



**WORLD  
BIOENERGY  
ASSOCIATION**

# **ANNUAL REPORT**

## **2024**

# About Us

The World Bioenergy Association is the global organization dedicated to **supporting the wide range of actors in the bioenergy sector**. Our mission is the **sustainable** development of **bioenergy** globally. Our members include national and regional associations as well as companies in the entire biomass to energy value chain including equipment manufacturers, fuel producers, traders, CHP facilities, utilities etc. from more than 40 countries.

## Fields of Action:

At WBA, we share **knowledge** on the **latest developments in bioenergy** including markets, policies, technologies, finance etc. through our publications, events, webinars and partnerships with international organizations.

## Our members:



List of WBA Members as of April 2025

## Membership

WBA proudly represents our members from a wide variety of stakeholders, sectors, and geographies. Our members benefit from a variety of opportunities to share, learn and interact with the bioenergy community worldwide. Membership benefits include:

- Access to **member exclusive** reports, studies, and analysis on latest developments
- **Speaking opportunities** at various WBA events including webinars
- Join as official WBA delegates to **international energy** and **climate conferences**
- Participation in **internal working groups**
- **Promotion of products** and **services** through various communication channels

**>> Join the leading global bioenergy community: [link](#)**

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# Summary of Activities

In 2024, the World Bioenergy Association (WBA) reaffirmed its leadership in advancing bioenergy solutions worldwide. Through impactful publications, strategic initiatives, and collaborative efforts, WBA championed bioenergy's vital role in achieving global climate goals, energy security, and sustainable development.

WBA's publications this year shed light on bioenergy's potential and critical role in the energy transition. The **India White Paper** highlighted the country's vast agro-biomass resources and potential to achieve 35 GW of bioenergy capacity by 2030, urging policy and investment reforms to realize this vision. The **Pellet Cookstoves Report** highlighted the role of pellet-fired cookstoves in providing sustainable, low-emission cooking solutions.

At the global stage, our flagship report, the **Global Bioenergy Statistics Report**, offered data-driven insights into bioenergy's contributions across different sectors, offering a renewed version with regional updates and developments on technologies like BECCS and SAF. Meanwhile, the **BECCS Factsheet** provided insights into biomass carbon capture and storage technologies, with a focus on their economic and logistical challenges, policy developments, and carbon accounting principles.

Leading to our participation in COP29, we also published a **Position Paper to COP29** where we emphasized the need for bioenergy's inclusion in global climate strategies. With the potential to decarbonize transport, heat, electricity, and other sectors, bioenergy remains underrepresented in Nationally Determined Contributions (NDCs). WBA called for enhanced policy frameworks, renewable energy targets, and international cooperation.

This year, WBA strengthened ties across the bioenergy sector. **Strategic workshops** in Amsterdam and London brought stakeholders together to discuss bioenergy's role in achieving net-zero goals. Our first **Bioenergy Associations Roundtable** in November marked a significant milestone, bringing together bioenergy associations worldwide to foster exchanges of ideas, strengthen collective advocacy, and address shared challenges such as feedstock diversification and regulatory barriers.

Also, WBA amplified its voice through global platforms, high-profile events, and leading media outlets like Bioenergy International Magazine. **Webinars** attracted over 3,400 participants, engaging them on diverse topics, from biofuel advancements and financing bioenergy projects to a series dedicated to India's bioenergy sector. In 2024, WBA's active participation at **COP29** featured side events, roundtables, and advocacy for bioenergy's inclusion in decarbonization strategies.

Looking ahead, the **Bioenergy Horizons Documentary Series**, debuting at COP30, will highlight global innovations and the role of bioenergy in combating climate change and promoting energy security.

We extend our heartfelt thanks to our dedicated members, both long-standing and new, who joined us in 2024. Your support drives our mission forward, enabling us to amplify our voice and impact as the unified global bioenergy community.

# Report by the President

Dear members of the World Bioenergy Association, partners, supporters and friends,

While 2024 was another year of record global temperatures and climate-related disasters, political support for climate mitigation appears to be waning, at least in the US and, to a lesser extent, in Europe.

In some cases, this trend has had an immediate impact on the use of renewable energy, such as in Sweden, where the addition of liquid biofuels to petrol and diesel has been reduced. On a larger scale, it's still difficult to estimate the potential impact of the political trend to reduce climate change mitigation efforts on bioenergy use.

One thing seems certain: where bioenergy is an inherently economic option, its use will continue to grow as long as fossil fuel prices remain volatile and relatively high. This will typically be the case where unused residues are available and can be used for heat generation in commercial or domestic contexts. Modern technologies that allow to realize this use in a clean and efficient way will facilitate this development.

Bioenergy use will also continue to grow in sectors that have made firm commitments to decarbonization, such as the aviation sector. The use of bioenergy with carbon capture and storage will be essential to stabilize climate change. The fact that a significant number of projects of considerable size are in the pipeline is encouraging. Their implementation will strongly depend on the continued political will to invest in climate protection and a supportive regulatory framework, which is currently being developed in Europe.

What distinguishes bioenergy from solar or wind energy is its complexity and the enormous variety of solutions it offers. This is a strength in terms of being able to offer locally adapted solutions, but a weakness in terms of explaining the opportunities to policy makers or the financial sector. The WBA will continue to address this challenge, promoting technology cooperation and knowledge sharing at a global level, and invites both companies and associations in the bioenergy sector to join this effort and become members.

Kind regards,

**Christian Rakos**

President

World Bioenergy Association



# 1. Membership

The World Bioenergy Association (WBA) is a member-driven organization, bringing together a diverse range of stakeholders from the biomass-to-energy sector. Our membership includes national and regional bioenergy associations, companies, research institutions, and individuals, creating a robust network that spans the entire bioenergy value chain.

