BD | THE BIOFUEL DEVELOPMENT
OZ | OPPORTUNITY ZONE INITIATIVE

EMPOWERING RURAL PROSPERITY
ENABLING ENERGY INDEPENDENCE
UNLEASHING AMERICAN BIOFUELS



2024 | BDO Zone Initiative | Annual Report

SITE LOCATION “BULLS-EYES” FOR BIOFUEL MANUFACTURING

The BDO Zone Initiative certifies “regional readiness for biofuels production" , creates global connections, and ignites an influx of new energy opportunities.

A BDO Zone Rating is a standards-based assessment of a specific region’s suitability for biofuels manufacturing. ‘AAA’, ‘AA’, ‘A’ and ‘BBB’ ratings put an internationally recognized, credible “bulls-eye” on the best areas to build and operate new bio-based manufacturing plants.

Ratings fill a critical need for more credible financial tools that empower place-based biofuel development by enabling local regions to gain attention at the international level and attract new biofuels projects and create jobs.

BDO Zone ratings send clear and powerful signals to developers and investors that a specific region is shovel-ready for biofuel development. Ratings enable economic developers to credibly signal and promote key biomass feedstock, supply chain, and infrastructure “success” characteristics around the world.

The goal of the BDO Zone Initiative is to catalyze and accelerate biofuels development with 1000 BDO Zone ratings over four years.

A MESSAGE FROM THE CHAIRMAN



JORDAN SOLOMON
Chairman, BDO Zone Initiative

> **We are laying the foundation for a thriving manufacturing base for biofuels that will support rural prosperity and unleash energy independence.**

The idea behind BDO Zones has always been simple. Identify the best places for biofuels and connect these zones with project developers from around the world. We thought that by creating a credible "rolodex" of regions that have been rigorously pre-vetted for attributes that give biofuels plants a "soft landing", project developers would naturally gravitate to those places.

And indeed, they are doing so.

The past year has seen extraordinary growth with over 350% increase in BDO Zone ratings compared to 2023. This surge from 12 BDO Zone ratings issued in 2023 to 43 ratings issued or in process by year-end is a testament to the increasing recognition of the initiative's value.

We are seeing substantial increases in inbound deal flow to BDO Zones. We are getting feedback from project developers that they want more BDO Zones to make it easier to create pipelines of future site locations. We are seeing BDO Zone ratings used to support capital raises for multiple projects such as the $2 billion raise by Barclays for USA Bioenergy's Synthetic Aviation Fuel (SAF) plant in Bon Weir, Texas. We are engaged with governments about how BDO Zones can be used to mitigate wildfire risk, and repurpose underutilized assets for biofuels project development. And we are proud of each of the 61 BDO Zone ratings issued or in progress as of this date.

Yet there is much more work to do. We recognize that biomanufacturing technologies have vastly different requirements when it comes to biomass type, cost and quantity, not to mention local infrastructure. Optionality is the energy that powers market economies, and the diverse range of biomanufacturing project requirements mean that 61 BDO Zones is a significant milestone—but it is not enough. If we truly wish to reach our national potential for biofuels production, we must continue to build towards our ambitious goal of 1000 BDO Zones in four years.

The journey ahead is challenging, but the potential rewards for our economy, our rural communities and our energy independence are immense. Together, we are laying the foundation for a thriving manufacturing base for biofuels that will support rural prosperity and unleash energy independence across America.



JORDAN R. SOLOMON
Chairman, BDO Zone Initiative

2024: BDO ZONES BY THE NUMBERS

The BDO Zone Initiative experienced remarkable growth in 2024, with significant increases in ratings issued and developer interest. Multiple zones are in discussions with potential projects, demonstrating the ability of BDO Zone ratings to generate meaningful biofuel manufacturing deal-flow for rural communities. BDO Zone ratings are being used to support multi-billion-dollar capital raises and have gained widespread attention from industry stakeholders globally, underscoring the program's expanding influence on biofuel development.

Here are BDO Zones by the numbers in 2024:



43 New BDO Zones – 30 potential projects

19 BDO Zones currently in contract discussions with 30 biomanufacturing projects.

358%

increase in BDO Zone ratings issued or in progress versus 2023.



