In 2018, coal consumption grew by 1.4% with production growing by 4.3%. Carbon emissions grew by 2%.
320 Billion tons of world coal reserves are low-rank coals (LRC) which is the target coal for Pristine M

High moisture content & low heating value

Source: BP Statistical Survey 2019

SUB- BITUMINIOUS AND LIGNITE COAL RESERVES

- Russian Federation 28%
- Australia 24%
- China 18%
- Germany 11%
- Other 9%
- US 9%
- Turkey 4%
- Indonesia 3%
- SUB-BITUMINIOUS AND LIGNITE COAL RESERVES
CCTI’s Proprietary Technologies

Pristine™
Upgrade low-rank high-moisture coal and extract valuable by-products

Pristine-SA™
Reduce coal to fixed carbon and co-fire with biomass

Pristine-M™
Upgrade high-moisture high-volatile coal and reduce moisture, transportation costs, coal dust, and carbon footprint
CCTI Test Facility
Current Plant Location:
Fort Union, WY
Highlights of Pristine-M™ Technology

- No moisture re-absorption
- No spontaneous combustion
- No size degradation
- Ideal gasifier feedstock
- Optimal level of VM to sustain combustion
- Reductions in emissions of CO₂ and carbon footprint
- Dust-free end product
- Increase Boiler Efficiency
### Weekly Coal Commodity Spot Prices - May 03, 2019

(USD Dollars Per Short Ton)

<table>
<thead>
<tr>
<th>Region &amp; BTU</th>
<th>Sulphur Content</th>
<th>Ash Range*</th>
<th>Week Ending 05/03/19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Appalachia 12,500 BTU</td>
<td>1.2 SO₂</td>
<td>6-13% - Average 9%</td>
<td>$77.30</td>
</tr>
<tr>
<td>Northern Appalachia 13,000 BTU</td>
<td>&lt;3.0 SO₂</td>
<td>5-20% - Average 10%</td>
<td>$63.15</td>
</tr>
<tr>
<td>Illinois Basin 11,800 BTU</td>
<td>5.0 SO₂</td>
<td>8-15% - Average 10%</td>
<td>$40.20</td>
</tr>
<tr>
<td>Powder River Basin 8,800 BTU</td>
<td>0.8 SO₂</td>
<td>4-10% - Average 7%</td>
<td>$12.45</td>
</tr>
<tr>
<td>Uinta Basin 11,700 BTU</td>
<td>0.8 SO₂</td>
<td>6-18% - Average 12%</td>
<td>$36.65</td>
</tr>
</tbody>
</table>

Source: EIA  
* The Ash % is not reported by the EIA as part of the above table but sourced independently by CCTI. In extreme cases, the ash % range could widen.
### Plant Economics

#### Example using PRB coal and upgrading it to 11,800 btu using Pristine M Technology @ 05/03/19

<table>
<thead>
<tr>
<th>Operating Costs</th>
<th>USD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1mm tons of PRB coal @ 8,800 btu</td>
<td>12,450,000</td>
</tr>
<tr>
<td>Utilized additional costs (slipstream of coal)</td>
<td>350,000</td>
</tr>
<tr>
<td>Running costs (based on US labor rates)</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Maintenance (based on US labor rates)</td>
<td>1,500,000</td>
</tr>
<tr>
<td>Total operating costs</td>
<td>19,807,500</td>
</tr>
<tr>
<td>Total capital costs (based on $35m for 1mm ton per annum facility built in the US$ - 25 years @6% P.A implied interest charge)</td>
<td>2,706,066</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>22,513,566</strong></td>
</tr>
<tr>
<td><strong>Price per ton to upgrade to 11,800 btu dust free coal</strong></td>
<td><strong>22.51</strong></td>
</tr>
<tr>
<td>Compare to Illinois coal 11,800 btu 1mm ton</td>
<td>40,200,000</td>
</tr>
<tr>
<td><strong>Arbitrage Value vs. 1m ton of Illininois coal</strong></td>
<td><strong>$17,686,434 per 1m ton</strong></td>
</tr>
</tbody>
</table>
• License And Royalty
  • $1 per ton upfront License Fee
  • $3 per ton Royalty Fee for life

A 10mta facility will provide $10m up-front followed by $30m per year over a 25 year agreement

• Partnerships with Existing Coal Mines

• Mine Asset Acquisition

• By-Product Extraction and Rare Earth Mineral Revenue Stream
Planned Milestones / Next Steps

Q3 2019: Commence Re-Assembly of Test Facility

Q1 2020: Commence Dry Test Runs
  : DoE and NETL Approval Review

Q1 2020: Commence Testing of US and International Coal
  : Complete License Agreement with WNP
  : Complete License Agreement with Jindal S&P

Q2 2020: Commence Testing of Coal By-Products
  : Testing of Rare Earth Minerals

2020    : FULL COMMERCIAL LAUNCH
What CCTI has done is developed a very intriguing technology.

Richard Horner  
Director of Special Projects and Emerging Technology,  
University of Wyoming. November 2017

We have validated that their technology does what it says on the packet.

Richard Horner  
Director of Special Projects and Emerging Technology,  
University of Wyoming. April 2019
Robin T. Eves, CEO  
+1203.918.2762  
reves@cleancoaltechnologiesinc.com

Aiden Neary, COO/CFO  
+1203.918.7706  
aneary@cleancoaltechnologiesinc.com

S.K. Grover, Advisor (Tech) Asia  
+91.9810139639

Marc Townsend, CEO CCTI International  
Mtownsend@cleancoaltechnologiesinc.com

Corporate Office  
295 Madison Avenue  
New York, NY 10017  
Tel. 646.727.4847

Company Information & Partnerships