Corporate members range from fuel producers and technology developers to equipment manufacturers and utilities, actively engaged in all bioenergy sectors like pellets, liquid biofuels, biogas, etc. Together, this vibrant community drives the advancement of sustainable bioenergy practices worldwide, fostering innovation and collaboration to meet global energy and climate goals.

**Table 1.** WBA Membership in 2024

	Associations	Companies	Individuals	Total
<b>Africa</b>	1	4	0	5
<b>Americas</b>	3	6	0	9
<b>Asia</b>	0	9	0	9
<b>Europe</b>	13	31	1	45
<b>Oceania</b>	0	0	0	0
<b>Total</b>	17	50	1	68

*At the General Assembly in Sao Paulo in October 2024, the members agreed to update the membership fee structure to properly reflect the current challenge faced by bioenergy and the increased support required for WBA to effectively execute the mission.*

Following is the current member fee structure:



**Table 2.** Membership fee structure 2025 – 2026

Form of membership	Membership Strategy	Fees (Euros/year)
<b>Associations</b>	2% of the membership fee	1 000 – 10 000
<b>Companies*</b>	> 500 million Euros	33 000
	200 – 500 million Euros	22 000
	100 – 200 million Euros	12 100
	50 – 100 million Euros	8 250
	25 – 50 million Euros	5 500
	5 – 25 million Euros	2 750
	< 5 million Euros	1 000
<b>Energy agencies, think tanks, universities etc.</b>		2 000
<b>Individuals</b>	Individual persons**	100

*\* Based on turnover of the previous year. 50% reduction for organizations in LDC countries*

*\*\* Individuals interested in supporting the work of WBA can join as individual supporters*

*Organizations can also join as supporter members (Gold/Silver). Please contact the secretariat for further information.*

## 2. Communication

### 2.1 Secretariat

World Bioenergy Association is registered as a Non-Governmental Organization in Sweden. The Secretariat is based in Stockholm, Sweden along with the Swedish Bioenergy Association (Svebio).

Daily activities of WBA are executed by the Executive Director, based at the Secretariat, and supported by the staff, consultants, the board, and the President.

The current location of the Secretariat is:

World Bioenergy Association  
Kammakargatan 22, Floor 6  
111 40, Stockholm  
Sweden  
+46 8 441 70 84

Office hours are usually from 09.00 – 17.00 and the Secretariat welcomes all members and bioenergy stakeholders to the office to interact and exchange information related to bioenergy development around the world.

### 2.2 Website

The WBA website (<https://worldbioenergy.org>) serves as a vital platform for sharing information and resources. The Secretariat ensures that content is regularly updated to keep it relevant and comprehensive. This includes news items, event announcements, publications (e.g., factsheets, statistical reports, position papers, white papers), and general information about the association.

Certain sections of the website require more frequent updates due to the dynamic nature of their content:

- **Upcoming Events:** This section features a chronologically organized list of events that WBA is organizing or supporting, including those by partner organizations and WBA members. Each event entry includes detailed descriptions and links to external event websites.
- **News:** This section highlights news from WBA as well as updates from our members, showcasing achievements, collaborations, and industry developments.

The website also includes a member-exclusive area, offering access to resources and information reserved for WBA members. Upon registering as a member, individuals are provided with a unique username and password to access this section.

## 2.3 Mailing list and GDPR

An active mailing list is essential for effective communication in NGOs, enabling regular updates and information sharing with stakeholders. The World Bioenergy Association (WBA) manages its mailing list via the platform Mailchimp, ensuring seamless communication with our subscribers while adhering to GDPR regulations.

Subscribers can choose from two tailored options:

- **Webinar Subscription List:** Specifically for individuals interested in receiving updates about upcoming webinars and related activities.
- **General Subscription List:** A broader mailing list that includes news, events, publications, and other general updates from WBA.

These lists are dynamically updated through the subscription button on our website and participation in our webinars, ensuring that only engaged and interested individuals receive our communications.

WBA takes the issue of data privacy seriously and manages its mailing lists in full compliance with the EU GDPR. Our subscribers' information is handled responsibly, with their consent, and in accordance with our comprehensive data policy, which is available on our website.

## 2.4 Social Media

Social media is a cornerstone of WBA's communication strategy, complementing our webpage and mailing lists to ensure broad and effective outreach. We are actively engaged across four platforms - Facebook, YouTube, LinkedIn, and X - and we have experienced a considerable growth in follower engagement over the past years.

Currently, our LinkedIn Company account receives the most focus due to its strong engagement among professionals in the bioenergy and renewable energy sectors.

**Platform-Specific Focus:**

- **LinkedIn Company, X, and Facebook:** Serve as key channels for sharing news, insights, event updates, publications, and WBA activities.
- **YouTube:** Dedicated to hosting video content, including webinar recordings.
- **LinkedIn Group:** Used for targeted, event-specific communications related to activities directly organized by WBA.

WBA ensures a regular and consistent posting schedule throughout the year to promote our activities, events, and partnerships effectively.

**Current Social Media Followers/Subscribers:**

- **Facebook:** 2,921 followers – [Visit Page](#)
- **X:** 2,255 followers – [Visit Page](#)
- **LinkedIn Company:** 4,049 followers – [Visit Page](#)
- **LinkedIn Group:** 1,921 followers – [Visit Page](#)
- **YouTube:** 547 subscribers – [Visit Page](#)

## 3. Publications

### 3.1 Annual Report 2023

The year 2023 was particularly successful for the World Bioenergy Association. Thanks to our members and continuing partnerships, we undertook webinars and different events throughout the year. We were able to execute the work plan for 2023, where a detailed report was presented in the Annual Report 2023.