69% increase

in inbound inquiries from project developers, on average.

6.3 million

BDO Zone ratings promoted to over **6.3 million industry project developers, investors and sector stakeholders** worldwide.[1]

$4 Billion

BDO Zone ratings currently being used to **support over $4B of capital** by 4 projects.[2]

850 per rating

Average number of rating downloads/views by project developers, capital markets and other stakeholders per individual rating issue.

1 Biofuels Digest (6.3M readers / viewers) and BDO Connect Webinars

2 USA Bioenergy, TX- $2B; Velocys, MS -$1.5B; Azure KA-undisclosed. Estimated $500M. Red Leaf Pulp, SK- undisclosed

THE BDO ZONE INITIATIVE IN 2024

BDO Zones: Unlocking Biofuels Potential in 2024

The BDO Zone Initiative has emerged as a pivotal force in driving biofuel manufacturing development across North America. In 2024, we witnessed unprecedented growth and recognition, solidifying our role in bridging the gap between biomass-rich communities and biofuel stakeholders.

Why BDO Zones Matter

Thousands of communities across North America are rich in sustainable biomass resources, yet they face challenges in leveraging these assets for economic growth. A key barrier is the inability to quantify and transparently communicate regional feedstock and infrastructure risks to potential investors. This gap often results in high-potential communities being overlooked for biofuel development opportunities.

Without the means to effectively signal their attributes to project developers around the world, these communities are effectively “lost” to biofuel development. BDO Zone ratings enable them to be “found”.

BDO Zone Ratings address this challenge by enabling rural communities to credibly and powerfully showcase their biomass and infrastructure assets. By facilitating connections between these communities and biofuel developers and investors worldwide, BDO Zones help catalyze development of new biofuels projects. This not only drives economic development but also creates jobs, allowing communities to benefit from the burgeoning global biofuels sector.

2024: A Year of Remarkable Growth

This year marked a transformative period for the BDO Zone Initiative. We experienced over 3.5X increase in ratings issued or in progress compared to 2023, from 12 in 2023 to 43 by the end of 2024 with a total of 61 throughout North America, reflecting heightened interest from communities, governments and project developers. On average, inbound inquiries to BDO Zones surged by 69% after issue of the rating, indicating growing global recognition by project developers of the value that BDO Zones offer. Currently, 19 BDO Zones are engaged in substantive contract discussions with 30 potential biomanufacturing projects demonstrating the program’s effectiveness in catalyzing economic development. Additionally, BDO Zone ratings are currently being used to support over $4 billion of capital being raised across four projects, showcasing the financial impact of the initiative.

Our outreach efforts have successfully promoted each BDO Zone to over 6.3 million industry stakeholders worldwide. Each rating issued in 2024 averaged 850 downloads or views, highlighting the strong interest worldwide from developers, investors, and other key players in the biofuels sector.

BDO ZONE INITIATIVE

Clarksville, Arkansas

BDO Zone Rating
AA

Issue Date
June 15, 2023

Feedstock Type
Poultry Litter

Feedstock Amount
150,000 tons/year

“We wouldn’t be approaching Phase 1 on a multi-million dollar project if not for the BDO Zone Rating.”

Stephen Houserman
Economic Development Director
City of Clarksville, Arkansas



In the U.S., the USDA's Rural Business Development Grant program approved funding for 14 local communities to obtain BDO Zone ratings in 2024. This endorsement from a key federal agency underscores the growing recognition of BDO Zones as a valuable tool for empowering rural prosperity.

Simultaneously, Natural Resources Canada's Clean Fuels Fund provided funding to seven Canadian communities for BDO Zone ratings. This support aligns with Canada's national strategy to boost biofuels production and accelerate energy independence.

These government-backed initiatives in both countries demonstrate the increasing integration of BDO Zones into national and regional strategies for economic growth and energy independence. By facilitating access to BDO Zone ratings, these programs are empowering more rural communities to showcase their biomass potential and attract investment in the burgeoning biofuels sector.

New Strategic Initiatives

We launched several strategic initiatives in 2024 designed to support BDO Zones:

BDO Zone Strategic Partners Network: This network brings together top-tier companies specializing in risk mitigation and project development acceleration. By uniting capital markets, project developers, technology firms, and supply chain experts, we aim to create an ecosystem that expedites project development within BDO Zones.

