

February 16, 2023

Rural and Agricultural Energy and Climate Policy: The Best Opportunity for the “Grand Transition” to Take Root

Wisconsin farming and forestry communities and our state’s natural resource-based, rural economies are at an important crossroads. Farm operator failures, (citation) loss of forest product markets, increasingly complex water quality issues, loss of rural manufacturing jobs and addressing impacts of severe weather events are just a few of the pressure points facing Wisconsin’s rural communities. (1)

During 2021-22, a public/private collaboration lead by Wisconsin Legislative leaders explored options for reinvigorating Wisconsin’s farm economy. The Agricultural/Carbon/Energy/Water (A-CEW) initiative investigated emerging agricultural sustainability trends and market opportunities. The result of this effort was the introduction of an innovative set of policy recommendations and Senate Bill 1054/Assembly Bill 1072. With only a five-week Spring 2022 Legislative session, this bill was unable to be scheduled for full-consideration. However, the March 2022 Senate Natural Resources and Energy Committee hearing demonstrated the considerable interest of many leading stakeholders for addressing the State’s potential role in facilitating and supporting sustainable market practices in its agricultural sector.

The following policy program was developed to build upon the A-CEW effort. This program outline offers specific recommendations for State practices and policies that will support investment and operational opportunities for rural enterprises and farms. The intent of this program is to streamline State policies and promote investment in areas necessary to support monetization of sustainable investments, carbon management and clean-energy transition.

The included policy recommendations were developed to leverage on-going market opportunities and Federal/State incentives, including but not limited to the recent Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA).

We thank you for committing your time and interest in review and commenting on this policy initiative and suggestions.

Gary Tauchen

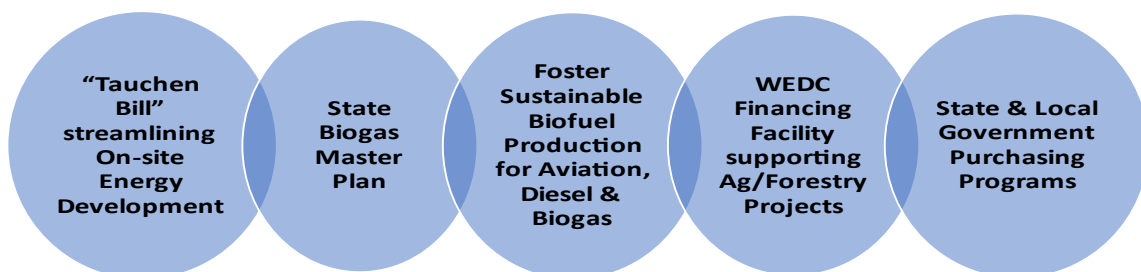
Retired; Chair, Agricultural Committee; Wisconsin Assembly, 6th District

Jessica Niekrasz

Board Chair, Wis. Biomass Energy Coalition

Summary of The Ask

- I Revisit, revise and reintroduce WI Senate Bill 1054/Assembly Bill 1072 (Tauchen Bill) to streamline and clarify opportunities for agricultural operations to effectively monetize sustainability and carbon management practices and investments. Require carbon intensity disclosure of power and fuels sold in Wisconsin.**
- II Sponsor and fund a comprehensive State-wide biogas master plan, to be managed by Public Service Commission (PSC) in cooperation with natural gas pipeline operators and utilities**
- III Sponsor and fund a comprehensive evaluation of the techno/economic feasibility of manufacturing sustainable aviation fuel (SAF), renewable diesel (RD) and renewable natural gas (RNG) to serve Wisconsin/Mid-west markets including air transportation providers, airport service vehicles, state and local government fleets, agricultural operations and other voluntary liquid/gaseous fuel customers. A specific focus would include assessing the feasibility of locating such facilities at existing biorefineries, forest product processors and rural industrial facilities/parks.**
- IV Direct the Wisconsin Economic Development Corporation (WEDC) to investigate and pursue the establishment of a financing facility to support:
A) On-farm energy systems and related infrastructure developments necessary to support wide-spread deployment of such systems, including but not limited to electric power generation and biogas/nutrient recovery
B) Biorefinery development pursuing SAF, RD and RNG
C) Feedstock and biomass supply-chain development to support biorefinery projects**
- V Direct the Department of Administration (DOA), in cooperation with Wisconsin Investment Board/ETF and municipal and county governments to develop a bio-based purchasing and investment program. Program would seek to provide effective offtake markets for SAF, RD, RNG and power sector products originating from farming systems.**