#### Activities in 2023 included:

- **Publications** – Annual Report 2023, Paper: “Transparency, trust and best practice of responsible biomass use”, Global Bioenergy Statistics 2023, news media articles
- **Events** – Webinars (Biomethane, Bioenergy and EU Energy Security, Biomass pellets and briquettes, Conversion technology for bioheat and power, Opportunities for biomass deployment in Asia, Green cooking as key for deploying modern bioenergy, Advancing pellet production in Latin America), GBEP Bioenergy Week, General Assembly (Beijing, China), COP28 (Dubai)
- **Projects** – WBA New logo, Glasgow Declaration on Sustainable Bioenergy, Propellets Africa
- **Collaborations** – Bioenergy International, REN21, IRENA Coalition for Action, Global Bioenergy Partnership, and Camberwell Energy.



Figure 1. Annual Report 2023

## 3.2 India White Paper

The white paper explored India's bioenergy potential and its role in meeting energy and climate goals. As the world's third-largest energy consumer, India has vast agro-biomass resources, with power potential exceeding 35 GW by 2030. The paper highlighted government incentives, including tax exemptions and blending mandates, while recommending investments in R&D, policy support, supply chain improvements, and market diversification. Insights from WBA roundtables in Goa and Delhi stressed the need for policy coherence and innovation. *Read the India White Paper [here](#).*



Figure 2. India White Paper

## 3.3 Report on Pellet Cookstoves

The report highlighted pellet-fired gasifying cookstoves as a modern, sustainable solution for clean cooking. Offering high efficiency (Tier 4-5) and low emissions, these stoves are affordable, relying on local biomass residues instead of costly, subsidized fuels like LPG or electricity. Unlike traditional charcoal or firewood stoves, pellet cookstoves reduce cooking costs while creating jobs in pellet production and distribution. With minimal investment per person and reduced dependency on volatile global markets, pellet-based systems are positioned as a practical and renewable pathway to clean cooking for a sustainable future. *Read the full report [here](#).*

## 3.4 BECCS Factsheet

Published in September, the BECCS factsheet covered key aspects, including biomass conversion technologies, CO<sub>2</sub> capture methods, storage and utilization options, and logistical challenges. It also highlighted economic incentives, policy developments, and carbon accounting principles to offer stakeholders actionable insights. *Read the BECCS factsheet [here](#).*

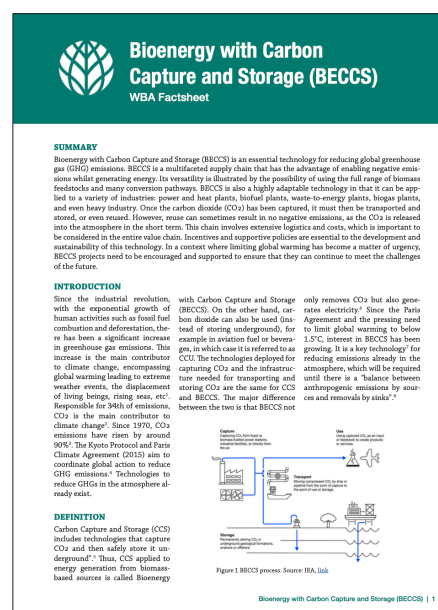


Figure 3. BECCS Factsheet

## 3.5 Position Paper to COP29

The position paper was written as a message to the International Energy and Climate Community leading to COP29. The WBA called for urgent action to integrate bioenergy into global climate solutions at COP29. As the largest renewable energy source, bioenergy is vital for decarbonizing transport, heat, and electricity while supporting hard-to-abate sectors like aviation and heavy industry. Despite its potential to triple by 2050 and significantly reduce emissions, bioenergy remains underrepresented in Nationally Determined Contributions (NDCs).

WBA urged increased renewable energy targets, clear fossil fuel phase-out plans, and robust climate finance commitments. Action must focus on strengthening policies, enhancing transparency in progress reporting, and fostering international cooperation to accelerate bioenergy deployment. *Read the full paper [here](#).*

## 3.6 Global Bioenergy Statistics 2024

The 2024 Global Bioenergy Statistics (GBS) Report underscored bioenergy's pivotal role in the energy transition. Key highlights included:

- 697 TWh of bioenergy electricity in 2023, 8% of global renewable power, with Asia leading.
- 96% of renewable heat from bioenergy, driven by Europe's 80% share.
- 188 billion liters of biofuels, 93% of renewable transport energy, led by the U.S., Brazil, and Indonesia.
- 3.9 million jobs supported, with \$9 billion invested globally.
- The report also introduced emerging technologies like SAF and BECCS, alongside region-specific updates and socio-economic insights.



**Figure 4.** GBS Report 2024

*Read the complete report [here](#).*

## 3.7 Article in news media

This year's presence of WBA in leading media outlets including Bioenergy International Magazine was important for the bioenergy community, as arguments for the acceleration of sustainable use of bioenergy were highlighted in different contexts.



### ***Article in Bioenergy International - India Energy Week showcases the progress and challenges of India's energy transformation***

Bharadwaj Kummamuru, WBA Executive Director reflected on WBA's participation at the India Energy Week (IEW) 2024, which highlighted India's energy transformation progress and challenges, with over 35,000 delegates and significant participation from the bioenergy sector. The event showcased successes, such as achieving 10% ethanol blending and advancing toward E20 and SAF targets. However, it was stated that gaps persist in areas like biomass co-firing and compressed biogas production due to logistics and coordination issues. The World Bioenergy Association hosted roundtables emphasizing bioenergy's vast potential, driven by resource availability and government support. Despite hurdles, bioenergy remains crucial to India's energy transition, with policies and initiatives paving the way for further development.

