WORLD BIOENERGY ASSOCIATION

Annual report 2016

www.worldbioenergy.org

ANNUAL REPORT FOR THE FINANCIAL YEAR 2016

The Board presents the following annual report.

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World Bioenergy Association

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ADMINISTRATION REPORT

INTRODUCTION BY THE PRESIDENT

WBA welcomes the new year with the annual report 2016!

It is my pleasure to present you this annual report about WBA activities in favor of bioenergy. 2016 has been a positive year for the global climate negotiations. More than 190 countries came together to sign the Paris Agreement limiting the global warming to less than 2 C. The agreement came into legal force on November 4th 2016. Countries pledged to reduce fossil fuel use, increase energy efficiency and deploy renewable energy technologies. The agreement will be the major driver for all renewable energy sectors including bioenergy. To meet the goals of the Paris agreement, bioenergy has to play a significant role – liquid biofuels for transportation, biomass for heating and electricity. Bioenergy should grow up to 150EJ in the next 20 years according to our fact sheets on the Global Potentials of Bioenergy published in 2016. WBA, being present at COP 22 in Marrakech, Morocco, has used that opportunity to express the need of shift from fossil fuels to renewable energy, and to re-confirm importance of bioenergy in future's energy mix, with the special focus on heat and transportation, and the role of bioenergy in the cities.

Another global event was World Energy Congress, a place to discuss mainly conventional (fossil based) energy issues. Nevertheless, WBA in different forms (panel discussions, press-conferences) expressed the importance of bioenergy in the future, using this possibility to perform our mission: "To promote the use of sustainable biomass globally and to support the business environment for bioenergy".

The global statistical report on bioenergy published in June 2016 was our third edition of this very important database. It shows the leading position of the bioenergy among all the renewable energy sources, and can be used by politicians, decision makers and investors for very practical purposes. WBA will continue publishing this report and improve data and the form of presentation, in order to better serve those, who need the database. World Bioenergy Association, as the global structure, also needs to be developed and improved. The new board on its September meeting supported the initiative to create a network of branch- offices or bioenergy hubs in the most promising regions for bioenergy development, like China, Middle East, Canada and Brazil. The achievement of this goal will lead to better communication and interchange of data, contacts, latest achievements, best bioenergy development stories, allowing us to serve our members worldwide and improve the information of the big potential to be used in the most efficient way.

We will also continue promotion of the carbon tax worldwide. We stay confident, that such an universal tool can help in getting momentum and speeding-up the transition process from fossil fuels to renewable energy in this very fragmented world, still looking for the best solutions for the future's climate and energy situation.

It is with great sadness that I inform about the passing away of our auditor Ms. Helène Ragnarsson. She will be remembered forever as a true professional who advocated strongly for the development of our association.

Finally, I would like to thank Mr. Heinz Kopetz, our previous President, for his long lasting efforts to improve and devotion to develop biomass potential as a renewable and affordable energy. I appreciate his decision to stay within WBA as a senior consultant, as we have to ensure the development process of the bioenergy globally.

As President of WBA I would also like to thank all our members and sponsors for their support as well as our staff for their engaged work for bioenergy.

Remigijus Lapinskas,
President, World Bioenergy Association

Remigijus Lapinskas
President, World Bioenergy Association

SUMMARY OF ACTIVITIES

The World Bioenergy Association (WBA) is the global organization dedicated to supporting and representing the wide range of actors in the bioenergy sector. Our members include bioenergy organizations, institutions, companies and individuals. Since its foundation in 2008, WBA has been working to address a number of pressing issues including certification, sustainability criteria, bioenergy promotion, and the debates about bioenergy s impact on food, land-use and water supply.

Mission: Promote the increasing utilization of bioenergy globally in an efficient and sustainable way and to support the business environment for the bioenergy companies.

A brief review of our activities in 2016 are summarized:

- WBA increased its membership to 203
  - Full members: 23
  - Associated members: 58
  - Individuals: 122
- WBA published six bi monthly newsletters to provide updated information on bioenergy developments from our partners and member networks
- WBA published two factsheets:
  - Biomass potential towards 2035
  - Clean and efficient bioenergy cookstoves
- WBA published the Global Bioenergy Statistics 2016 report
- WBA published the Role of Bioenergy in European Cities report
- WBA welcomed a new President, Mr. Remigijus Lapinskas from Lithuania
- WBA elected a new board to the organization
- WBA appointed Dr. Heinz Kopetz as the Senior Consultant of the organization
- WBA organized various events at COP22 in Marrakech, Morocco
- WBA prepared various press releases, position papers and responded to bioenergy news worldwide
- WBA published the Fossil Exit Strategy
- WBA attended numerous international conferences, workshops and events worldwide promoting the role of bioenergy

ADMINISTRATIVE REPORT

WBA had a busy year in 2016.