Rural and Agricultural Energy and Climate Policy: The Best Opportunity for the “Grand Transition” to Take Root (a story)

Brothers Dan and Bob Smith began the annual business planning session for their dairy enterprise as usual: an early morning meeting with big plates of eggs over easy, hashbrowns, venison bacon, blackberry preserves. And an apple fritter was planned for the mid-morning break! Sister and financial boss, Jess, had just arrived and was setting up the large computer screen for presenting the year-end numbers. The crop harvest had gone as smoothly as any in recent memory. Little autumn rainfall and favorable humidity had saved their operation both diesel and propane costs. Luckily, no major equipment problems had set them back, other than the transmission on that old Massey Bob so loves. Yields for all the crops, corn, alfalfa, beans, and some oats were well above long-term averages, both on the family ground and the rented land.

All three knew, that the recent inflationary period, while taking a bite out of their fertilizer and fuel budgets, had significantly improved all their crop and milk prices. This morning’s discussion, as in all years, was intended to take a hard look at their major investments, tax outlook and set the stage for both operational and capital budgets for the upcoming year. Each sibling knew major changes were afoot and they couldn’t afford to hesitate or become trepid. If their family farm was to continue to thrive, in contrast to too many of their family, friends, and neighbors, they needed to remain creative and clever.

One year ago, at this same table, they had agreed to install the solar array on the milking parlor roof at the home farm and the ground-mounted system at the “Back Acres” farm. Together this was a \$150,000 investment. If they had just stuck with the solar panels it would have been quite a bit less. Yet, the Federal investment tax credit program along with the Focus on Energy and Wisconsin Economic Development Corporation programs prompted a bigger, and bolder, play. Their power rates had been increasing faster than inflation. They were concerned that their Rural Electric Coop (REC) wasn’t going to be able to keep up with their plans much less protect them from continued pricing increases.

A year later, they were glad to have been “partially wrong” about the Co-op. The REC folks had been taking advantage of the Federal Inflation Reduction Act provisions too and had adopted recent contracting changes brought on by Public Service Commission rules simplifying the power sale process. The result was that their farm had invested in an enterprise-wide energy management system along with a humble battery pack for the Back Acres chiller and barn ventilation system. The Smiths actually had a working microgrid at their farms. A year ago, they weren’t even able to spell “m-i-c-r-o-g-r-i-d.”

Last year was also the first time Jess and their accountant Gary had worked directly with a sustainable advisory team. This group was made up of farm management advisors from Southwest Technical College, University of Wisconsin-Extension agents, and technical service providers associated with their milk cooperative, Edge Dairy. That team combined Edge’s carbon management and accounting tool with a database supported by the Wisconsin Department of Agriculture, Trade and Consumer Protection, USDA, and PSC-WI. (2)

Through this process, Jess was not only able to evaluate the feasibility of the energy system investment but was in a much better position to negotiate commercial terms with the REC. They had agreed to bundle the Renewable Energy Credits generated from the solar system for a limited 3-year period in their contract with the REC in exchange for a higher buy-back rate. The standard PSC-endorsed contract had reduced much need for legal review and had been easily understood by all including her “non-financial” brothers. More importantly, this entire process better prepared her for today.

In late October, Smith Dairy had received a letter from Edge Dairy Cooperative. Edge was about to offer a voluntary pricing program for producers who elected to measure and manage the carbon intensity of their milk. That same week the REC also sent a letter requesting the Smiths consider enrollment of their energy system into a “partnership” that promised better pricing and a cooperative “profit-sharing” arrangement. This arrangement was being offered to several other area farms, where the REC aggregated their system with their neighbors and sold power and efficiency into the “grid.” Luckily, the PSC-WI standard agreement had alerted and informed her of this possibility last year, so it wasn’t a completely new topic.

Both of these opportunities required careful consideration. However, the Edge offer needed to be considered first. There was less potential benefit to the Smith enterprise of comprehensive carbon management unless they could receive both cost savings and milk premiums. Carbon management would also imply decisions regarding fuel choices (renewable-diesel availability from their local farm supplier), manure management (digester, solids separator, irrigation), fertilizer use (GHG impacts across options), commodity transport both to market (Edge facilities) and from supply sources (forage, grain, soil treatments), and expanded energy system investment. On top of those issues, they needed to consider soil carbon solicitations they’d been receiving from private carbon marketers since early last year.