### ***Article in Bioenergy International - Bioenergy for flexibility in energy systems***

In this article, Alejandra Leon, Project Officer at WBA, reflected on two webinars organized by WBA, focusing on the role of bioenergy in enhancing flexibility within energy systems. The article examined how bioenergy contributes to a flexible, decarbonized energy system, emphasizing its ability to balance supply and demand across power, heat, and industrial sectors. Bioenergy's capacity to store energy, adapt to changing conditions, and reduce CO<sub>2</sub> emissions was highlighted, supported by case studies from Europe showcasing its applications in district heating, industrial processes, and cooking solutions. The article stressed the importance of policy support and greater integration into long-term energy planning to unlock bioenergy's full potential.

### ***Article in Bioenergy International - WBA advocacy work at COP29***

After our participation at COP29 in Baku, Azerbaijan, the article reflected on the World Bioenergy Association's (WBA) key contributions to the global climate dialogue. The article examined how bioenergy continues to play a critical role in achieving decarbonization goals, despite limited visibility and persistent challenges in policy alignment, investment, and technological scaling. Highlighting key takeaways from WBA's involvement, the article stressed bioenergy's contribution to renewable energy systems, especially in power, heat, and transport sectors, as well as its role in emerging technologies like SAF and BECCS. The need for enhanced policy frameworks, sustainable practices, and accelerated innovation are emphasized as essential for scaling bioenergy and driving climate action. Moving forward, it was noted that COP30 in Brazil is identified as a critical opportunity to further bioenergy's role in the energy transition.



## ***Authorship of REN21's Bioenergy Chapter***

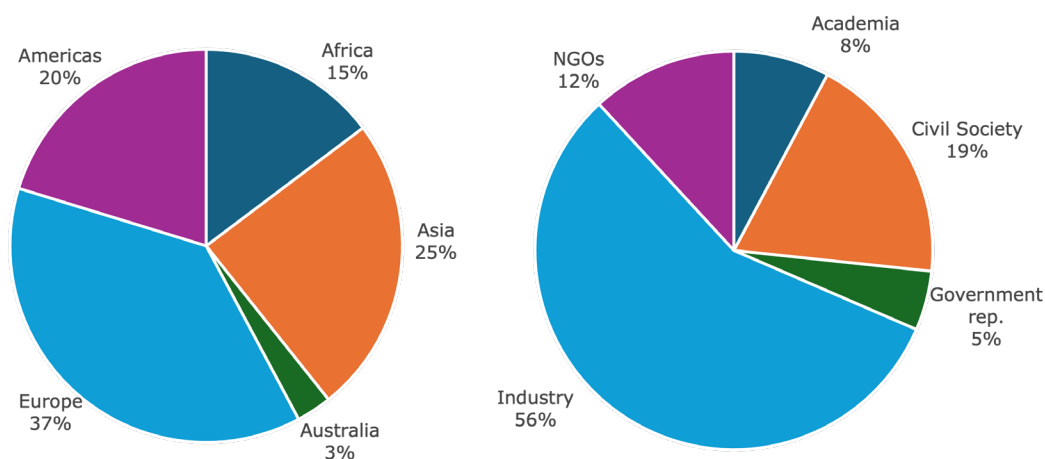
As in previous years' editions, the WBA team authored the Bioenergy Chapter within the Energy Supply Module of the Global Status Report 2024. This flagship report, published by REN21, highlighted key developments and emerging trends that are shaping the future of renewable energy. The Bioenergy Chapter provided a detailed analysis of global bioenergy capacity, its role in achieving decarbonization, and the challenges and opportunities facing bioenergy sectors. The chapter examined bioenergy's contribution to renewable power, heat, and transport, as well as the progress of advanced bioenergy technologies like SAF and BECCS. This comprehensive section aimed to inform policymakers, stakeholders, and industry leaders on how bioenergy can be further scaled to meet global climate targets. **Access the full document [here](#).**

## 4. Events

### 4.1 Webinars

In 2024, the WBA webinar series achieved remarkable outreach, attracting over 3,400 registrations from a truly global audience. Participants represented a wide array of sectors, including industry leaders, civil society organizations, academia, government officials, and NGOs, showcasing their diverse interests in bioenergy solutions.

Registrations came from across the globe, with the largest share from Europe (37%), followed by Asia (25%), the Americas (20%), Africa (15%), and Oceania (3%).



**Figure 5.** Webinar - The Future of Liquid Biofuels

These numbers highlight the growing momentum around bioenergy topics and reinforce the WBA's role as a central hub for dialogue and innovation. The global reach and sectoral diversity of our audience affirm the impact of our webinars as a platform for fostering collaboration and advancing sustainable bioenergy practices worldwide.

*Webinar recordings and presentations can be found on demand [here](#).*

## ***Webinar – Modern Renewable Heat using biomass for industries***

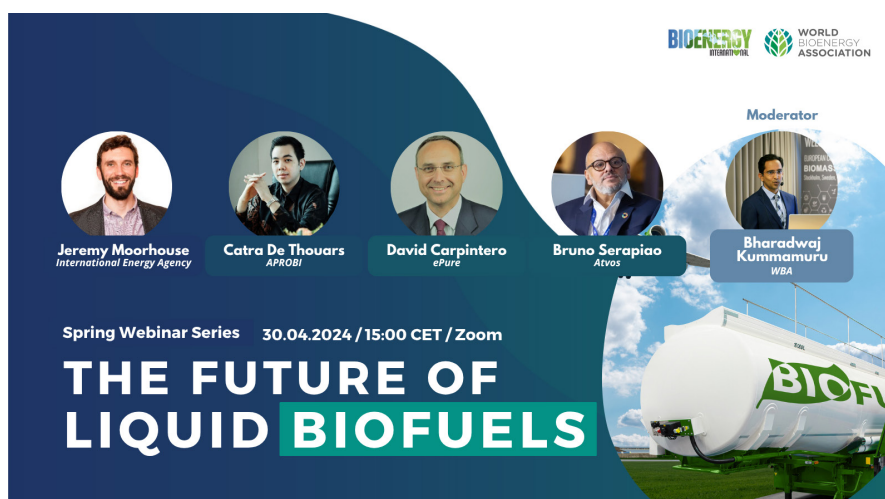
The webinar brought together industry experts to explore the vital role of biomass in decarbonizing industrial heat. The discussion highlighted the adaptability and versatility of biomass across various sectors, showcasing its ability to meet diverse industrial heat demands while significantly reducing global CO<sub>2</sub> emissions. Participants gained insights into innovative technologies, best practices, and real-world applications of biomass, emphasizing its potential to drive sustainable industrial growth.

