

**WASTEWATER:
THE ULTIMATE RENEWABLE ENERGY
SOURCE**

NOVEMBER 2017



CSE: SHRC FSE: IWIA OTCQB: INTWD

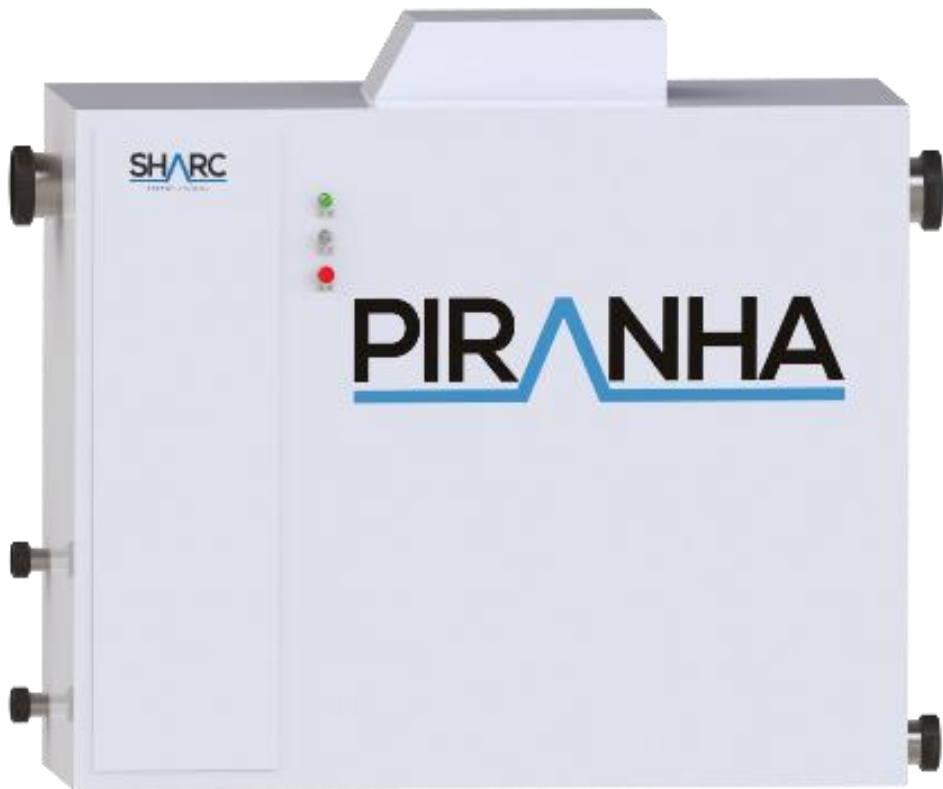
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THE OPPORTUNITY

- North America and EU, **330 billion** liters of wastewater is discharged through sewer systems every day.
- Higher in temperature than other regenerative sources;
~70°F
- Potential to replace **1.5 billion MWh** of the natural gas consumption used to provide water heating and space conditioning.