The permanent work of the WBA staff included service to our members, solving requests concerning bioenergy, contact with international organizations to continue collaboration as well as exploring new partnerships, handling member information, participation in projects, attendance in conferences, publishing articles, newsletters, press releases, reports etc., preparation for meetings, and other discussions related to bioenergy. We published fact-based material via our factsheets and global bioenergy statistics. Following is an overview of our main activities/projects in 2016:

- Global Bioenergy Statistics
- Factsheets
- Country Mission Reports
- Newsletters
- Organizing and attending events
- Communication activities – Website and Social Media
- General Administration

Membership and supporters

WBA ended the year 2016 with 203 members in our network. We welcomed 21 new members to our association. The membership included 23 full members, 58 associated members and 122 individual members.
WBA appreciates that Enerstena Group of Companies became the official supporter of WBA. Their support has been immense in executing the activities of the organization. WBA also appreciates Agrana, silver supporter of WBA in their support to the organization.

Table 1. WBA membership in 2015

	Full members	Associated members	Individual members	Total
Africa	3	2	20	25
America	2	3	23	28
Asia	4	3	27	34
Europe	13	49	49	111
Oceania	1	1	3	5

We have been increasing our membership base outside Europe with various activities with the assistance from the board members. New members from American continent have joined and especially from Brazil followed by Canada. Europeans are steadily increasing the numbers but also Asia has started to take steps to join into WBA. It seems clear for

our members on the various benefits of being part of WBA. Apart from communication via mails, our members are also active in social media leading to interesting discussions on bioenergy developments globally.

Discussions are on going to increase our membership and supporter base as well as initiatives taken by individual board members together with the office to get more members to the organization.

Why should you become a member?

WBA values your membership as it can help us achieve our mission. We are the leading bioenergy expert in the international level consisting of professionals from various countries, specializations and level of experience. We aim to promote bioenergy as a crucial sector in achieving the renewable energy goals. As we grow, so does our influence.

Becoming a member would enable you to have exclusive access to information about bioenergy from leading experts worldwide. It opens up opportunities for possible cooperating among projects and working groups.

Add your voice to the global bioenergy movement!

Communication activities

Secretariat

The secretariat of WBA is in Stockholm, Sweden. It is led by the Executive Director and assisted by a Project Officer. We are glad to inform that we could appoint a new Project Assistant in 2016 working exclusively in developing the new WBA website. The secretariat is responsible for communication activities for members and the extended WBA network.

Website

WBA has a website: www.worldbioenergy.org which is maintained by the Project Officer. The website includes information on recent news and developments in the organization, overview about the organization and activities, publications, events etc. It has a separate section for members who can access member exclusive information.

We have been able to increase traffic to the website every year. In the year 2016, WBA had 21 421 sessions with 65% new visitors. This was a 41% increase in sessions in comparison to previous year. The top visits were from USA, Great Britain, Sweden, Germany and Spain.

WBA is having the official website re-constructed and re-designed to better fulfill the needs and expectations of our members and supporters. It will be launched in the first quarter of 2017.

Social media

WBA has an active social media accounts in Facebook, LinkedIn and Twitter. WBA also created a new company page on LinkedIn and a new YouTube account as well:

Facebook: https://www.facebook.com/World-Bioenergy-Association-102103226497174/

Twitter: https://twitter.com/World_Bioenergy

LinkedIn (Group): https://www.linkedin.com/groups/4154386

LinkedIn (Company): https://www.linkedin.com/company/world-bioenergy-association

YouTube: https://www.youtube.com/channel/UCLiobHKWzRYFnV77YPYKdDQ

Member letters

WBA published 6 bi monthly newsletters to our members, which included recent developments in bioenergy, membership details, WBA activities and a list of conferences on bioenergy supported by WBA.

Press release

18th February: Solid biomass is a cornerstone of future energy portfolio

WBA addresses decision makers in the USA and Europe: Increase sustainable biomass use, introduce carbon taxes on fossil fuel emissions and reject arguments that ignore the basics of the natural carbon cycle. As the President of WBA, Dr Heinz Kopetz puts it: Follow the experience of leading countries in climate mitigation policy. They prove solid biomass is the cornerstone of a future carbon neutral energy portfolio.

3rd March: New WBA Factsheet: Global biomass potential towards 2035

The World Bioenergy Association (WBA) released the factsheet 'Global biomass potential towards 2035' – the ninth in the series of publications. For the success of the Paris deal, an accelerated deployment of all renewable energy sources should take place including wind, solar, hydro, geothermal and bioenergy. In this factsheet, WBA studied the realistic contribution of biomass to the global energy supply by 2035.

10th March: WBA urges for carbon taxes now to meet climate targets

WBA addresses governments all over the world: stop subsidies for fossil fuels, introduce and increase carbon taxes to move towards a fossil fuel free economy by 2050. Fortunately, a few governments have taken the right steps: France initiated and has plans to increase the carbon tax, Portugal carbon tax went into effect in 2015, South Africa published a policy paper on introduction on carbon tax, Ireland already has a carbon tax of 20 Euros per tonne CO_2 and India recently doubled its tax on coal while reducing fossil fuel subsidies. Sweden has been implementing carbon taxation since 1991. All governments should follow these examples.