*Speaker affiliations: Bioenergy Europe, Enviva Biomass, Schmidmeier NaturEnergie, and NCC Industry AB*

## ***Webinar – The Future of Liquid Biofuels***

With representatives from the IEA, APROBI, ePURE, and Atvos, this webinar was one of the year's most attended. With experts discussing liquid biofuels' role in decarbonizing the transport sector, the event covered global progress, policy implications, and regional insights into production capacities and feedstock opportunities. Experts highlighted the growing momentum of the biofuels industry and emphasized the importance of international cooperation, technological advancements, and harmonized sustainability standards.

*Speaker affiliations: International Energy Agency, APROBI, ePURE, Atvos*



**Figure 6.** Webinar - The Future of Liquid Biofuels

## ***Webinar – Role of Bioenergy in Atmospheric CO<sub>2</sub> removal***

The webinar highlighted the crucial role of Bioenergy with Carbon Capture and Storage (BECCS) in energy transition and climate change mitigation. With representatives from academia and industry, both theoretical and practical applications were covered. The discussions ranged from the ethanol industry's

potential for carbon capture, benefits of BECCS for forest management, to its cost-effectiveness in reducing emissions in Canada and the US. The need for strong policies, international collaboration, and partnerships was also stressed to scale BECCS effectively.

*Speaker affiliations: University of Oxford, Drax Group, Torchlight Bioresources, Climate Ethanol Alliance*

### **Webinar – Bioenergy for flexibility in Energy Systems: Power**

The webinar was organized in collaboration with IEA Bioenergy Task 44. The event brought together industry experts to explore the critical role of flexible bioenergy in enhancing energy system resilience and reliability. Discussions centered on best practices, key benefits, and emerging opportunities for integrating bioenergy into dynamic energy markets, highlighting its potential to support grid stability, complement other renewable sources, and advance the global transition to sustainable energy systems.

*Speaker affiliations: IEA Bioenergy T44, PSI, Siemens Energy AB.*

### **Webinar – Bioenergy for flexibility in Energy Systems II: Heat**

After the success of the first webinar on bioenergy for flexibility in energy systems, this session focused solely on heat applications. Experts discussed applications such as district heating systems, energy-as-a-service models, and clean cooking initiatives. The session emphasized bioenergy's advantages, including efficient energy storage, rapid deployment capabilities, and its proven success in replacing fossil fuels across various sectors, showcasing its potential to drive sustainable energy transitions globally.

*Speaker affiliations: IEA Bioenergy T44, proPellets Austria, BECIS*



**Figure 7.** Webinar - Bioenergy for flexibility in Energy Systems II: Heat

## ***Webinar – Optimizing industrial supply chains***

The webinar offered an in-depth exploration of optimizing bioenergy supply chains and fostering bioenergy trade. Experts from prominent organizations like Enviva and Hinterland Management shared insights into successful supply chain management strategies. The session highlighted the economic and environmental benefits of integrated approaches, emphasizing their role in enhancing efficiency and sustainability in global bioenergy markets.

*Speaker affiliations: Enviva Biomass, Hinterland Management*

## ***Webinar – Financing bioenergy: challenges and success stories across end-use sectors***

The final webinar of 2024 focused on the challenges and opportunities in financing bioenergy projects. Featuring insights from funding agencies such as NEFCO and FAO-GEF, along with real-world experiences from project developers Biomasters (Rwanda) and Renetech (Sweden), the session provided diverse perspectives, practical solutions, and case studies. It offered valuable guidance on navigating financial complexities to drive bioenergy advancements globally.

*Speaker affiliations: NEFCO, BioMassters, FAO-GEF, Renetech*

## **4.2 India Webinar Series**

### ***Webinar – Solutions for reducing India's Coal use in power today***

The inaugural webinar of the India Series brought together stakeholders to explore the potential of biomass in reducing the reliance on coal for power generation in India. Government representatives, researchers, and industry experts discussed the lessons learned from biomass co-firing, shared success stories, and reflected on the challenges and opportunities facing India's heavily fossil-fueled power sector.

*Speaker affiliations: SAEL India, CEEW, Ministry of New and Renewable Energy, Valmet Technologies, DCM Shriram*

### ***Webinar – How India can be a global leader in sustainable agro-residue biomass production***

The second webinar in the series explored advancements in densification technology for agro-biomass production in India. It covered pelletization, briquetting, and baling, as well as the types of feedstocks and their required preconditions for optimal processing.

*Speaker affiliations: Andritz, CF Nielsen, Prodesa*



## Webinar – Matching biomass supply and demand cost-effectively

The India series's final webinar gathered speakers at the forefront of the bioenergy supply chain revolution. Companies such as BioTrend Energy, A2P Energy, and Biofuel Circle shared the challenges and latest innovations in business models and technology to drive the uptake of biomass, while Baltpool from Lithuania shared their experiences of setting up an international biomass exchange.