BDO Zone Project Developer Network: With over 350 companies, this network connects BDO Zones with global opportunities and helps ignite an influx of new energy projects to BDO Zones. Members of the Project Developer Network are all notified of BDO Zones ratings within 30 days of issue.

BDO Zone Investment Coalition: We added 2 new capital markets to the coalition which currently consists of 22 leading investors committed to collectively deploying $1 billion in new biofuels manufacturing plants located within BDO Zones.

Endorsements from Key Organizations: Since inception of the Initiative, we have received letters of endorsement from influential groups such the Commercial Aviation Alternative Fuels Initiative (CAAFI) the largest coalition of airlines, aircraft and engine manufacturers, energy producers, researchers, international participants and U.S. government agencies with a goal of accelerating the production of Synthetic Aviation Fuel and from the Agricultural Producers Association of Saskatchewan (APAS), the main organization advocating for Saskatchewan farmers (2020). These endorsements were leveraged to validate our approach and enhance our credibility within the industry in 2024.

BDO ZONE INITIATIVE

Lewis County, WA

BDO Zone Rating
AA

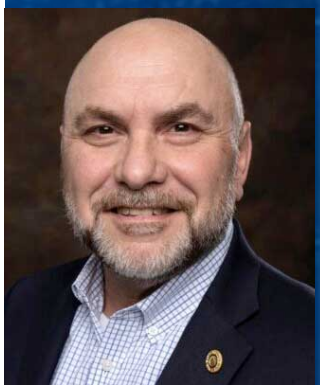
Issue Date
December 20, 2023

Feedstock Type
Woody Biomass

Feedstock Amount
600,000 bdt/year

"Our 'AA' rating has sparked serious interest in our biomass assets, driving a strategic shift for the Alliance, community, and local businesses toward innovative biobased opportunities."

Todd Chaput
Director of Operations
Economic Alliance of Lewis County



Tools for Community Empowerment

To further support communities in their biofuels development efforts, we introduced two new essential tools:

Community Quick Start Guide: This guide provides a clear, step-by-step overview of the BDO Zone rating process tailored for communities, economic development entities, and government officials. It simplifies the complexities involved and explains the significance of each stage.

BDOSAT (BDO Zone Self-Assessment Tool): BDOSAT is a free online tool that enables communities, corporations, and governments to quickly assess regional readiness for new biofuels manufacturing plants. It offers preliminary insights into potential BDO Zone rating grades to help regions decide whether a BDO Zone rating is right for them.

Looking Ahead

As we move forward into 2025 and beyond, we are focused on leveraging BDO Zones to help the US Forest Service mitigate wildfire risk; on increasing the impact of the BDO Zones by anchoring them to local Biomass Supply Cooperatives; and on developing new types of BDO Zone Ratings to leverage the impact of Large Biomass Generators (LBGs) and Underutilized Infrastructure Assets (UIAs) such as certified rail sites, recently closed pulp and paper mills, and defunct airports.

Finally, we are pleased to announce that the *American Society for Testing and Materials (ASTM)* and the *Canadian Standards Association (CSA*) will deploy a US/Canada bi-national standard for BDO Zone ratings in 2025.

Overall, we remain dedicated to unleashing the full energy potential of biomass-rich rural communities across North America. By continuing to connect communities with biofuels developers and investors, we aim to ensure that our rural areas reap the benefits of investments in new biofuels plants, job creation, and an energy independent future for all.