8th June: The important role of bioenergy in European cities

This new study from World Bioenergy Association addresses the challenges cities are facing within the global climate mitigation policy and explains the contributions biomass can offer to reduce the use of fossil fuels in cities. Seven Eu-

ropean cities are mentioned in this study that demonstrate how bioenergy is integrated into the urban energy system. The reduction of greenhouse gas emissions, energy security and development of new jobs in Europe are key arguments in favour of bioenergy for these cities.

20th June: WBA launches the Global Bioenergy Statistics 2016

The World Bioenergy Association (WBA) is pleased to publish the 3rd Global Bioenergy Statistics report. The report shows that bioenergy is growing at a steady pace. Bioenergy will continue to be a major contributor to the global energy mix and part of the solution for a future sustainable society.

20th June: World Bioenergy Association elects President from Lithuania

The World Bioenergy Association (WBA) is pleased to announce that Remigijus Lapinskas has been elected as the new President of WBA. He was elected during the annual meetings in Istanbul in Turkey on May 28 and takes over from Dr. Heinz Kopetz with effect from June 20, 2016. Dr. Heinz Kopetz will continue assisting WBA in the new role of 'Senior Consultant'.

14th July: New WBA Factsheet: Clean and efficient bioenergy cookstoves

The World Bioenergy Association (WBA) released the factsheet 'Clean and efficient bioenergy cookstoves'- the tenth in the series of publications. Globally, more than 3 billion people rely on traditional use of biomass for cooking and inefficient use of fuel is leading to over 4 million deaths per year. This new factsheet details renewable fuel resources and associated stove technologies. The document focusses on solid, liquid and gaseous fuel based cookstoves along with solar based cookstoves.

8th September: Enerstena becomes official supporter of WBA

The World Bioenergy Association (WBA) is pleased to announce that Enerstena Group has become an official supporter of WBA. "Enerstena" Group of Companies is well-known in Lithuanian energy sector, distinguishing itself for its biomass heating technologies. They operate on the energy market since 2002. Their achievements are the following: development of own technology, establishment of the centre of science and research and building of the team of the strongest professionals.

20th October: Response to EU biofuels policy

The World Bioenergy Association (WBA) opposes the European Union (EU) proposal to phase out support for conventional biofuels post 2020. The recent European Commission proposals against conventional biofuels are impacting the local farmers, businesses and companies in the biofuels sector. These policy decisions based on emotions and myths are dangerous and will significantly impact the EU plans for being the leader in the climate change arena.

11th November: WBA Declaration to COP22

The World Bioenergy Association (WBA) calls on the delegates attending the 22nd Conference of Parties (COP22) at Marrakech, Morocco to act now with a managed yearly decline of fossil fuel use and implementing a carbon tax in each country to achieve the targets of the Paris Agreement. In such a scenario, bioenergy in combination with other renewables should play a crucial role.

15th November: WBA Fossil Exit Strategy (FES 2030)

Each country needs a strategy for fast deployment of renewable energy sources including solar, wind, bioenergy, geothermal and hydropower. The world must move towards a 100% renewable energy before 2050 to achieve the Paris COP21 targets. The WBA proposal includes a step by step reduction of fossil fuel use and increasing use of renewable energy sources.

8th December: WBA Press release on EU winter package 2016

On November 30, 2016, the European Commission presented the package on "Clean Energy for All Europeans". The package contains many well designed proposals but fails to comply with the challenges set by the Paris Agreement. A reduction of the CO_2 emissions by 40% by 2030 as compared to 1990 is by far not enough to achieve the 2°C target. The proposed package contains many positive proposals but has to be improved in order to comply with the climate policy after Paris.

Publications

Factsheets

WBA releases factsheets in order to support companies in bioenergy sector, educate and inform policy makers and investors in a simple and concise manner. The factsheets are distributed on a global scale to an audience of 100 000+ along with distributions at conferences worldwide and via official media partners and 3rd party news organizations globally.

In 2016, WBA published two factsheets: global biomass potential towards 2035 and clean and efficient bioenergy cookstoves. We have also drafted two more factsheets on energy recovery from waste and bioenergy logistics. They will be published in 2017.

Global biomass potential towards 2035

Climate change is the most significant challenge for humanity today. An important solution is replacement of fossil fuels with renewables and improved energy efficiency. Among renewables, biomass will play a major role in satisfying the human energy needs. Biomass for energy originates from a variety of sources classified into forestry, agriculture

and waste streams. Some of the potential sources include: crops for biofuels, energy grass, short rotation forests, woody biomass and residues, herbaceous by-products and municipal solid waste. Globally, in 2012, the biggest share of biomass for energy came from forests - almost 49 EJ out of a total supply of 56.2 EJ. The current global energy supply is about 560 EJ.