Speaker affiliations: Biofuel Circle, Biotrend Energy, Baltpool, Agri-2-Power



**Figure 8.** Webinar - Matching biomass supply and demand cost-effectively

## 4.3 Industry Roundtables in India

In February, the World Bioenergy Association organized two [dinner roundtable discussions](#) in India, focusing on opportunities and challenges in the bioenergy sector. The first, held on February 7th in Goa, gathered key industrial players like Biofuel Circle, Indian Oil, and Verbio to share insights on India's bioenergy landscape. The second, on February 9th in Delhi, brought together organizations such as UNEP, GIZ India, and the Swiss Agency for Development to explore policy, industry, and financial perspectives. Both events highlighted India's



**Figure 9.** Policy, industry and Finance roundtable (Delhi)

significant bioenergy potential while addressing challenges such as awareness, stakeholder coordination, price competition with fossil fuels, feedstock logistics, and densification technologies.

## 4.5 Strategy Workshops in Amsterdam and London

### *Amsterdam, 23-24 January*

WBA hosted a [2-day workshop in Amsterdam](#) on January 23–24, 2024, bringing together a broad range of stakeholders including fuel suppliers, energy utilities, end users, certification bodies, trade associations, and the research community. Participants explored sustainability, biomass competition, and effective communication while sharing experiences and insights on stakeholder engagement. The event highlighted bioenergy's pivotal role in net-zero pathways and its impact on diverse sectors.

### *London, 24 April*

Building on the first workshop in Amsterdam, the WBA hosted a networking roundtable alongside the Argus Biomass Conference in London. The discussions centred on enhancing stakeholder engagement and identifying ways WBA can support collaborative initiatives. The event brought together diverse stakeholders to define and explore effective strategies for fostering meaningful engagement within the bioenergy sector.

## 4.6 WBA General Assembly 2024

Held alongside the IEA Bioenergy BBEST Conference in São Paulo, the General Assembly provided a platform to share experiences on bioenergy development worldwide, reflect on WBA's 2024 achievements, and outline 2025 goals. A key milestone was [the election of a new board](#) along with the re-election of Christian Rakos as the President of the WBA for another term. Learn more about our new board and WBA's engagement in Brazil [here](#).



**Figure 10.** WBA General Assembly 2024

## 4.7 GBEP Bioenergy Week

WBA supported sustainable bioenergy solutions at the [GBEP 11<sup>th</sup> Bioenergy Week](#), held from June 18-21 at FAO headquarters. The event gathered over 120 stakeholders from 27 countries to exchange best practices on reducing emissions, ensuring food security, and promoting sustainable bioenergy. WBA participated in high-level panel discussions on key topics, including bioenergy for residue management and clean cooking solutions. WBA President Christian Rakos contributed to a demonstration showcasing gasification cookstoves and biomass from agricultural residues. WBA endorsed the [joint statement](#) on sustainable bioenergy issued by GBEP, highlighting its critical role in addressing climate and development challenges.

## 4.8 COP29, Baku

As an accredited NGO Observer to the UNFCCC (UN Framework Convention on Climate Change), the [WBA participated at the COP29](#) climate change conference held in Baku, Azerbaijan. WBA has led advocacy efforts for bioenergy solutions through various events and stakeholder engagement. Here's a recap:

### *Official Side Event*

On 16 November, WBA, alongside partners WWEA and CII, hosted a Blue Zone side event titled "Renewable Energy Transformation: From Tripling to 100% RE." With COP28's commitment to tripling renewable energy capacity by 2030, the session emphasized the need for a Net Zero scenario to achieve a fully decarbonized energy system. Speakers from WBA, WWEA, and CII discussed the role of various renewable technologies, including solar, wind, biomass, and batteries,



**Figure 11.** Blue Zone Side Event on RE transformation: WBA, CII and WWEA

in reaching this goal.

### *Global Biofuels Alliance Roundtable: Setting Common Definitions for Biofuels*

Chaired by India's Ministry of Petroleum and Natural Gas, the Global Biofuels Alliance roundtable brought together policymakers, industry leaders, and stakeholders to address the need for standardized definitions for biofuels. WBA Director Bharadwaj



Kummamuru highlighted the importance of harmonization and the role of the GBA, emphasizing WBA's willingness to collaborate in strengthening the biofuels sector.

### *South-South Cooperation for Climate Change, China Pavilion*

Held at the China Pavilion, this full-day event focused on cooperation among the Global South. WBA Director participated in a session on Clean Cooking, presenting the concept of Green Cooking. The project has made significant progress, engaging stakeholders in regions like India, China, and Sub-Saharan Africa to promote clean fuels and cookstoves.



**Figure 12.** Intervention at Clean Cooking Session at South South Cooperation on Climate Change, China Pavilion

### *Bilateral Meetings*

In addition to official events, WBA engaged in bilateral meetings with stakeholders from organizations such as Montreal International, African Carbon Markets Initiatives, Centre for Creativity and Sustainability Study and Consultancy (Vietnam), and the Confederation of Agriculture and Livestock (Brazil), fostering collaboration and knowledge exchange.



**Figure 13.** Meeting with HINS Consultancy (left) and with CCS (right)

## 4.9 Bioenergy Associations Roundtable

On November 26th, WBA hosted its [first National Bioenergy Associations Roundtable](#), bringing together other bioenergy associations to address bioenergy challenges and solutions. Key topics included sustainable fuels, feedstock diversification, and overcoming misinformation and regulatory hurdles. The event highlighted WBA's role in advocacy and collaboration, with plans for future member-focused meetings.