Libby, Montana

BDO Zone Rating
A

Issue Date
October 4, 2022

Feedstock Type
Woody Biomass

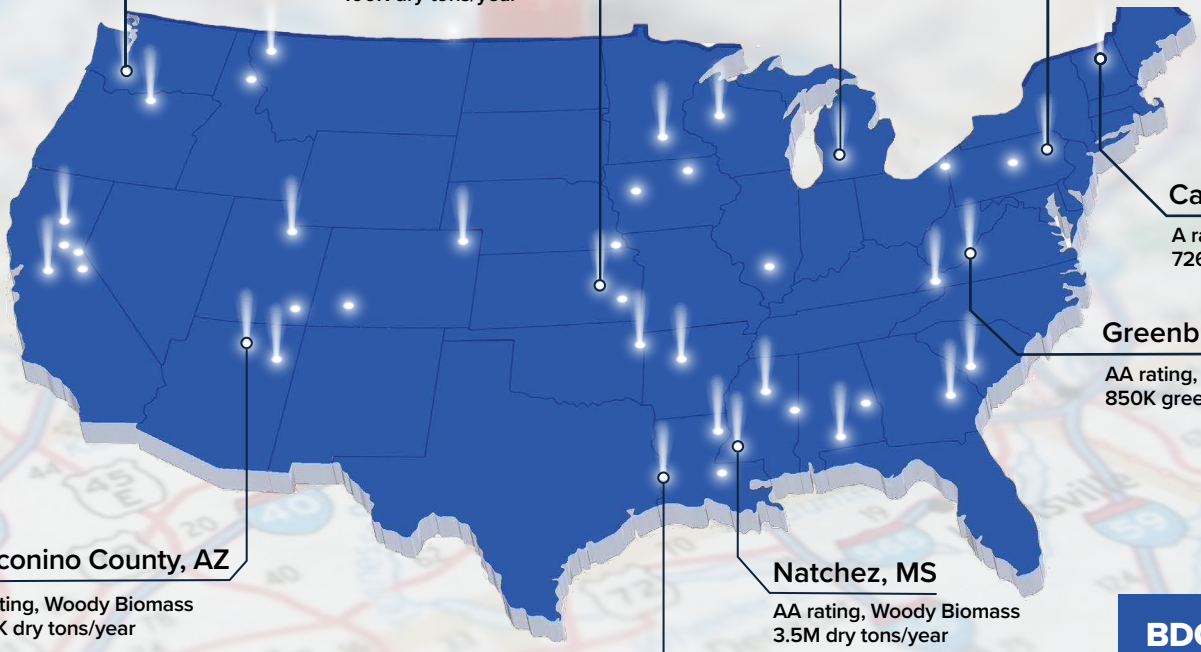
Feedstock Amount
275,000 green tons/year

“We could’ve tried to market ourselves, but we are a very small, rural county with a population of 20,000; we don’t have a lot of resources. I don’t think we would have been discovered at all had it not been for the BDO Zone Rating.”

Mark Peck
Shared Stewardship Coordinator, Lincoln County Port Authority



BDO ZONES 2024



Lewis County, WA
AA rating, Woody Biomass
600K dry tons/year

Barry County, MI
A rating, Woody Biomass
324K dry tons/year

Emporia, KS
BBB rating, Corn Stover
100K dry tons/year

Wyoming County, PA
A rating, Woody Biomass
662K dry tons/year

Caledonia County, VT
A rating, Woody Biomass
726K dry tons/year

Greenbrier Valley, WV
AA rating, Woody Biomass
850K green tons/year

Coconino County, AZ
A rating, Woody Biomass
100K dry tons/year

Natchez, MS
AA rating, Woody Biomass
3.5M dry tons/year

Bon Wier, TX
AA rating, Woody Biomass
2M green tons/year

BDO Zones Rating Status

Rating Issued

Rating Pending

Natchez, Mississippi

BDO Zone Rating
AA

Feedstock Type
Woody Biomass

Issue Date
May 11, 2023

Feedstock Amount
3.5 M bdt/year

"The two or three weeks post announcement tripled our dealflow in the foresty product side of things."

Chandler Russ
Executive Director
Natchez Inc.