Land is an important basis for biomass production. The future potential of biomass for energy depends on protection of agricultural land against desertification, degradation, limitless urbanization as well as protection and increase of forest area. Permanent innovation in agricultural yields plays a major role in increasing potential for food and fuel production. As an example, increase in corn yields between years 2000 and 2012 has saved 50 million ha of land area. Given good policies, WBA estimates that by 2035, about 5% of the agricultural area (240 million ha) can be used for growing dedicated energy crops for biofuels and solid biomass for energy.

A conservative estimate of the energy potential of biomass from agriculture, forestry and waste sectors totals 150 EJ in the next 20 years. About 43% coming from agriculture (residues, by-products and energy crops), 52% from forests (wood fuel, forest residues and by-products of the forest industry) and 5% from waste streams. Biomass can play an important role in the transformation to a new energy system based on renewable energies.

Clean and efficient bioenergy cookstoves

Globally, more than 3 billion people rely on traditional use of biomass for cooking and inefficient use of fuel is leading to over 4 million deaths per year. There is an urgent need for developing clean and efficient cookstoves and fuels. Currently, the cookstoves sector is growing rapidly with a 50% increase in annual sales during 2003 – 2013. The growth is expected to continue further.

Clean and efficient cookstoves are an important development for improvement of both the environment and public health. Use of such cookstoves leads to better combustion of fuel and improved heat transfer leading to reduction in fuel demand, improved health of women and children and lower costs of cooking.

Cookstoves vary greatly in terms of performance across different models and designs. A set of interim international guidelines for stove performance was developed under the International Standards Organization International Workshop Agreement process. This framework provides categories to measure and classify performance including efficiency, emissions and safety. There are also a broad range of other factors such as affordability, accessibility, and livelihood impacts that are critical factors to consider.

An integrated systems approach involving all actors is essential. Factors such as efficient forest management, replacing traditional fuels like charcoal with modern and renewable fuels like pellets, ethanol, electricity etc., and proper awareness are crucial in protecting the environment and public health.

The objective of the World Bioenergy Association is to support increased production and use of sustainable bioenergy and hence, this fact sheet specifically focuses on biomass based fuel sources and associated stove technologies.

Global Bioenergy Statistics

WBA launched the Global Bioenergy Statistics 2016 report in June 2016. It provides an overview of data on the supply and consumption of all sectors of bioenergy and information is structured according to global, continental and country levels. The data is useful for informed decision making for policy makers, companies and research institutes.

In 2013, global biomass supply increased to 57.7 EJ accounting for 10% of the global energy supply. In terms of final energy consumption, bioenergy use increased by 1.23 EJ. The share of bioenergy in final energy consumption was 13.9%.

Bioenergy is the third largest renewable electricity generating source. In 2013, 462 TWh of bioelectricity was generated – a 6% increase over previous year. Bioenergy is largest renewable source for direct heat (use of energy in end use sectors), derived heat (heating in power plants) and transportation.

Forestry is the largest biomass source followed by agriculture and waste sectors. There is a lot of potential of using agricultural and forestry residues for energy generation.

There is rapid growth in pellets production. Charcoal production is underestimated and current production is twice as much as pellets. Biogas production is increasing.

Bioenergy will continue to be a major contributor to the global energy mix and part of the solution for a future sustainable society.

Bioenergy in European cities

In the battle against climate change, cities can play a decisive role. Without a targeted policy for cities to reduce their greenhouse gas emissions, climate mitigation policies cannot be successful.

This study explains the contributions biomass can offer to reduce the use of fossil fuels in cities. Bioenergy is a proven option to replace fossil fuels in the heat supply and partly in the transport sector and generation of electricity. Seven European cities are mentioned in this study that demonstrate how bioenergy is integrated into the urban energy system.

The supply of biomass in Europe is increasing. The forest area and the wood stock in forests are growing, the use and production of pellets and chipped forest biomass is increasing whereas the production of fossil fuels: gas, coal and oil is dwindling.

The reduction of greenhouse gas emissions, energy security and development of new jobs in Europe are key arguments in favour of bioenergy. Therefore, it is clear that bioenergy has the potential to become a pillar in the future energy portfolio of cities.

Fossil Exit Strategy

After COP 21 and COP22, Europe as well as the world face – in a historical view – the last chance to limit global warming below 2°C. This chance will be lost for centuries if the concentration of CO_2 in the atmosphere continues to grow as in the last decades. The European Commission started different initiatives to reduce CO_2 emissions from bioenergy supply chains or land use change. These activities address a tiny portion of the total CO_2 emissions of Europe, far less than 10%! The future policy must focus on the main source of CO_2 emissions, that is the burning of fossil fuels and therefore develop a straightforward Fossil Fuel Exit Strategy.

If the EU policy tackles the minor issues and ignores the main problem the climate policy will fail, in Europe and worldwide. Europe is the only continent able to implement a fossil fuel exit strategy fast enough: the solar potential is here, the technology is available, so far only the political will is missing! With a successful climate policy Europe could urge other continents to follow the European Example.

WBA demonstrates a path to a fossil free energy system for Europe within 25 – 30 years as a guideline for energy decisions worldwide. As a first milestone, a halving in the use of fossil fuels by 2030 is proposed in this concept.