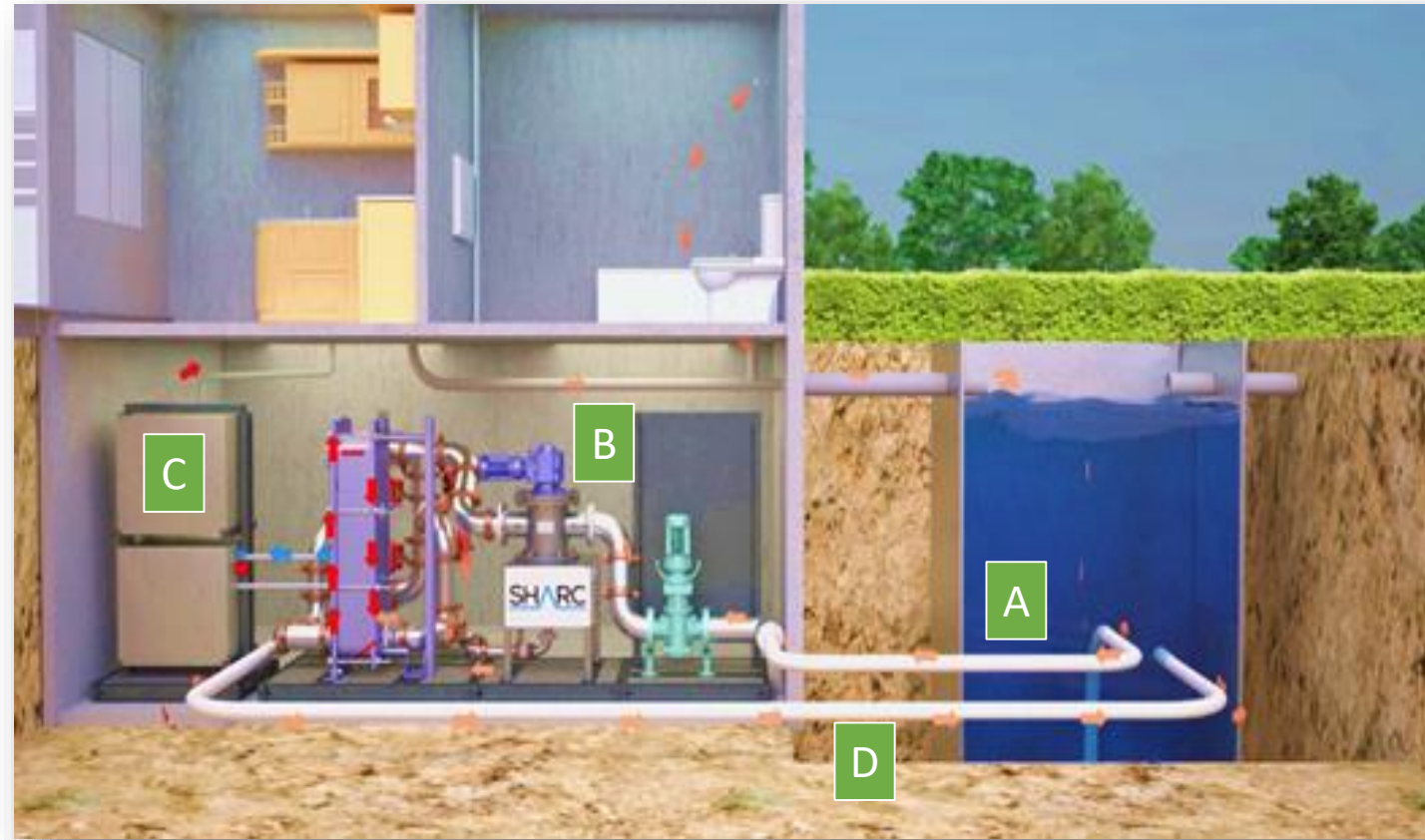
Award-winning tech with a payback of 4 years, exceeding competing technology.