US BDO ZONE RATINGS

2024

BDO Zone Name	State/Province	Rating	Issue Date	Biomass	Quantity	Analytics
Caledonia County	VT	**A**	Aug 27, 2024	Woody	726K BDT	View Rating
Barry County	MI	**A**	Aug 8, 2024	Woody	324K BDT	View Rating
Chippewa County	WI	**A**	July 23, 2024	Corn Stover	380K BDT	View Rating
Wyoming County	PA	**A**	July 16, 2024	Woody	662K BDT	View Rating
Little Colorado RIver	AZ	**A**	June 25, 2024	Woody	147K BDT	View Rating
Butte County	CA	**BBB**	June 20, 2024	Woody	223K BDT	View Rating
Grenada County	MS	**A**	June 4, 2024	Woody	1.8M BDT	View Rating
Conecuh County	AL	**A**	May 16, 2024	Woody	969K BDT	View Rating
Emporia	KS	**BBB**	Mar 28, 2024	Corn Stover	100K BDT	View Rating
Toombs County	GA	**AA**	Mar 20, 2024	Woody	1M BDT	View Rating
Region Nine	MN	**A**	Mar 15, 2024	Corn Stover	1.4M BDT	View Rating
Richland Parish	LA	**A**	Mar 12, 2024	Woody	677K BDT	View Rating
Coconino County	AZ	**A**	Feb 29, 2024	Woody	100K BDT	View Rating
North San Joaquin Valley	CA	**AA**	Feb 15, 2024	Tree Nut	1.1M GT	View Rating
Lewis County	WA	**AA**	Jan 25, 2024	Woody	600K BDT	View Rating

IN PROCESS

BDO Zone Name	State	Rating	Issue Date	Biomass	Quantity	Analytics
Prince of Wales Island Region	AK	--	Q4 2024	Woody	--	Rating Pending
Clearwater County	ID	--	Q4 2024	Woody	--	Rating Pending
Mason City	IA	--	Q4 2024	Corn Stover	--	Rating Pending
Sac County	IA	--	Q4 2024	Corn Stover	--	Rating Pending
Southeast Kansas	KS	--	Q4 2024	Corn Stover	--	Rating Pending
Pointe Coupee	LA	--	Q4 2024	Woody	--	Rating Pending
Kemper County	MS	--	Q4 2024	Woody	--	Rating Pending
Falls City	NE	--	Q4 2024	Corn Stover	--	Rating Pending
Cameron County	PA	--	Q4 2024	Woody	--	Rating Pending
San Juan County	UT	--	Q4 2024	Woody	--	Rating Pending
Macon County	AL	--	Q1 2025	Woody	--	Rating Pending
El Dorado County	CA	--	Q1 2025	Woody	--	Rating Pending
Nevada County	CA	--	Q1 2025	Woody	--	Rating Pending
Placer County	CA	--	Q1 2025	Woody	--	Rating Pending
Region 9 (Southeast)	CO	--	Q1 2025	Woody	--	Rating Pending
Breese	IL	--	Q1 2025	Corn Stover	--	Rating Pending
Ashtabula County	OH	--	Q1 2025	Miscanthus Grass	--	Rating Pending

2023

BDO Zone Name	State	Rating	Issue Date	Biomass	Quantity	Analytics
Summit County	UT	**A**	Nov 30, 2023	Woody	100K BDT	View Rating
Tazewell	VA	**A**	Sep 28, 2023	Woody	625K GT	View Rating
Logan County	CO	**A**	Aug 24, 2023	Wheat Straw	100K ODT	View Rating
Greenbrier Valley	WV	**AA**	Aug 1, 2023	Woody	850K GT	View Rating
Clarksville	AR	**AA**	Jun 15, 2023	Poultry Litter	150K T	View Rating
Natchez	MS	**AA**	May 11, 2023	Woody	3.5M BDT	View Rating

2022

BDO Zone Name	State	Rating	Issue Date	Biomass	Quantity	Analytics
Bon Wier	TX	**AA**	Oct 19, 2022	Woody	2M GT	View Rating
Libby	MT	**A**	Oct 4, 2022	Woody	275K GT	View Rating
Barnwell County	SC	**A**	Jan 17, 2022	Woody	300K T	View Rating

2021

BDO Zone Name	State	Rating	Issue Date	Biomass	Quantity	Analytics
Arlington	OR	**A**	Dec 6, 2021	MSW	350K T	View Rating
Siloam Springs	AR	**A**	Oct 18, 2021	Poultry Litter	1.5M T	View Rating

JORDAN SOLOMON
Chairman, BDO Zone Initiative
jordan.solomon@bdozone.org

ARYN GARSWOOD
Head, BDO Zone Initiative
aryn@bdozone.org

1-833-311-4BDO (4236)

info@bdozone.org

linkedin.com/showcase/bdo-zone-initiative

www.bdozone.org

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