If all these topics wouldn’t have made her head spin, just this past week the operator of a natural gas pipeline had sent an email asking for a time to call. Seems this pipeline had just received approval from the PSC to team with a digester developer to begin investigating a “cluster” of potential digesters including both Smith farm locations. Dan also had just talked with a neighboring farmer located in a northwest corner section of their township. Seems every dairy operation in the township received a similar email and request.

Jess intended to turn to the same team of sustainable farm practice advisors as before, but not until after Saturday’s session with her brothers (and some of that apple fritter made it her way). They had to figure out the final details on the energy system tax credit filing, run the financial numbers of energy savings/returns and discuss, in general, this carbon management opportunity from Edge. Gonna be another busy – and exciting year.

Jess wished her sister and brother-in-law had seen these options before selling their dairy herd two years ago. Things would have been so different. At least knowing her relatives were able to get new jobs at the biofuel facility, which had just added a community digester, softened the blow. According to her sis, the facility is talking about expanding by contracting farmers to grow grasses and oil-seed crops just for the digester. My, my how agriculture seems to be changing. At least the basics all still seem familiar. Some comfort in these turbulent times.

State Climate Resiliency, Adaptation, and Economic Development Program: Rural and Agricultural Sector Plan

Core Concept:

Leverage Existing Economic and Policy Drivers to Optimize Opportunities Related to Energy/GHG management, Supply-chain, and Community Resiliency/Adaptation, New Venture Formation, Clean Tech/Energy Investment, and Climate Finance (e.g. environmental attribute monetization) in Rural & Agricultural sectors

The following outlines a proposed set of statutory, administrative, programmatic, and resource actions. The State would provide structure and incentives for rural and agricultural enterprises and institutions to capture benefits from clean tech/energy and sustainable practices. These actions are designed to streamline and facilitate investments and practice changes that will enhance the economic viability of rural communities. These State actions will strengthen the ability of rural areas to adapt to impacts attributed to climate change, demographic trends, and supply-chain volatility. Sustainable farming investments and practices will significantly improve farming operation's ability to manage direct impacts of a changing world. (3)

A State program addressing rural economic viability and sustainability must include a robust effort addressing electrical power systems. This policy program would complement the recent-and-on-going significant renewable energy investments of State power utilities. While On-site energy systems are tailored by the individual host to meet their own specific needs, State policies and incentives would promote these same systems to contribute to grid stability, resilience, and decarbonization, along with providing additional grid service revenues to the DER host.

(I) Distributed Energy Resources

- A) Facilitate and support self-management of energy cost control, resilience, and emissions (Scope 2 GHG) through the promotion of grid-tied Distributed Energy Resources (DER). Target deployment for on-farm and rural communities. Develop graduated incentives utilizing State tools such as Focus-on-Energy, tax credits, property assessed clean energy (PACE) and power purchase agreements to support enterprise-scale energy management, self-generation, islanding-capable and dispatchable on-demand (e.g. micro-grid) systems; (4)
- B) Advance and expand Wisconsin's contribution to wholesale market opportunities within the spirit of FERC order 2222 to enhance DER creation, deployment, and economic sustainability. Require Statewide methodology for accounting for parallel generation and ancillary service revenue allocation between DER host and market intermediaries (e.g. Distribution Utilities holding a DER's PPA). Promote Virtual Power Plants by supporting aggregation of DERs for wholesale transactions. (5)(6)(7)
- C) Adopt recommendations of WI Senate Bill 1054/Assembly Bill 1072**
- D) Leverage Inflation Reduction Act of 2022 (7) programs/provisions through financing facility development (WEDC, WHEDA) and taxation programs (WDOR) to promote DER deployments through: (2)
 - a. Public/Private Partnerships especially serving small municipality commercial and industrial districts.
 - b. Non-profit institution (e.g. health-care, schools, etc.) installations.
 - c. Farm Enterprises
 - d. Small municipality energy management districts and manufacturing (8)

Wisconsin has an abundance of capacity to be competitive in developing and manufacturing bio-based materials. Its long history in forest products and agriculture well-position the State's industries to produce fuels, lubricants, chemicals, and many other sustainable replacements for fossil hydrocarbon-based materials. Recent Federal and international policies have created a welcoming environment for products that can transparently and confidently demonstrate a reduction in carbon intensity and sustainability. Sustainable aviation fuels, renewable diesel, and renewable natural gas are experiencing exponential market growth and acceptance. State leadership should and can focus on supporting wide-scale expansion in these sectors, specifically seeking to leverage existing biorefining facilities and forest product facilities (both going concerns and distressed assets).