Bioenergy Action Plan Vojvodina

With the permission from the Vojvodina government and energy minister, WBA was able to publish the Bioenergy Action Plan for Vojvodina for our members. During the years 2014 and 2015, WBA worked on the project "Biomass Action Plan for Vojvodina". In 2015, as part of the project, WBA organized a workshop and study tour for experts from Vojvodina to demonstrate the development of bioenergy in Styria, a province in the South East of Austria. The important goal for Vojvodina is to create an economic and institutional framework to double the share of biomass in Vojvodina until 2020 to reach 7% of the primary energy demand and to go for 20% until 2030.

Events

WBA Mission to Lithuania

The main purpose of this mission was to get information about the newest developments in the bioenergy sector in Lithuania and to establish future connections between World Bioenergy Association (WBA) and Lithuanian Bioenergy community. WBA undertook various study tours in Lithuania during the year 2016. The board meeting was also held in Vilnius, Lithuania.

The result of the mission was very positive in all aspects. Lithuania has a great success story on turning from fossil fuels to bioenergy which needs to be shared and followed. A detailed report on the mission will be available on the WBA members page soon.

WBA Mission to Turkey

World Bioenergy Association (WBA) visited Istanbul, Turkey in May 2016 as part of the annual mission. The objective of the visit was: 'To gather information about the development of renewable energy, especially bioenergy, in Turkey, to develop networks for future collaboration and to increase the presence of WBA in the Asian region'. Turkey is one of the fastest growing economies in the world. WBA was pleased to visit the vibrant capital city of Istanbul for the meetings held during 26th – 30th May 2016. The meetings started with WBA presence at the 6th International Renewable Energy Conference (IRENEC 2016) with various speeches and discussions. WBA held our annual meetings – General Assembly, Steering Committee and Board Meeting on the 28th of May 2016. A new President was elected – Mr. Remigijus Lapinskas from Lithuania. On the final day, WBA visited the facility – Altaca Gönen Enerji. The plant utilizes waste to produce multiple outputs: Bio oil, Fertilizer, Biogas, Compost etc.

WBA would like to acknowledge the support of Prof. Dr. Tanay Sidki Uyar (Vice President, WBA) and his organizers for arranging the logistics for the tour. A detailed report on the mission will be available on the WBA members page soon.

Torrefied Biomass Webinar

WBA successfully organized the first in a series webinar on torrefied biomass on 22nd June 2016. The webinar drew registrants from 18 countries worldwide and had an impressive and inspiring list of speakers from different companies and institutions. Presented by the World Bioenergy Association and the International Torrefaction Council, Torrefied Biomass: New Markets, New Direction, New World examined how the black/brown pellet industry can successfully grow in the near term by focusing away from large power plants to smaller but potentially more lucrative and secure markets. Presenters included representation from Solvay, Future Metrics, IBTC, Torr coal, River Basin Energy, Air-Ex, Torr gas, Renewable Fuel Technology, the Port of Rotterdam, and more!

COP22

WBA attended the COP22 in Marrakech, Morocco during 07th – 18th November 2016. Right after the ratification of Paris Agreement, it was crucial for WBA to be present at the 'COP of Action' to inform, network and be a presence at the event:

- WBA had an exhibition stand during the 1st week (07th – 12th November) of the event where we met government delegates, companies and researchers interested in bioenergy. A complete list of exhibition stands is available here: Link
- WBA organized a press conference on the role of bioenergy in the Paris Agreement on 11th November 2016. The speakers included Dr. Heinz Kopetz, Remig-

ijus Lapinskas, Kjell Andersson, Karin Haara and was moderated by Bharadwaj Kummamuru. Link

- WBA along with REN Alliance partners held a side event on 14th November 2016 on the renewables working together: rural, island, city, national and regional approaches. The speakers included the heads of REN Alliance partners – ISES, WBA, WWEA, IGA and IHA. The guest speaker was Gustaf Landahl from the city of Stockholm. Link (Video) and Link (News)
- WBA released a declaration to COP22 proposing a fossil exit strategy and carbon tax as key message. This was announced at the press conference as well. Link
- WBA was interviewed by media organizations, international institutions and researchers. A list of all interviews will be available online on our website. Link
- WBA also had a speech at Turkish and Brazilian pavilion on global developments in bioenergy and the liquid biofuels respectively.
- WBA President sent a video message from COP22 to the AEBIOM European Bioenergy Future Conference in Brussels. Link

Overall, it was a very successful event. WBA was able to get some members, develop contacts and generate ideas for new projects. The next COP will be held in November 2017 in Bonn, Germany with Fiji as the Presidency.

Projects

Bioenergy Equipment Directory

Bioenergy Equipment Directory was developed as an online platform for companies to showcase their equipment and clients to access information. The objective was technology transfer with the added benefit of gathering members and supporters to WBA. Unfortunately, due to lack of resources and website constraints, the project didn't proceed as expected. It was decided to keep the project on hold till the new website is developed in first quarter of 2017. Till now, WBA BioED has 36 companies in the directory.

