



“Navigating Roadblocks on the Path to Advanced Biofuels Deployment”



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Chairman & CEO
Sweetwater Energy
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Sweetwater *Fast Facts*



- Based in Rochester, New York
- Produces C5/C6 sugar solutions for sale to biofuel and biochemical plants
- Pilot and laboratory facility operational - 1QTR/2012
- Raised \$17 Million in Series A Equity rounds
- Currently employs 27 professionals
- Signed customer contracts worth \$500 Million

Sweetwater Demo Plant

- Located in Rochester, New York
- Became operational 2QTR/2013
- Processes multiple feedstocks



Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

SOLUTION

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

1. Lack of Cost-Effective Feedstock

SOLUTION

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BARRIER

1. Lack of Cost-Effective Feedstock

SOLUTION

✓ **Feedstock Agnostic**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

1. Lack of Cost-Effective Feedstock

2. Logistics Costs

SOLUTION

✓ Feedstock Agnostic

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✓ Feedstock Agnostic

✓ **100-Ton Biomass / Day Modules**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

1. Lack of Cost-Effective Feedstock

2. Logistics Costs

3. Upfront Capital & Operating Expenses

SOLUTION

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SOLUTION

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✓ 100-Ton Biomass / Day Modules

✓ **Sweetwater Owned & Operate Model**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

1. Lack of Cost-Effective Feedstock
2. Logistics Costs
3. Upfront Capital & Operating Expenses

4. Long-Term Off-Take Contracts Necessary

SOLUTION

- ✓ Feedstock Agnostic
- ✓ 100-Ton Biomass / Day Modules
- ✓ Sweetwater Owned & Operate Model

Top 10 Listing of Barriers & Sweetwater Solutions



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- 4. Long-Term Off-Take Contracts Necessary**

SOLUTION

- ✓ Feedstock Agnostic
- ✓ 100-Ton Biomass / Day Modules
- ✓ Sweetwater Owned & Operate Model
- ✓ **Indexed to Corn, Ethanol, or Dextrose Price, Share Incentives**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

1. Lack of Cost-Effective Feedstock
2. Logistics Costs
3. Upfront Capital & Operating Expenses
4. Long-Term Off-Take Contracts Necessary
- 5. Some Customers Want to Own and License**

SOLUTION

- ✓ Feedstock Agnostic
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SOLUTION

- ✓ Feedstock Agnostic
- ✓ 100-Ton Biomass / Day Modules
- ✓ Sweetwater Owned & Operate Model
- ✓ Indexed to Corn, Ethanol, or Dextrose Price, Share Incentives
- ✓ **Built by Sweetwater with Option to Own**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

SOLUTION

6. Permitting Issues

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

6. Permitting Issues

SOLUTION

- ✓ **Utilize CO₂ as New Feedstock and Customize Project by State**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

6. Permitting Issues

7. Water Balance Concerns

SOLUTION

- ✓ Utilize CO₂ as New Feedstock and Customize Project by State

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

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7. Water Balance Concerns

SOLUTION

- ✓ Utilize CO₂ as New Feedstock and Customize Project by State
- ✓ **Aggressive Water Re-Use Programs with Each Client**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

6. Permitting Issues

7. Water Balance Concerns

8. EPA Issues

SOLUTION

- ✓ Utilize CO₂ as New Feedstock and Customize Project by State
- ✓ Aggressive Water Re-Use Programs with Each Client

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

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7. Water Balance Concerns

8. EPA Issues

SOLUTION

- ✓ Utilize CO₂ as New Feedstock and Customize Project by State
- ✓ Aggressive Water Re-Use Programs with Each Client
- ✓ **Ongoing; Frequent Dialogue About Feedstocks and Business Model Needs**

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

SOLUTION

6. Permitting Issues

- ✓ Utilize CO2 as New Feedstock and Customize Project by State

7. Water Balance

- ✓ Aggressive Water Re-Use Programs with Each Client

8. EPA Issues

- ✓ Ongoing; Frequent Dialogue About Feedstocks and Business Model Needs

9. Long-Term Cash Flow Protection

Top 10 Listing of Barriers & Sweetwater Solutions



BARRIER

6. Permitting Issues

7. Water Balance Concerns

8. EPA Issues

9. Long-Term Cash Flow Protection

SOLUTION

- ✓ Utilize CO₂ as New Feedstock and Customize Project by State
- ✓ Aggressive Water Re-Use Programs with Each Client
- ✓ Ongoing; Frequent Dialogue About Feedstocks and Business Model Needs
- ? Low Incremental Capex to Convert to Higher Value Products**

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BARRIER

SOLUTION

6. Permitting Issues

✓ Utilize CO₂ as New Feedstock and Customize Project by State

7. Water Balance Concerns

✓ Aggressive Water Re-Use Programs with Each Client

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✓ Ongoing; Frequent Dialogue About Feedstocks and Business Model Needs

9. Long-Term Cash Flow Protection

? Low Incremental Capex to Convert to Higher Value Products

10. Financing Initial Commercial Projects

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9. Long-Term Cash Flow Protection

**10. Financing Initial
Commercial Projects**

SOLUTION

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- ✓ Aggressive Water Re-Use Programs with Each Client
- ✓ Ongoing; Frequent Dialogue About Feedstocks and Business Model Needs
- ? Low Incremental Capex to Convert to Higher Value Products
- ? **Working with Denmark and Brazil to Support Imported Equipment**



Thank you!