## 4.10 Attended Events by Secretariat

### January

- Nordic Pellets Conference, Malmö - Participant

### February

- India Energy Week, Goa - Participant

### March

- Indian Biogas Association Webinar, online - Speaker
- REN21 Strategy Meeting, Berlin - Participant
- ECADIN/Pertamina - Speaker

### April

- Argus Biomass, London - Participant
- Bio-CO2 Use and Removal 2024 Conference, Helsinki - Participant

### May

- Summit for Global Biomass Energy Innovation and Development, Beijing - Speaker
- Summit on Clean Cooking in Africa, Paris - Participant\*

### June

- GBEP Bioenergy Week, Rome - Speaker
- September
- Svebio Fuel Market Day, Stockholm - Participant

### October

- Biomass PowerON, Copenhagen - Speaker
- IEA BBEST Bioenergy Conference, Sao Paulo - Moderator/Participant

### November

- GBEP Annual meetings, online - Participant
- EBF 2024, Brussels - Participant\*

### December

- European Biocarbon Summit, Amsterdam - Participant\*

*\* Attended by the President*

## 5. Projects

### 5.1 Propellets Africa

In its second year, [Propellets.Africa](#) continued to champion itself as an information hub for sustainable pellet production and usage across Africa. The platform expanded its reach by showcasing innovative projects and companies advancing clean cooking solutions.

In 2024, the project achieved a significant milestone with the publication of a [research paper](#) “Pellet cookstoves – An affordable and sustainable modern solution for clean cooking”. Another highlight for the year was our involvement in a school project in Rwanda, where Christian Rakos and Paul Prauhart from WBA worked closely with local innovators to provide clean cooking solutions using advanced pellet cookstoves for schools.



**Figure 14.** Propellets Africa website

### 5.2 Bioenergy Horizons Documentary Series

Launching at COP30, [Bioenergy Horizons](#)—our new series with [BlackRook Media](#)—will explore bioenergy’s role in a sustainable future through innovations, inspiring stories, and key discussions.

Through compelling films, this project will feature pioneering companies, associations, and individuals driving innovation and sustainability in bioenergy across 50+ countries. The series will showcase advancements in liquid biofuels, biogas, and solid biomass while exploring bioenergy's impact on climate change mitigation, energy security, and local development. It will foster knowledge-sharing through evidence-based journalism, addressing sustainability challenges, and celebrating international cooperation.

## 5.3 WBA Signatory of Global Pledges

As an active partner of the Biofuture Campaign, the WBA signed up to the [Turin Joint Statement](#) on Sustainable Biofuels. This statement underscored the role of sustainable biofuels in achieving decarbonization across all transport sectors.

Additionally, WBA demonstrated its commitment to global energy equity by signing the [Clean Cooking Declaration](#) in Paris, a key outcome of the Clean Cooking Summit in Africa organized by the International Energy Agency (IEA). This declaration reaffirmed WBA's dedication to advancing clean cooking technologies, fostering sustainable development, and improving lives worldwide.

## 6. Collaborations

### 6.1 Bioenergy International

In 2024, WBA continued the partnership by contributing articles and organizing joint events, like the 2024 webinars. Together, we co-organized seven webinars, supporting event promotion, providing input on speaker selection, and ensuring broad visibility post-events. Additionally, WBA authored three articles for the magazine's print edition, highlighting our advocacy efforts in India, insights from COP29, and key takeaways from previous webinars. This partnership amplified WBA's voice, advocating for bioenergy solutions and fostering industry-wide engagement.

### 6.2 Global Bioenergy Partnership

WBA is an observer organization of the Global Bioenergy Partnership (GBEP). In this capacity, WBA actively participates in GBEP's activities, including technical and steering committee meetings. WBA and GBEP continue to collaborate, exchanging knowledge and supporting each other's initiatives.

### 6.3 REN21

WBA is a member of the Steering Committee of REN21 and regularly participates in official meetings. WBA also reviews reports including the Global Status Report (GSR) and participates in interviews etc. to inform on the latest developments in bioenergy. In 2024, the WBA Secretariat participated in the [REN21 Strategy Meeting](#), held alongside the Berlin Energy Transition Dialogue 2024 in Berlin – where discussions revolved around REN21's strategy for the next triennium. Additionally, WBA was the lead author of the Bioenergy Chapter at the GSR 2025, providing comprehensive insights on market trends, key data, and technological advancements shaping the bioenergy sector.

## 6.4 IRENA

WBA is an observer organization to IRENA and is part of the Coalition for Action. As an observer, WBA participates in the General Assembly and provides input to the Work Program while our role in the Coalition for Action involves suggesting case studies for various working groups, reviewing reports, and participating in webinars as speakers. Participation in WG on 100% RE and Community energy.

## 6.5 CAMBERWELL ENERGY

In the second year of our collaboration with Camberwell Energy (UK), we successfully advanced the third phase of our on-the-ground activities. This included our joint participation in the India Energy Week in February, where we connected with key stakeholders across industry and government. We also organized industry roundtables to foster dialogue and engagement with a diverse array of bioenergy stakeholders.

Throughout the year, the collaboration continued to strengthen, marked by ongoing meetings and efforts to finalize a Memorandum of Understanding (MoU) with India's Ministry of New and Renewable Energy. Additionally, we jointly planned the webinar series focused on India, aimed at providing valuable insights into the country's bioenergy landscape.

This ongoing partnership has been crucial in advancing our shared objectives of driving sustainable energy solutions and promoting bioenergy in India.

## 6.6 Signed MoU with the Indian Biogas Association

The World Bioenergy Association (WBA) and the Indian Biogas Association (IBA) have signed a [Memorandum of Understanding](#) (MoU) to advance sustainable biogas solutions in India. This partnership focuses on fostering innovation, raising awareness, and advocating for supportive biogas policies. Through joint research, knowledge exchange, capacity building, and public outreach, both organizations aim to collaborate with stakeholders and unlock biogas's potential as a vital renewable energy source.



