New Energy Risk helps Brightmark Energy secure cost-effective financing for its first advanced plastic recycling plant

CASE STUDY

"We were able to secure debt financing more quickly than we otherwise could have for our first commercial-scale advanced plastic recycling facility. I don't think it would have happened without the policy developed by New Energy Risk."

Jay Schabel,
President of Brightmark Energy Plastics Division

Brightmark Energy

Brightmark Energy is an innovator in the plastics renewal sector. By turning organic and plastic waste into sustainable products and fuel, its solutions tackle society's most complex waste challenges.

HIGHLIGHTS

CHALLENGES

- **Identifying optimal project structure:** Balancing project economics with risk mitigation
- **Obtaining investor confidence:** Proving technological viability and long-term value with a first-of-its-kind project
- **Adapting to pre-financing changes:** Understanding how to reduce risk in a quickly changing market

SOLUTIONS

- Deep risk assessment based on detailed technoeconomic models
- Supporting the project with rapid feedback to build investor confidence
- Introductions to potential investors and help optimizing project structure to secure project financing

RESULTS

- Successful project financing for a plastics renewal plant in Ashley, IN, USA
- Aggregate $185M in debt capital raised at a favorable long-term interest rate of 7.125%
- Partnerships with important debt financiers, including the current largest bondholder

Challenges

Securing investor confidence for a first-of-its-kind plastics renewal project

Brightmark Energy Plastics Division was seeking financing for its first commercial-scale project: a plastics renewal plant in Ashley, IN, USA.

The Ashley facility will take mixed plastic waste and convert it into usable products at a commercial scale. The technology's outputs can also be used to manufacture plastics again, creating one of the world's first truly sustainable plastics technologies that enables the circular economy.

But two main challenges stood between this waste solutions provider and project financing, which prompted the team to reach out to New Energy Risk (NER).

Challenge #1: Identifying the optimal project structure

Brightmark Energy needed a structure that maximized project economics and scale while mitigating perceived technological and commercial risks that could threaten its viability.

This balance is especially difficult for first-of-its-kind projects like the Ashley facility. First-time commercial projects are perceived to have greater risk, and often have upfront capital costs that are higher than the market can bear.

> *"Our technology is one that requires proof of commercial success. New Energy Risk helped us by adapting a technology insurance policy to specific investor feedback. The end result was perfectly suited to the project's business model and financing strategy," explains Jay Schabel, president of Brightmark Energy Plastics Division.*

Challenge #2: Obtaining investor confidence

Even though Brightmark Energy Plastics Division's underlying technology had gone through years of testing and a successful pilot-scale demonstration, it didn't have any commercial facilities to use as references for operational history. The investment community perceived significant technology risk, which proved difficult for securing financing with favorable rates.

> *"We spent countless hours convincing investors that our technology was unique and viable, but securing financing was like crawling uphill through molasses. We had to take investment groups deep enough into our process for them to understand that what we were doing was viable and commercially ready," Jay says.*

Then, once Brightmark Energy began working with NER, together they came upon a third challenge.

Challenge #3: Adapting to pre-financing changes

As the transaction moved closer to execution, Brightmark Energy needed to tweak its project structure to make it more financially viable. To keep project financing on track, Brightmark Energy requested guidance and support from NER to stay agile and adaptable given required pre-financing changes.

> *"Our original project changed throughout the closing process based upon New Energy Risk's feedback and assistance. They helped us reduce risk in the business model. They helped us from an overall uptime success assurance standpoint and helped make the project viable for debt financing," Jay says.*

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Solutions

Deep risk assessment based on detailed technoeconomic models

NER worked hand-in-hand with Brightmark Energy’s engineering team and independent engineers to understand their process. A proprietary, detailed technoeconomic analysis enabled NER’s team of scientists, engineers, and actuaries to accurately assess risk where other partners may lack the expertise or mandate to do so.

NER is able to create bespoke insurance solutions built on the back of rigorous analysis. This helps mitigate technology risk for project investors and provides the certainty needed to close project financing transactions.

> *“New Energy Risk truly understands what your obstacles are and they actively work with you to help you secure the funding you need. Their insurance solution is a unicorn in this industry; it’s very specialized and unique,” Jay says. “I was impressed by how they vet technologies and partnered with us to co-develop a model that was both financially- and risk-driven.”*

Supporting the project to build investor confidence

NER also helped guide Brightmark Energy's team during the structuring of the project, which helped make the project more attractive for investors.

> *"As we made changes to our plant throughout the design phase, New Energy Risk's involvement, the questions they asked, and the advice they gave on how to approach the project structure were invaluable. It had a large impact on the viability of the project," Jay says.*

As the technical design and commercial parameters underwent changes, NER continued to modify its custom insurance solution to support Brightmark Energy's project.

Making introductions to potential investors

As capital needs for the project grew, NER facilitated introductions between Brightmark Energy and potential investors. Introductions with investment banks like Goldman Sachs & Co. helped enable the debt capital raise required to complete the project.

NER even provided the initial introduction between Brightmark Energy and Jay, whose advanced plastics-recycling technology (RES Polyflow) Brightmark Energy acquired to become the majority-stake owner and project equity provider.

> *"New Energy Risk performed a lot of iterative legwork. They went out into the bond market, they hosted calls to answer questions about how the insurance product works and what risk mitigation factors they considered in their review, and they helped build bond investor confidence with the project," Jay says.*

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Results

$185M in debt capital secured at a low interest rate

NER worked in close partnership with Brightmark Energy during the pre-financing cycle. Throughout the process, NER's commercial team collaborated with Brightmark Energy's team and its investment banks to educate the debt financiers on the benefits and details of the bespoke performance insurance policy.

> *"New Energy Risk stood alongside us as the petroleum market and financing market went up and down. That allowed us to continue moving the project towards funding," Jay says.*
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> *Brightmark Energy's SVP & Chief Financial Officer Scott Healy adds, "New Energy Risk's ability to understand our proprietary technology and to tailor their technology insurance solution on a timely basis to meet key financing needs was integral to the ultimate success of the Ashley project financing."*

Understanding exactly how Brightmark Energy's technology worked enabled NER's technical team to communicate the plastic renewal project's value, mitigate perceived risks, and translate that information to an insurance policy issued by Indian Harbor Insurance Company, a member of the AXA XL group of companies (S&P AA-).

> *"We were able to secure debt financing more quickly than we otherwise could have for our first commercial-scale advanced plastic recycling facility. I don't think it would have happened without the policy developed by New Energy Risk," Jay says.*

In the end, the partnership paid off. Brightmark Energy raised an aggregate **$260 million, including $185 million in Indiana green bonds, underwritten by Goldman Sachs & Co.** NER was part of the solution that helped Brightmark Energy raise the requisite debt capital at a **favorable long-term rate of 7.125%.**

> *"With New Energy Risk's help, we were able to oversubscribe the project funding and bring our interest rate down as a result. Their insurance solution played a significant role in that," Jay says.*

The successful financing of this project was the catalyst Brightmark Energy needed to achieve its long-term vision for diverting plastic waste. It broke ground on the Ashley plastics renewal plant on May 22, 2019.

Once the facility is operational, it will convert approximately 100,000 tons of waste plastics into fuel and other products annually—around 18 million gallons of ultra-low sulfur diesel and naphtha blendstocks, and 6 million gallons of commercial grade wax.

> *"New Energy Risk is still playing a role in monitoring the success of the project. They will be a part of the team that helps us overcome obstacles as we start up, and we'll be knocking on their door again when it comes time to seek out affordable funding for future plants," Jay says.*

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New Energy Risk helps you secure financing for tomorrow's technology

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