(II) Bio-based Product and Fuel Production

- A) In addition to (I)(A) above, support the creation of bio-based fuels and products which promote “new carbon” replacements for fossil carbon legacy products. Promote and support new carbon feedstocks and inputs originating from purpose-grown annual or perennial herbaceous crops, short-rotation (2-10 year harvest cycle) woody plants, agricultural/forestry harvest residuals, and organic waste streams, for use in biorefining conversion facilities. Promote and support widespread development of waste-to-energy and nutrient/soil amendment recovery/production (N, P & K, biochar, etc.) facilities (9)
- a. Widespread development of biogas production systems, including manure, commercial/industrial (C&I) diverted organics, and purpose-grown crop feedstocks. Specific program incentives for the location of such systems at existing biofuel facilities, industrial/commercial/publicly owned wastewater facilities, and landfills. (10)(11)
 - b. Woody feedstock facilities producing Sustainable Aviation Fuels (SAF) and Renewable Diesel (RD), along with high-value co-products (including biochar), especially at pulp and paper (both going-concern and non-operating) and biofuel facilities. (12)
 - c. Agricultural commodity and C&I waste feedstock supplied SAF and RD facilities. (13)(14)(15)
 - d. Bio-based substitutes for products historically/currently produced (primarily) from non-renewable fossil hydrocarbon inputs/feedstocks, including but not limited to plastics, chemicals, lubricants, fertilizers, and other soil treatments.
- B) Adopt recommendations of WI Senate Bill 1054/Assembly Bill 1072**
- C) Promote and facilitate Great Lake Region offtake markets for SAF in State/Regional airports. Promote and facilitate offtake markets for RD and RNG in local/regional markets, including State and Local government purchasing. (16)
- D) Leverage Inflation Reduction Act of 2022 programs/provisions through financing facility development (WEDC, WHEDA) and taxation programs (WDOR) to promote biorefining facilities (2)(17) through:
- a. Early planning and mezzanine grants, contracts, awards, and credit enhancements
 - b. State purchasing programs rewarding lower CI products originating from sustainably produced domestic feedstock
 - c. Brownfield and distressed asset re-use/renewal

What is the one thing missing from the global “avalanche/tidal wave” of recent climate and sustainability initiatives, policies, and programs?

Structure. Simple market structure. Where a producer can offer an “environmental attribute” product to a buyer and there is a mutual understanding of the nature of the transaction and trust in the deal.

Recent voluntary market developments attributed to corporate and financial Environmental, Social and Governance (ESG) initiatives have begun to complement the longer-standing compliance markets. (18)(19)(20)(21) Those compliance markets, such as state renewable portfolio standards, Federal EPA markets (emissions trading and Renewable Fuel Standard (RIN) systems), and carbon market initiatives in California and Oregon have been the backbone for investments and ingenuity in the sustainability sector.

Wisconsin can facilitate carbon management, supply-chain resilience, and climate adaptation by requiring product labeling and transparency in its energy sector, supporting clear and consistent scientific evidence-based claims on environmental attribute claims, and leaning forward in influencing Federal and regional policies. (22)(23)

(III) Carbon Management and Supply Chain Resiliency

- A) Mandate Carbon Intensity (CI) reporting (by power distribution utilities) for any ratepayer requesting CI/kwh (for the purposes of self-management of GHG emissions). (24)
- B) Mandate CI reporting for all liquid and gaseous fuel distributors and retailers (CI/gallon, CI/m³). (24)
- C) Establish a standing Climate Finance Governance Board (CFGFB) to advise both Legislative and Executive Branch leaders regarding current financial relations, conditions, trends, and other related issues as such concerns may impact Wisconsin industrial sectors, public finance, and investment decisions. CFGFB would also establish permanent and ongoing communications with State trade, labor, financial, and advocacy organizations, including but not limited to major agricultural and forest industries, to support legislative and executive policies that best reflect climate finance opportunities for rural and farm enterprises. (Appendix A)
- D) Aggressively “weigh into” Federal policies and seek to develop State/Regional policies related to natural climate solutions. Such projects and policies would include those that affect the creation, origination, registry, and trading of carbon credit instruments. Promote policies that enhance/achieve universal liquidity of such credits in global commodity markets and acceptance of such credits for all climate compliance and voluntary market regulations.
- E) Incentivize State vendors to provide carbon labeling through a respected third-party verifier