Funding applications/Projects

An application for funding was submitted to KR foundation in January on the theme 'Scaling up adoption of clean, efficient and affordable cooking technologies using renewable fuels'. The application was rejected.
An application to Swedish Agency for Economic and Regional Growth was made for a planning grant for project 'Enhancing clean cooking solution access through upscaling business models in East Africa' but was rejected.

An application for a project 'Bioenergy and ecosystems services for low carbon development in the Baltic Sea Region" led by KTH Royal Institute of Technology was accepted for seed funding. WBA is one of the partners of the project. WBA attended the kick off meeting of the consortium of Bio Green Baltic project in Vilnius. The attendees included associations, universities and institutions from Lithuania, Latvia, Estonia, Belarus, Austria and Sweden. The delegates initially presented activities of individual organizations and contributions to the development of bioenergy in the Baltic Sea Region. The future activity is to prepare a project proposal to apply for EU funding.

Bioenergy Hubs

WBA has initiated discussions with board members and other partners to set up WBA branch offices/hubs in different parts of the world. The objective is to serve as a point of contact for transfer of knowledge and influence policy in the national level. The hubs will be funded by local bioenergy companies interested to expand into the global market. Discussions have started about hubs in Canada, Turkey, Brazil and China. WBA also is in discussion with SE4All to identify 3 – 5 countries (e.g. Vietnam, Philippines etc.) with potential for hubs and will sign a letter of cooperation.

Bioenergy Associations

WBA has a guide for setting up bioenergy associations. WBA is in contact with delegates from Belarus to set up a Belarussian bioenergy association. Another possibility is setting up the Kazakhstan bioenergy association. Discussions are ongoing.

Biofuels Working Group

The working group was an initiative which followed our previous declaration by the transport industry for COP21. A draft paper is available and we are discussing on who will take the initiative to lead the project.

Collaborations

Our list of collaborations increases every year. WBA is partnering with multiple organizations in promoting the role of renewables in the future energy society. Following are some of the important activities we performed with our network:

REN Alliance

WBA is continuing its association with REN Alliance. A side event was organized along with other partners at COP22 in Marrakech, Morocco. WBA was also involved in the launch of a new website and rebranding proposal for the REN Alliance.

REN21

WBA contributed to the Global Futures Report with expert advice on the role of 100% renewable energy society in the future. WBA continues to assist in data contribution

and review of the Global Status Report.

IRENA

WBA assisted in the review of the Project Navigator platform – an online platform for bioenergy project developers. WBA is also assisting IRENA and IEA on a Bioenergy Messages paper to explain the positive role of bioenergy to policy makers. The paper will be released during the IRENA General Assembly in January 2017.

SE4All

WBA is exploring the possibility to connect the concept of regional hubs with the SE4All objectives of deployment of renewable energy technologies. A letter of cooperation may be signed with the SE4All High Impact Opportunity Sustainable Bioenergy.

World Energy Council

WBA was the lead author of the World Energy Resources bioenergy chapter. WBA also attended the World Energy Congress in Istanbul, Turkey. This concludes the current collaboration with the WEC.

IEA

WBA was part of the workshop on developing the IEA Bioenergy Roadmap 2017. WBA will continue assisting IEA in developing the document along with future activities.

Go100%

WBA is the founding member of the Go100% campaign and was part of an informal dinner with the other partners of the group in Marrakech, Morocco on 12th November 2016.

ISO

WBA assisted in the preparation of the ISO standard for sustainable bioenergy. No further progress.

Green Climate Fund

WBA is an accredited observer to the Green Climate Fund. Due to lack of resources, WBA was not physically present at their meetings.

Organization

WBA meetings

In 2016, WBA held 4 board meetings – two via telephone and two in Istanbul in May and, in Vilnius in September. WBA and its members also attended numerous conferences, workshops, seminars etc. to promote the role of bioenergy globally.

Board meetings

- 16.02: Board meeting over telephone
- 28.05: General Assembly, Steering Committee, and Board meeting in Istanbul, Turkey
- 28.09-30.09: Board meeting in Vilnius
- 15.12: Board meeting over telephone

Conference attendance

January

- 18.01-19.01: Fuels of the Future, 13th Conference on Biofuels, Berlin, Germany
- 22.01: Conference on the Paris outcomes from UNFCCC COP21, Vienna, Austria

March

- 02.03-03.03: Urban Future global conference, Graz, Austria
- 31.03: Press conference on Paris agreement and renewables, Vienna, Austria

April

- 19.04-21.04: Nordic Baltic Bioenergy, Vilnius, Lithuania
- 20.04-22.04: World Energy Resources Study Group Meeting, London, UK

May

- 24.05-26.05: IWB Week, Stockholm, Sweden
- 27.05-28.05: IRENEC 2016, Istanbul, Turkey

