
- The possibility of using discharge from the Town of Langham's new sewage lagoon as process water to reduce aquifer use by up to 20%



COBALT

- Cobalt is needed to build lithium-ion batteries for devices including:
 - Portable electronic devices (Smartphones, Laptops, Tablets)
 - Electric vehicles (EV's)
 - Stationary storage cells (Grid Storage)
- Stationary grid storage enables renewable generation from wind, solar & off-peak charging to be optimized, which will help drive the move to a less carbon intensive world
- Cobalt is used to build EV's and will help reduce carbon emissions
- Cobalt-based batteries will remain the standard for the foreseeable future
- Key component of high temperature and high speed steel alloys required for the Aerospace and Electricity industries
- Typical smartphone contains 5 g to 20 g of cobalt vs 4,000 g to 30,000 g (9 lbs to 66 lbs) per EV
- Saskatchewan and Canada can be positioned as contributing to a greener, less carbon intensive world and helping to slow climate change



BISMUTH

- Environmentally friendly replacement for lead in many applications, as it is scientifically recognized as non-toxic but has many of the characteristics of lead
- Uses include:
 - Glass & alloys for stability (expands during cooling)
 - Pharmaceuticals (e.g. Pepto-Bismol)
 - Fire retardants & sprinkler system activators
 - Cosmetics
 - Automotive: anti-corrosion coatings; glass frits (lending dimensional stability to windshields so they won't fall out in cold temperatures); pearlescent paints & pigments.
 - Superconductors & solar panels