Supplemental Narrative

Markets Matter

Since the early 1970's when solid evidence of humanity's impact on planetary atmospheric conditions started gaining traction in scientific circles, the most important and inconvenient question has seldom been effectively answered: *how does a global economy based upon fossil fuels systemically change in a manner which preserves open markets, property rights and, rewards risk-taking and innovation, while mobilizing the necessary resources required to transition into a more sustainable system?*

In years hence, massive investments in renewable energy, international-to-neighborhood policies, programs, regulations, and education have greatly increased the penetration of sustainable systems. School kids to retirees all understand the basic concept underlying climate science and humanity's impact. Corporations and non-profit sectors publish ambitious sustainability platforms and even oil companies are "turning green." Yet, the necessary structure to ensure market forces and conditions reward the creation of environmental services in a fluid and transparent manner remains elusive. All the tax incentives, rules, and regulations in the world cannot perform as effectively in allocating resources and mobilizing system-wide contributions as Adam Smith's invisible hand of the market.

That missing piece, a functioning and structured market for products and services that sequester, reduce, avoid greenhouse gases, and reduce the fossil carbon intensity of "life" is in its infancy. However, the market has begun to take form.

A successful market will feature simple rules and conditions for creating and trading "real" environmental attributes. These attributes are defined as a commoditized, scientifically-based greenhouse gas-reducing/avoiding product. Policies, both public and private, would treat these attributes as any other commodity: property that is trusted in its form and that is accepted by all, throughout the global economy. Both regulated (compliance) markets, requiring obligated parties to reduce and report carbon emissions/carbon intensity of their products and voluntary markets would willingly and routinely accept such attributes as "climate currency." Such market acceptance is necessary to monetize the value of generated environmental attributes, provide liquidity and incentivize investment and changes in practices/behaviors.

Carbon/GHG Management & Sustainability: Same? Different? Complementary?

In various forms, emission management and regulation have been an integral part of Western economies since the early 1970s. Regulatory compliance in volatile organic compounds (VOCs), SO_x, NO_x, CO, O₃, particulates, etc. has driven point source emission behavior and mitigation for many industries. Since the Kyoto Protocols were adopted in 1997, many countries (and their industrial base) have sought processes to manage and reduce greenhouse gas (GHG) emissions. Subsequent international agreements expanded emission regulations and fostered the adoption of voluntary GHG markets for private entities. An entirely new "industry" focused on managing "sustainability" has developed in response to the demand for managing emissions. (25)

Today, the question of the value of sustainable practices, of carbon management, to the private enterprise is increasingly part of the dialog underlying public policy choices. Is GHG management a strategically important aspect to an enterprise's economic viability? Are practices and investments in GHG management clearly transferrable to improved competitiveness and profitability? Are some sustainability concepts good for my enterprise, for the public good, but elusive in terms of translating into GHG management?

The evidence across many authoritative sources is increasingly supporting sustainable practices as enhancing an enterprise's competitiveness and value. Harvard, Forbes, MIT, and World Economic Forum all endorse the tangible value of sustainable practices for competitiveness. Most of the major international accounting/consulting houses have published comprehensive studies measuring and monitoring the impact of sustainable practices on competitiveness and profitability. (26)(27)(28)

For expediency, clarity and transparency carbon/GHG metrics, definitions, and management practices have emerged as a "de-facto" measurement of an enterprise's sustainability efforts. While many practices may improve the resiliency of an organization's operations and supply chain and the same practices may reduce the firm's adverse environmental impact, those activities that can be effectively measured through the guidelines provided by the World Resource Institute (WRI, Scope 1, 2 & 3 emissions) serve as sustainability accounting standards. (29)

For Wisconsin agricultural operations, rural businesses and local governments having clarity in understanding the metrics and how such measurements benefit their organizations and stakeholders is critical to evaluating and executing projects and practices. The WRI guidelines, accounting standards submitted at the recent COP 27, and expected financial disclosure standards from the U.S. Securities Exchange Commission (SEC) should be considered benchmark standards, upon which State policies and measures can reference. (30)(31) Efforts from State institutions, including adopting outcomes from the nationwide USDA Climate Smart Commodity projects, should seek to simplify and codify metrics, support on-farm and rural community project evaluation and execution and, promote voluntary efforts to manage carbon intensity/footprint.