June

- 10.06: Conference: After the Paris Climate Agreement, Stockholm, Sweden
- 15.05: Conference about Future forest: CIFOR programme for bioenergy & forestry actions until 2025 meeting the SDG goals, KSLA, Stockholm
- 20.06: WBA Global Bioenergy Statistics 2016 release, Stockholm, Sweden
- 22.06: Conference: Forests, Bioenergy and Global Climate – Future Forest, Stockholm, Sweden

August

- 30.08-01.09: Conference: Bioenergy from Forest, Jämsä, Finland

September

» 16.09: Climate Diplomacy Week 2016, Stockholm, Sweden

» 20.09-21.09: XII International Conference on Biomass for Energy, Kiev, Ukraine

October

» 09.10-13.10: World Energy Congress, Istanbul, Turkey

November

» 05.11-15.11: UNFCCC COP22, Marrakech, Morocco

» 11.11: COP22 Press Conference, Role of Bioenergy in Paris Agreement, Marrakech, Morocco

» 14.11-15.11: Conference: Bioenergy Australia, Brisbane, Queensland, Australia

» 16.11-17.11: European Bioenergy Future, 2016 AEBIOM Conference, Brussels, Belgium

» 29.11-30.11: AEBIOM Communications working group, Brussels, Belgium

December

» 02.12-04.12: ICAF 2016, Advanced biofuels conference, Kayseri, Turkey

» 05.12-06.12: REN21 Steering Committee meeting, Paris, France

Board members

1. Remigijus Lapinskas, World Bioenergy Association (Lithuania)
2. Werner Sitzmann, Amandus Kahl (Germany)
3. Douglas Bradley, Climate Change Solutions (Canada)
4. Andrew Lang, World Bioenergy Association (Australia
5. Benard Muok, Jaramogi Odinga Odinga University of Science and Technology (Kenya)
6. Tanay Sidki Uyar, Eurosolar Turkey and Bioenergy Association of Turkey (Turkey)
7. Laercio Couto, Renabio (Brazil)
8. Jean Marc Jossart, European Biomass Association (Belgium)
9. Saku Rantanen, Tasma Bioenergy (Singapore)
10. Geraldine Kutas, UNICA (Brazil)
11. Christoph Pfemeter, Austrian Biomass Association (Austria)
12. Wan Asma Ibrahim, Forest Research Institute (Malaysia)
13. Mika Ohbayashi, Japan Renewable Energy Institute (Japan)
14. Hisashi Kajiyama, Bioenergy Research and Investment Inc. (Japan)
15. Hazir Farouk, Sudan Universiy of Science and Technology (Sudan)
16. Jörgen Sandström, Addax Bioenergy (Switzerland)
17. William Strauss, Future Metrics (USA)
18. Kelvin Hong, Great Resources (China)
19. Kes McCormick, Lund University (Sweden)

Nominating Committee

» Gustav Melin, Svebio, Sweden (Convenor)

» Ralph Sims, Massey University, New Zealand

» Kent Nyström, Former President of WBA, Sweden

Secretariat

» Remigijus Lapinskas, President, Lithuania

» Heinz Kopetz, Senior Consultant, Austria

» Karin Haara, Executive Director, Sweden

» Bharadwaj V Kummamuru, Project Officer, Sweden/India

» Viktorija Kazlauskaite, Project Assistant, Sweden/Lithuania

» Pranav Dadich, Project Assistant, Sweden/India

» Johanna Eklund, Project Assistant, Sweden

Members of Honour

» Kent Nystrom, Stockholm

Full members

Spanish Bioenergy Association, Swedish Bioenergy Association, European Biomass Association, proPellets, The Energy Farm International Foundation, CZ Biom - Czech Bioenergy Association, Eurosolar Turkey, German BioEnergy Association, African Bioenergy Association, Austrian Biomass Association, Norsk Bioenergiföreningen, Fachverband Biogas e.V, Bioenergy Association of New Zealand, New World Hope, Advanced Biofuels Association, Bioenergy Association of Turkey, Lithuanian biomass energy association, Swedish Peat Producers Ass., Bioenergy 2.0 Association, The Bioenergy Association of Finland, Zambian Bioenergy Association, Climate Change Network Nigeria, SSS-National Institute of Renewable Energy.

