Company Information

- Vadxx Energy, LLC
- Main Office: Cleveland, OH
- R&D Center: Akron, OH
- Commercial Unit #1 Akron, OH
- www.vadxx.com
Recycling technology converting plastic waste into high value energy products.
The Problem: An Energy Burial Epidemic

The rate of plastic being generated greatly outpaces current recycling efforts..... resulting in 90% heading to landfills or even worse our rivers, lakes, and oceans.

In the US each year we are burying 125,000,000 barrels of energy product!
Vadxx Solution: An Attractive $5 mil Investment?

EBITDA Margins > 50%

Unit #1 Risk Mitigated—oil production Q2 2015
  • Liberation Capital $20 mil closed, experience in space
  • Rockwell EPC Contractor, experience in space

Scaling Model: +100 units

Experienced Management Team

Big Upside
  • 30-50X investment multiples, $2-$3 bil company
Technology Overview – Thermal Depolymerization

**Scalable** science & organization

**Decentralized** market opportunities

**Modular** design to optimize specific investments

**Repeatable** results to gain stakeholder confidence
Technology Overview – *Differentiators*

- Robust to Contaminants
- Zone Delineation
- Continuous Process
- No Proprietary Catalyst
- Product Flexibility
- Environmental Responsibility

**IRR**

30%+
1. PCT Application No. PCT/US13/25335
   • Zone-Delineated Pyrolysis Apparatus for Conversion of Polymer Waste
   • Priority date 02.09.12 per US Provisional Application 61596876
   • 3 independent claims + 25 dependent claims
   • Published August 15, 2013 WO2013119941
   • National stage filings July, August 2014 with amended claims

2. PCT Application No. PCT/US13/26412
   • Dual Stage, Zone-Delineated Pyrolysis Apparatus
   • Priority date 02.15.12 per US Provisional Application 61599206
   • 3 independent claims + 30 dependent claims
   • National stage filings July, August 2014 with amended claims

3. USPTO Application No. 13-735,677
   • Anti-Fouling Apparatus for Cleaning Deposits in Pipes and Pipe Joints
   • Priority date 01.06.12 per US Provisional Application 61584074
   • Published July 11, 2013 US-2013-0174363-A1
   • In review at USPTO, no additional filings contemplated
Competition

- **cynar plc** - Green Fuel
  - Batch Process
  - Continuous Process
  - Serial Batch Process
  - Process Under Development

- **DGE Engineering**
  - Rockwell Automation
  - Continuous, Zone delineated process
  - Process Under Development

- **agilyx**
  - Clean Plastic
  - Tires, Low value product
  - Clean Plastic
  - Contaminated Polymer Mixtures

- **VADXX** - Plastic to Energy
  - Clean Plastic
  - Contaminated Polymer Mixtures

- **Plastic2Oil**
  - Clean Plastic

- **RES Polyflow™**
  - Demonstration Reactor
  - Process Under Development
Vadxx Management Team Competencies

CEO: Finance, Engineering, Operations, HoldCo Corporate, Entrepreneur

CTO & Founder: Petroleum Geochemistry, Environmental, Entrepreneur

VP-Operations & Engineering: Manufacturing Plant Operations, Personnel

VP-Technology: Statistical DOE, Chemistry, Nanotechnology, Carbon Materials

VP-Business Development: Marketing, Sales, Division Management

Chair, Board of Directors: CEO Fortune 1000 Polymer Company

Board Member: Global Manufacturing/Operating Expert

Advisors: Manufacturing, Engineering, Banking, Petroleum, Academia
Management Team – Strategic Partners

- Fortune 500 company
- 18 month Vetting
- Design, Engineering, Risk Mitigation, EPCM, Planning Engagement
- Process Control HQ Mayfield Heights, OH
- Finance small renewable energy, water and waste water projects.
- Managing Partner: Former Pres/CEO GE Water & Process Technology, $2.5 Bil
- Exclusivity for 6 units
- Access to Developer Network
National Potential Post Unit 1

- Corporate HQ (Cleveland, OH)
- Regional Hub
- Operating Unit
Capital Raise

Operating Units $20M/ unit

- Financing Closed on Unit #1 12.31.13 Exclusive agreement with Liberation Capital for first round of Vadxx operated units
- Vadxx EBITDA share is AB%, yr 1 operations; XY% after yr X
- Third party funding of Developer units permissible
- LOIs units in Middle East and Asia

$5.5M Vadxx Energy Holding Company Capital Raise
Why is a Vadxx Investment a Big Opportunity?

**Immense Potential:** Valuation path to $2-$3 billion
- Investment Multiplier of 30-50x is feasible

**Dilution Minimal:**
- Project financing for initial units
- HoldCo capital needs are relatively small
- Additional capital needed only to accelerate project % ownership by HoldCo

**Significant Upside**
- ++100 plants, diverse feedstock, char derivatives, charge for feedstock, high value products