Accepting efforts and measurements focused on carbon management (and accompanying carbon accounting) should be the State's position as an acceptable practice and equivalent to pursuing sustainability.

Going Forward: Stressing Adaptation, Mitigating and Removing GHG Emissions

The objective of the 2015 Paris accord was to develop a series of international agreements to limit average global warming due to human activities to 1.5C. According to a May 2022 report issued by the World Meteorological Organization, "*There is a 50:50 chance of average global temperature reaching 1.5 degrees Celsius above pre-industrial levels in the next five years, and the likelihood is increasing with time.*"

Reality.

According to the WRI, “holding warming to 1.5 degrees C will also require **removing carbon from the atmosphere, using both natural approaches like reforestation and carbon-removal technologies**. The scale of change required over this decade is enormous.” (Oct 26, 2022).

Outside of massive and numerous mechanical/thermal/chemical systems, natural climate solutions based upon agricultural and forestry practices remain the most feasible option for both short and long-term carbon removal. These bio-based options, managed effectively, can provide multiple contributions to GHG management, including:

1. Feedstock (“new carbon”) supporting the direct replacement of fossil-hydrocarbon-based fuels (GHG avoidance) through bio-refineries.
2. Carbon aggregation and sequestration, both short-term and long-term.
3. Economic development for agricultural, forestry, and rural communities, often replacing distressed assets of other industries (coal, petroleum, pulp & paper, power generation).
4. Environmental services not directly quantified and monetized in enterprise-level GHG accounting.
5. *Broader population base drawing economic livelihood from sustainable activities, increasing political support for long-term policy stability (reduction in policy risk).*
6. A stable “natural climate solution policy” encourages investment at scale and in ventures/technology.
7. Energy platforms, both stand-alone (e.g. anaerobic digesters) or matched with other systems (e.g. biomass combined heat & power, with solar/wind, forming microgrid);

State public policy and programs must recognize the value of encouraging both continued GHG mitigation efforts AND adaptation projects/practices ALONG WITH GHG removal. Natural climate solutions frequently provide both mitigation and adaptation benefits.

Supplemental Program Design

Key Terms:

Energy price stability/risk management; Micro-grids; Renewable Diesel; Sustainable Aviation Fuels; Renewable Natural Gas; Bio-based Materials, Chemicals & Manufacturing Precursors/Inputs; Carbon Credits as Commodity; Decarbonization of supply chains/processing; Voluntary Carbon Markets; Carbon/Sustainably Managed Feedstocks; Natural Climate Solutions; Public/Private Partnerships; “New Carbon”

Context & Setting:

Global agreements and climate-related stressors, financial sector expectations and market developments valuing continued and aggressive decarbonization require consideration of comprehensive State/Regional industrial policies to promote sustainable investments and practices, both private and public. Wisconsin’s manufacturing, agriculture, and forest product industries are well suited to develop sustainable opportunities within the State, support similar markets throughout the Midwest U.S. and serve specific global markets. **Wisconsin’s competitive strengths** within the sustainability sectors include (but are not limited to):

1. Abundant water, soil, and growing season resources for biomass feedstock production
2. Substantial agricultural and forest product processing capacity and workforce.
3. Access to major regional markets (Chicago, Minneapolis, St. Louis, Indianapolis) via rail and pipelines. Access to global markets via Great Lakes and Mississippi River shipping.
4. Substantial biotechnology, automation/controls, machine development, and engine/transportation manufacturing capacity.
5. Established leadership in sustainable agriculture and forestry, biorefining, waste-to-energy, and Public/Private Partnerships supporting clean-tech/energy development.

