

Leading the world to Zero Landfilled Waste



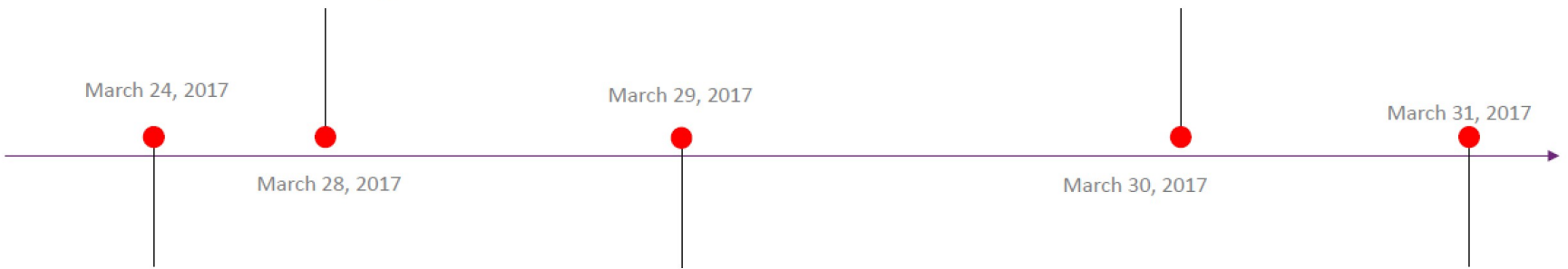
UNSM Presentation

May 11 2017

In the ground at Chester!



Tree Clearing



March 24, 2017

March 28, 2017

March 29, 2017

March 30, 2017

March 31, 2017

Site Mobilization



About Sustane

- ❖ Nova Scotia company that has developed disruptive technologies that allow for complete separation and recycling of municipal solid waste (MSW)
- ❖ Our mission is eliminating landfilling worldwide, delivering a huge environmental benefit
 - Patent granted in 2016 + extensive trade secrets
 - Overall winner of Nova Scotia top start-up for 2015/16 from 187 competitors (Innovacorp i3 award)
 - NS Department of Environment formally recognized the Sustane process as recycling and therefore our biomass is real biomass
 - Chester, NS commercial project connects a set of proven technologies in unique way at full commercial scale
 - Main products are biomass pellets, synthetic diesel (internal use and sales), recyclables (metals, plastics)
 - Biomass pellets off-take secured to Emera



Waste is a terrible thing to waste

- ❖ 3 billion tonnes of household waste generated each year - Over 2 billion tonnes¹ landfilled
 - 99 percent of raw materials passing through society is consumed or trashed within 6 months²
 - Potential value of landfilled materials if separated is \$250 billion
- ❖ Global landfill methane emissions → equivalent to 200 million cars³
- ❖ Landfills take up increasingly valuable land in urban areas

Sustane can deliver a world without waste and without landfills

1. United Nations Environment Programme, Yearbook 2009
2. Paul Hawken, Natural Capitalism, (1999)
3. Sustainable development technology Canada (SDTC) calculations