PIRANHA

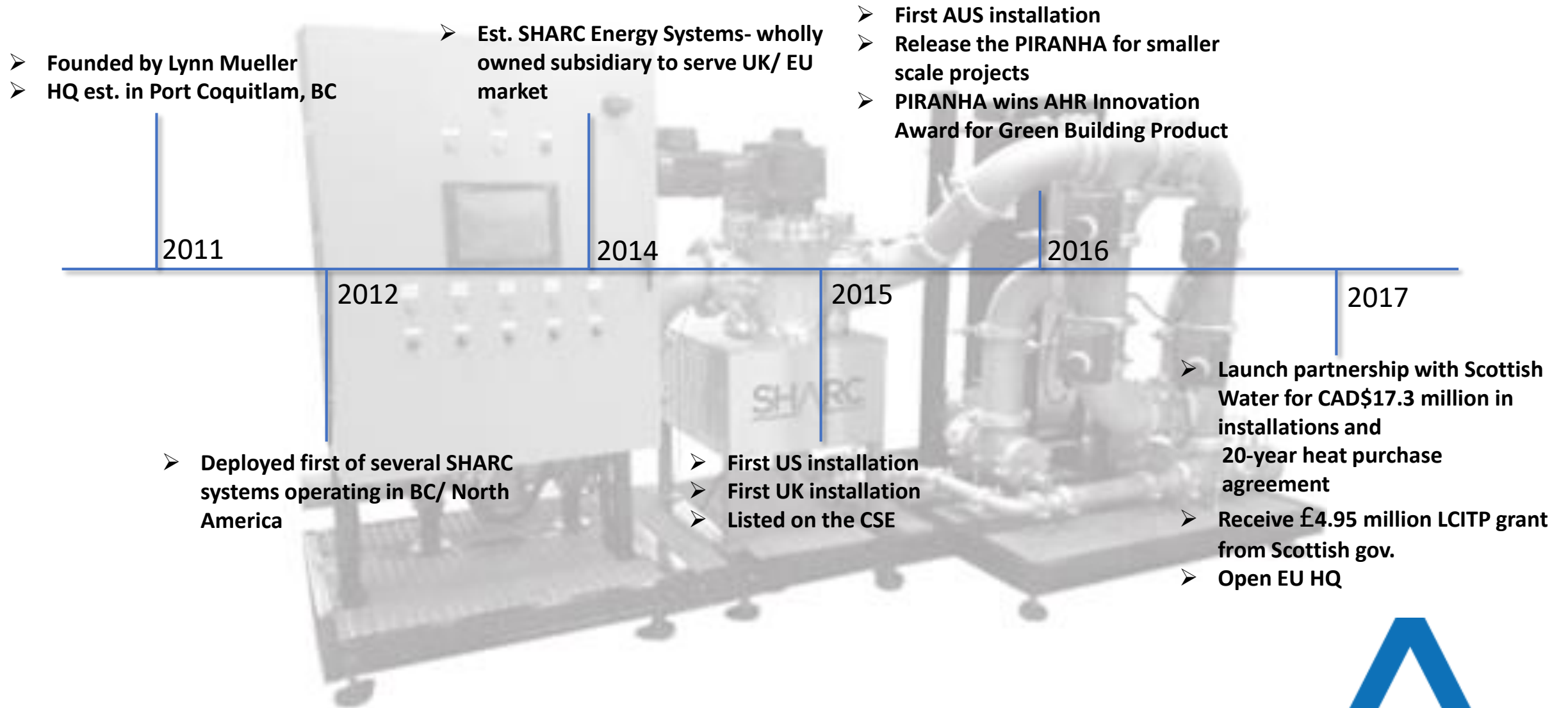


RECYCLED ENERGY



- A** Wastewater, typically $\sim 70^{\circ}\text{F}$, leaves a facility and is captured in an onsite tank.
- B** Solids are separated from the waste stream and the warm water is passed through a heat exchanger which transfers thermal energy from the contaminated water to a process loop
- C** The PIRANHA can pre-heat the domestic hot water supply at high efficiencies (400-600%)
- D** Solids and contaminated water are released to the sewer system

TIMELINE



TRENDS AND OPPORTUNITIES

- **Regulatory Compliance, e.g.:**
 - Zero Emission Building Plan 2018, LEED® Gold mandate, Vancouver, BC.
 - Energy Efficiency Standards for Residential and Nonresidential Buildings, California, USA.
- **Incentives**
 - Renewable Heat Incentive (RHI), UK.
- **Demand for multifamily construction projects**
 - Population density + rising home prices
- **Increasing global demand for energy and water**
 - World energy consumption will grow by 48% between 2012-2040 (IEO2016)



REVENUE MODEL

Canada

**Original Equipment Manufacturer
(OEM)**

System Sales and Project Development

Servicing

UK

DBFO



IN THE PIPELINE

Revenue guidance of \$20 million from installations over the next two years.

UK

- **Strategic alliance with Scottish Water Horizons Ltd., a public utility owed by the Scottish Gov.**
- **Secured projects for 5 locations across Scotland for approx. CAD \$17.3 million in installations.**
- **Recurring revenue through 20-year heat purchase agreement for five sites.**

USA

- **Joint Venture in California.**
- **Signed in November 2016; Production expected Q1 2018.**

Canada

- **Working with BC Hydro to implement SHARC systems in educational institutes.**
- **Planning stages for district heating opportunities in Richmond, BC; Ottawa, ON; Chicago (US); LA (US).**

Australia

- **Finalizing joint venture contract with Environmental Technology Solutions (ETS).**
 - **Several sites identified for SHARC and PIRANHA systems and are in planning stages.**
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TEAM



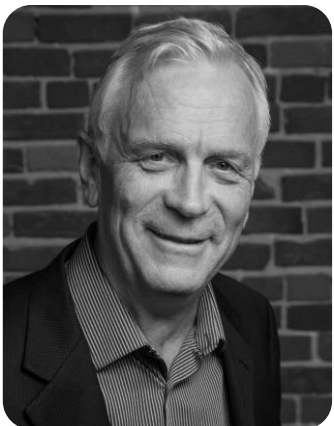
Lynn Mueller - **CEO & Chairman**

- **25 years of experience in geothermal heat pump sales**
- **Pioneered many innovative approaches to geothermal installation**



Russell Burton - **COO**

- **30+ year in real estate management**
- **Focus on managing income growth through asset/ corporate acquisition**



David Alexander - **CFO**

- **Proven history of advancing and accelerating businesses**
- **30+ years of capital markets and executive management**



Richard Mort- **UK FD**

- **CA 20+ years experience in construction and infra sector**
- **Large focus on water and wastewater projects**



CONTACT

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