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First Bioenergy, Elmia AB, United Loggers Ltd, Scandinavian Forestry & Engineering, Firefly AB, CPM Europe BV, C.F. Nielsen A/S, W.Kunz Dry Tec AG (Swiss Combi), Ekman & Co AB, Bronswerk Heat Transfer BV, Herz Energietechnik GmbH, Energie Steiermark AG, Agrana, Ingenieurbüro Riebenbauer, Forstbetrieb Regnier-Helenkow, Addax Bioenergy Management S.A, Sunbird Bioenergy Ltd, BDI - BioEnergy International AG, Sveaskog Förvaltnings AB, Lund University Biofuels , Westtech Maschinenbau GmbH, Bioenergie Wärmeservice GmbH, Södra Skogsägarna ek. för., Probstdorfer Saatzucht GmbH & Co Kg, Energiecontracting GmbH, HSH Nahwärme & Photovoltaik GmbH, Bioenergie Tirol Nahwärme GmbH, TB Harald Kaufmann GmbH, Meva Energy, MAB Powertec Oy, Bioenergy Recycling Sweden Ab, Siemens Industrial turbomachinery AB , WSP Sverige AB, Victor Energy ApS, World Thermal Service AB, ENERSTENA Group, Mongolian Federation of Engineering organizartions, Amandus Kahl GmbH & Co.KG, Pragati Koraput, United Loggers, B&W Mechanical Handling, Firefly AB, CPM, Groupe Anderson Inc./Anderson Group co., C.F. Nielsen A/S, W.Kunz Dry Tec AG (Swiss Combi), Viking Heat Engines AS, FM BioEnergy, Booker Tate Ltd, Jeffrey Rader Corporation, Chemec Oy, Vermeer, KWB, Ekman & Co AB, EFO AB, Bronswerk Heat Transfer BV, Promille Stoltz, Pilum AB, AKATA Commodity Trading ApS, MHG Systems Oy Ltd, COVAERSA s.a.u. (Briec), SIBCONGO, Groupe Anderson Inc./Anderson Group co., Viking Heat Engines AS, FM BioEnergy, Jeffrey Rader Corporation, SAMSON /B&W Mechanical Handling Ltd, Energy commission of Nigeria, Chemec Oy, Vermeer Corporation, National Center for Biotechnology, Promill Stolz SAS, Pilum AB, Konrad Forsttechnik GmbH, KWB.

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Official supporter

» **Enerstena Group of companies**

Silver supporter

» **AGRANA**

4. FUNDING

WBA would like to acknowledge the continued support of financing from the Austrian Government and from following supporters:

» Enerstena Group of Companies, Lithuania

» AGRANA AG, Wien

» GRAWE, Graz

» Fortum, Stockholm

» Graz Stadt, Graz

» Niederosterriches Landesregierung, Wien

» Landeskammer für Land- und Forstwirtschaft Steiermark, Graz

» Landwirtschaftskammer Oberösterreich, Linz

It is a continued challenge to build a world organization, especially in the financing. With sustained support from current supporters and the possibilities of new funding partners would enable WBA to be in a stronger position in 2017. The financial report with figures is available upon request. Kindly send an email to info@worldbioenergy.org with the *Subject: Request for WBA annual report 2016 – Authorized Version*

Stockholm 2017- 03 - 22

Board members below have signed the Annual Report for 2016:

Remigijus Lapinskas, President

Werner Sitzmann

Douglas Bradley

Andrew Lang

Benard Muok

Tanay Sidki Uyar

Laercio Couto

Jean Marc Jossart

Saku Rantanen

Geraldin Kutas

Christoph Pfemeter

Wan Asma Ibrahim

Mika Ohbayashi

Hisashi Kajiyama

Hazir Farouk

Jörgen Sandström

William Strauss

Kelvin Hong

Kes McCormick

My audit report has been submitted and signed 2017 -

-, Authorized public accountant

World Bioenergy Association – the GLOBAL VOICE OF BIOENERGY

Mission: To promote the use of sustainable Bioenergy globally & support the business environment for bioenergy.

Together with our members

- We work for an increased use of biomass in the global energy system in the markets for heat, electricity and biofuels
- We follow the principles of sustainable, efficient and economic biomass development
- We influence and inform the public opinion in favor of sustainable biomass solutions worldwide and in individual countries
- We promote bioenergy as an important player in the global climate mitigation policy
- We cooperate with global institutions such as UNEP, UNFCCC, IPCC, IEA, IEA Bioenergy, IRENA, REN Alliance, FAO, REN 21 etc. towards the target of 100% Renewable

How we work?

- **Office** in Stockholm, Sweden
- **Our board:** 19 members from 5 continents
- **Our members:** companies, associations, individuals from all over the world
- **Main areas:** Biomass potential, sustainability of biomass, pellets, small scale heat with biomass, combined heat and power, conventional & advanced biofuels, biogas, carbon neutrality of biomass, bioenergy statistics, bio mass trade, bioenergy policy, traditional biomass
- **Main activities:** fact sheets, statistics, position papers, policy reports, workshops, press-releases, networking, presentations in conferences & exhibitions

What kind of membership is possible?

- **Full members**
  Bioenergy associations on regional, national or international level, (fee between 300 and 5 000 Euro annually, depending on situation and size)
- **Associated members**
  Companies, energy agencies, research institutes, consultants working in the field of bioenergy (fee between 300 and 5 000 Euro annually, depending on situation and size)
- **Individual members**
  Individuals, interested in the global development of bioenergy as sustainable and renewable energy source (fee 50 Euro annually)

Benefits of WBA membership?

- Strengthen of the lobbying in favor of biomass on a global scale
- Exchange of information and experience between the bioenergy sector worldwide
- Possible cooperation in working groups and projects
- Access to new global studies and information about bioenergy

We invite you to join WBA on www.worldbioenergy.org!