The breakthrough... Separation → purity → VALUE



Complete separation → Disruption → Game changer

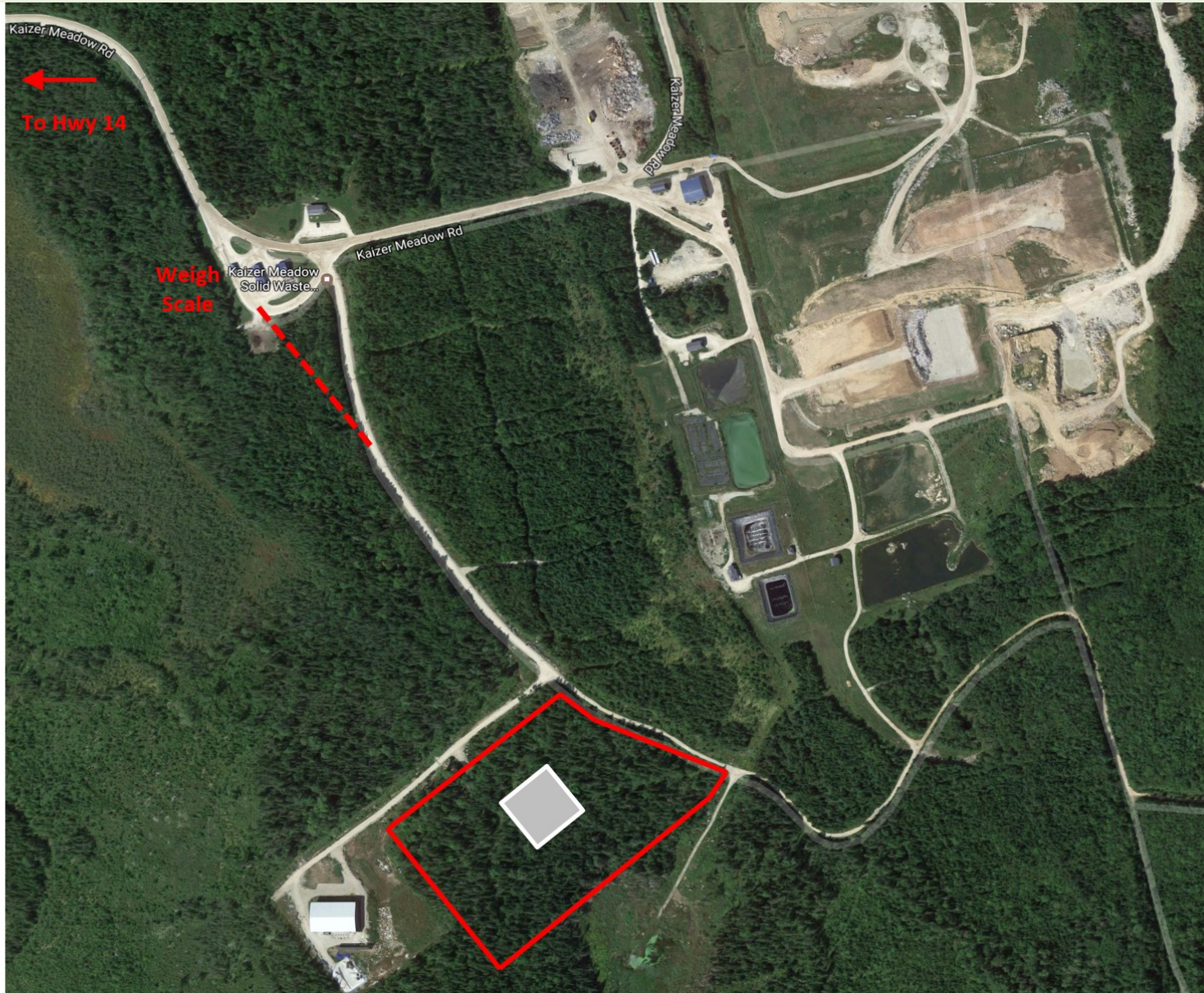
- ❖ NOT incineration
- ❖ NOT gasification
- ❖ Process makes clean fuel products and recyclable materials
- ❖ Processes are low impact, thermo-mechanical in nature (relatively low temperatures and pressures)