## 7. Organization

### ***WBA Board Members 2024 – 25\****

1. Alarik Sandrup, Lantmännen (Sweden)
2. Christian Rakos, Former CEO Propellets Austria (Austria)
3. Dave Lello, Ekasi Energy (South Africa)
4. Elizabeth Woodworth, US Industrial Pellet Association (USA)
5. Glaucia Souza, University of Sao Paulo (Brazil)
6. Guangqing Liu, Beijing University of Chemical Technology (China)
7. Jamie Stephen, TorchLight Bioresources (Canada)
8. Justine Akumu, Ministry of Energy and Mineral Development (Uganda)
9. Ketaki Kokil, Ecosense Appliances Pvt. Ltd. (India)
10. Mariano Molina, Elimini Drax Group (UK)
11. Marion Peterson, Emerging Cooking Solutions (Zambia)
12. Mika Ohbayashi, Renewable Energy Institute (Japan)
13. Oscar Espinosa Mijares, Pellet Mexico Bioenergia (Mexico)
14. Remigijus Lapinskas, Lithuania Biomass Energy Association (Lithuania)
15. Rodrigo O’Ryan, Chilean Biomass Association (Chile)
16. Werner Sitzmann, Amandus Kahl GmbH & Co. KG (Germany)
17. Zoltan Szabo, Ethanol Europe (Hungary)
18. Zygmunt Gzyra, Polish Chamber of Biofuels (Poland)

*\*Elected at the WBA GA in 2024*

### ***Board meetings (2024)***

- BM66 – May 22 (13.00 CET), Conference Call
- BM67 – September 4 (13.00 CEST), Conference Call
- BM68 – October 22 (11.00 BRT), Sao Paulo (Brazil)
- BM69 – November 27 (13.00 CET), Conference Call

### ***Nominating Committee***

- Gustav Melin, WTS Biofuels, Sweden (Convenor)
- Christoph Pfemeter, Austrian Bioenergy Association, Austria

- Jean-Marc Jossart, Bioenergy Europe, Belgium
- Alan Sherrard, Bioenergy International, Sweden

## Secretariat

- Bharadwaj Kummamuru, Executive Director, India/Sweden
- Alejandra Leon, Project Officer, Sweden
- Lízia Branco, Communication Manager, Germany
- Paul Prauhart, Research Assistant, Austria

## Members

AVEBIOM, Svenska Bioenergiföreningen, Bioenergy Europe, Propellets Austria, Energy Farm International Foundation, Bundesverband Bioenergie e.V., Austrian Bioenergy Association, Fachverband Biogas e.V, Litbioma, Bioenergy Association of Ukraine, Namibia Biomass Industry Association, ePURE - European renewable ethanol, Polish Chamber of Biofuels, Hungarian Biofuel Association, Power Workers Union, US Industrial Pellet Association, Chilean Biomass Association

Firefly AB, CPM Europe, C.F. Nielsen A/S, KWB - Kraft und Wärme aus Biomasse GmbH, Herz Energietechnik GmbH, Energie Steiermark AG, Bioenergie Warmeservice GmbH, nahwaerme.at Energiecontracting GmbH, n.nahwaerme.at Energiecontracting GmbH, s.nahwaerme.at Energiecontracting GmbH, HSH Nahwärme & photovoltaik GmbH, Bioenergie Tirol Nahwaerme GmbH, TB Harald Kaufmann GmbH, Meva Energy, World Thermal Service AB, Amandus Kahl GmbH & Co. KG, Syncraft Engineering, Mantex AB, Pellet MX, Mine Biomass Sdn Bhd, Renewable Energy Institute, Enviva Management UK Ltd, Aichernig Engineering GmbH, Fröling, SSGE Bioenergy Company Ltd, Justsen Energiteknik A/S, Drax Group, African Clean Energy, Emerging Cooking Solutions, Renetech AB, Carbotermo SPA, Fram Renewable Fuels, Ekasi Energy, KIS Group, BECIS, CM Biomass, ANADEB, Andritz Feed and Biofuel, Eraluf Investment GmbH, Polytechnik, Onym Group, Atvos, BAIF Development Research Foundation, SBP, Better Cooking Company, Agnext Technologies Pvt. Ltd, SC ENERGY-SERV SRL, BioMassters Limited, Ecosense Appliances, Zhejiang Huiwenmei Stove Co. Ltd

## Individual Supporters

*Individual supporters list will be available upon request.*

## Silver Supporter Members

Fröling (Austria), Polytechnik (Austria)



## 8. Funding

WBA is grateful for the funding we receive from our membership. The companies, associations, and individuals comprising our member base support us immensely. Apart from the core membership, we are also thankful for the support of our supporter members.

- Fröling, Austria
- Polytechnik, Austria

Detailed analysis of WBA financing is available in the authority version and will be available upon request. Please send your request [info@worldbioenergy.org](mailto:info@worldbioenergy.org)



**Board members below have signed the Annual Report for 2024:**

Alarik Sandrup

Remigijus Lapinskas

Mariano Molina

Guangqing Liu

Christian Rakos (President)

Rodrigo O’Ryan

Marion Peterson

Jamie Stephen

Dave Lello

Werner Sitzmann

Mika Ohbayashi

Justine Akumu

Elizabeth Woodworth

Zoltan Szabo

Oscar Espinosa Mijares

Ketaki Kokil

Glaucia Souza

Zygmunt Gzyra

The WBA Audit Report 2024 has been submitted and signed in 2025 by Daniel Gustavsson, Authorized Public Accountant at Grant Thornton Sweden AB.



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