Economic & Regulatory Drivers:

- A. Robust and stable biofuels markets and expected strong growth in aviation, heavy equipment, and thermal fuel (heating and process steam) sectors. The value proposition of renewable fuels tied to relative carbon intensity a/c/t. legacy fossil fuels. Segments of this market include:
 - a. Continued access to CA, WA, OR, and NY Low Carbon Fuel Markets. For the near-term CA LCFS significantly benefits RNG production;
 - b. Sustainable Aviation Fuel: current and anticipated demand, including major Midwest-based carriers and airport hubs;
 - c. Renewable Diesel: current and anticipated demand, including mining, construction, forestry and agricultural markets;
 - d. Voluntary corporate purchases of renewable fuels/energy for the process and facility heating (e.g. Renewable Thermal Collaborative). Some traction in sustainable materials markets, but still novel and niche.
- B. ESG-driven/influenced markets, seeking supply-chain decarbonization. Especially significant with multinational food and forest product production and processing.
- C. Robust and stable (10+ years) U.S./Federal tax, direct payment, and investment policies (e.g. Inflation Reduction Act 2022)

Immediate/Near-term Policy Actions

Overall, the approach of **immediate/near-term policy actions** will be two-fold:

1. Encourage prompt evaluation and action on existing/recent Federal incentives addressing sustainability/clean energy; and,
2. Develop robust and substantive policy package to support and encourage sustainable business investment and practices for for-profit, non-profit and public entities, specifically in bio-based systems.

To accomplish:

I Convene Agriculture, Forestry, Food/Fiber Processor, and related/support industry conference to discuss and refine opportunities within Wisconsin/Midwest for sustainable business development.

II Develop and support front-facing dashboards and related community/business services (Econ Dev, SBDC, WTCS, DATCP, etc.) for Wisconsin enterprises to evaluate investment and practice changes incentivized by Federal and State programs. Include decarbonizing/carbon management, emission reductions (scope 1, 2 & 3), ITC, PTC, Bio-preferred, RFS-2, supply-chain resilience, etc. into a business case analysis for the individual firm/farm. (2)

III Support the development of carbon credit origination and carbon accounting practices at the farm/initial processor level to provide, to the maximum extent possible, ownership, control, and monetization at the farm/field level.

IV Promote and incentivize public/private/partnerships, including regulated power, gas, water, and communication utilities, for both direct investment in sustainable facilities/practices AND for support of enterprise investment and practice changes. Leverage and optimize IRA and other related funding/tax incentives. Examples include, but are not limited to:

- targeted financing facilities and credit enhancements for natural climate solutions;
- Statewide biogas collection and distribution plan
- Statewide EV charging plan and deployment program, specifically rewarding microgrid hybrid systems that support EV, local critical loads, and regional resiliency/capacity markets

V Modify Regulations and Agency Practices to Encourage Sustainable Investments and Transactions: B2B, B2G, G2B, and B2C. Examples may include:

- Incentivize “natural climate solutions” domestic content standards for State purchases
- Standardization of distributed energy resource power purchase and interconnection agreements
- Standardization of renewable natural gas tolling and interconnection agreements
- Standardized carbon intensity (CI) labeling for products/services purchased by State agencies (and voluntary private organizations)
- Monitor and provide stakeholder support for consideration of private carbon offset markets

VI Support comprehensive and robust expansion of science-based sustainability methods, practices, and reporting, especially addressing natural climate solutions (agriculture and forestry).

VII Support bio-based product research and development and manufacturing/industrial development through bio-feedstock development, propagation, harvest/transport/storage, risk management, landfill diversion, and waste recovery – utilizing to the maximum extent possible existing and potential sources of biomass materials to replace and offset fossil hydrocarbon inputs.

VIII Sponsor and fund a comprehensive evaluation of the techno/economic feasibility of manufacturing sustainable aviation fuel (SAF), renewable diesel (RD) and renewable natural gas (RNG) to serve Wisconsin/Mid-west markets including air transportation providers, airport service vehicles, state and local government fleets, agricultural operations and other voluntary liquid/gaseous fuel customers. A specific focus would include assessing the feasibility of locating such facilities at existing biorefineries, forest product processors and rural industrial facilities/parks.

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Emerging Opportunity Example: Decarbonizing Commodities (Carbon Commodity Origination)

<https://www.mckinsey.com/featured-insights/sustainable-inclusive-growth/sustainable-and-inclusive-growth-a-weekly-briefing?cid=other-eml-alt-mip-mck&hlkid=e878959c212d4e15aa3d61fd72419be3&hctky=2398859&hdpid=4274f4c4-10f3-493c-b908-54af70a5ee39>

Footnotes:

- (1) <https://www.jsonline.com/story/money/business/2023/01/06/wisconsin-dairy-farm-losses-mount-hurt-by-inflation-labor-market/69776836007/>
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- (6) FERC petitioning MISO to Drop Restriction on RE serving ancillary markets:
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