Video

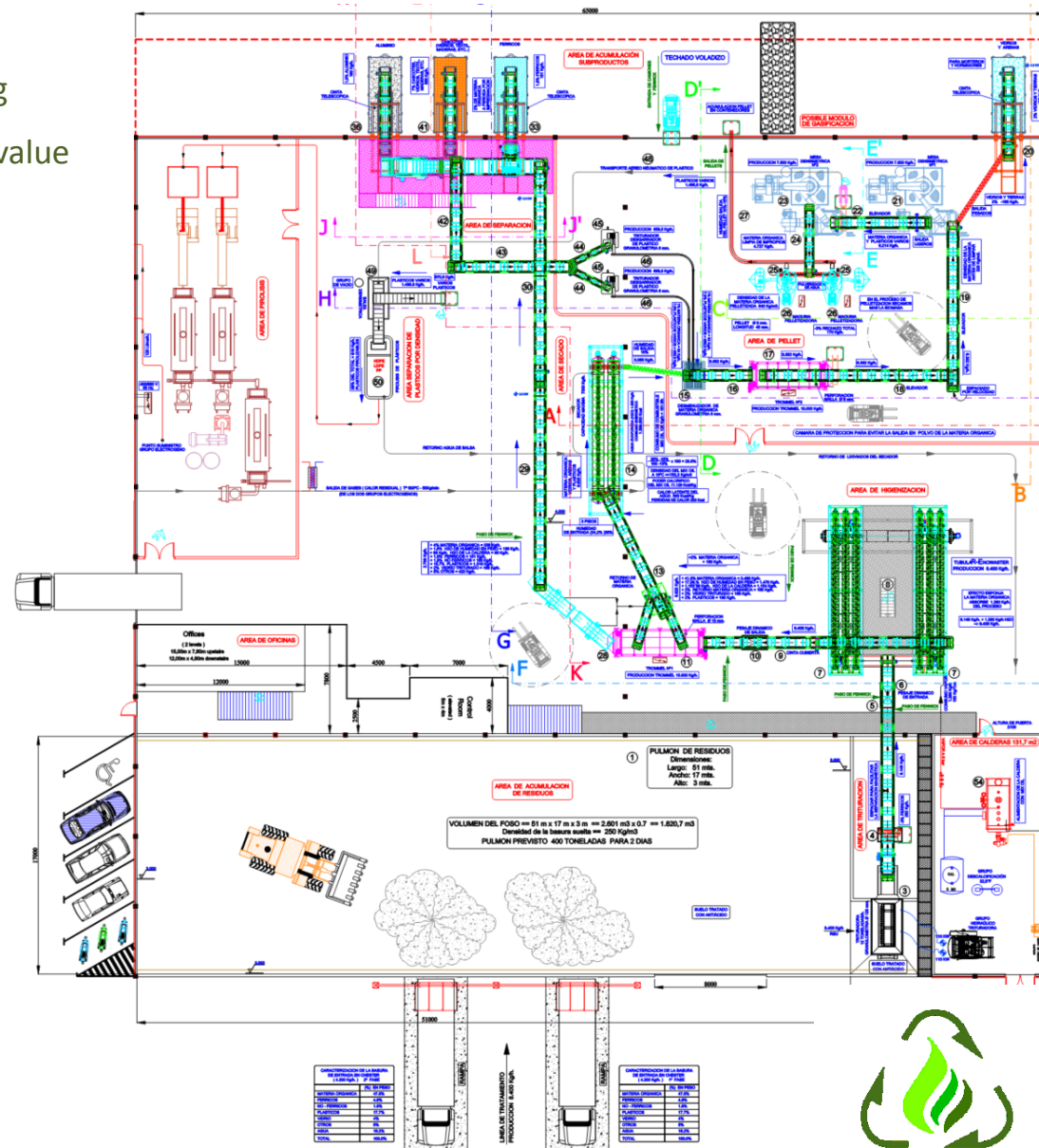


Site Plan



Chester Project → State of the art operation → Showcase

- ❖ MSW supply secured (20 years +) & strong synergy process with MODC to maximize value
- ❖ Design completed
- ❖ Financing in place
- ❖ Equipment fabrication underway
- ❖ Break ground Q1/17, operational Q1/18
- ❖ \$16 m capital
- ❖ 24 Employees - many higher skills
- ❖ Energy self-sufficient (30% of plastic oil)
- ❖ Pellet offtake signed with Emera
- ❖ Plastic to oil technology secured and in construction

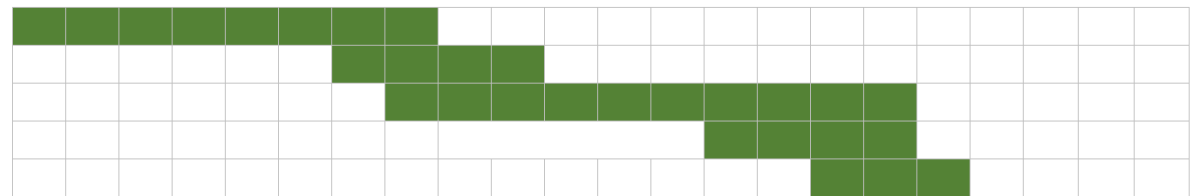


Project development process

2016						2017												2018			
JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR

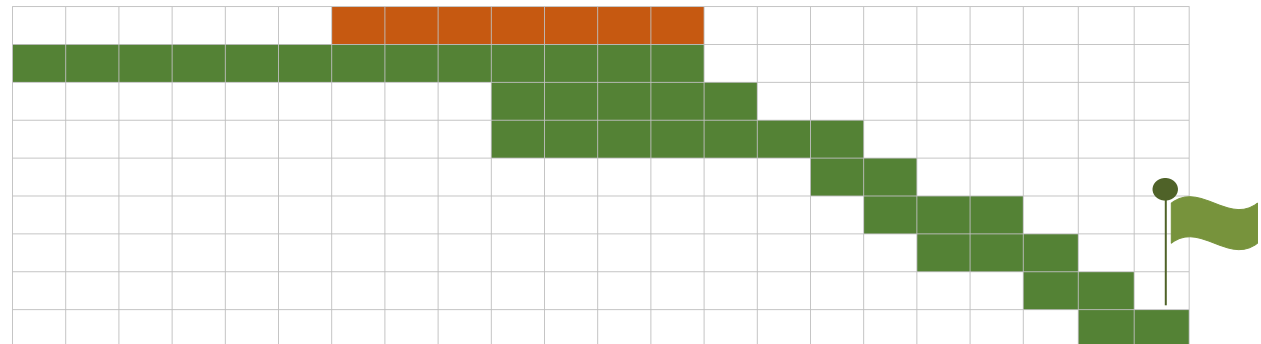
SPAIN

- Engineering
- Purchasing (Spain)
- Equipment manufacturing
- Module testing (Spain)
- Shipping



CANADA

- Environmental permitting
- Engineering
- Purchasing (Canada)
- Building construction (to lock-up)
- Building interior, lighting and services
- Boiler, dryer, pelletizer installation
- Module installation
- Testing
- Startup



Questions



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ENGINEERED FOR LIFE ON EARTH



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