



ONTARIO BIOMASS PRODUCERS CO-OPERATIVE INC.

for a cleaner tomorrow

by Urs Eggimann

Will we be ready to step up to the plate?

There have been several solid initiatives promoting Ag biomass. OMAFRA, OSCIA, OFA, OPG, etc., have all been instrumental with a number of studies, projects and initiatives to research and elevate Ag biomass. Required funding could get secured to perform the much-needed research and raise the awareness and demonstrate the benefits of Ag biomass.

There is no doubt that it will get tougher to get future funding for biomass. We will need to prove that a proposed initiative or project will have a great chance of success and will open up new market opportunities. Most likely sooner than later we need to find ways to get the biomass industry on a level where it can support and drive itself. We have been fortunate to have a few talented and dedicated pioneers or front-runners who were willing to spend substantial amounts of time and money to open new biomass possibilities.

What these “biomass heroes” have been doing is not sustainable – they need help.

Ontario Biomass Producers Co-op was founded with the objective of finding new opportunities for farmers in Ontario and at the same time being good stewards of our environment. The group sees great potential in opening markets for biomass producers, but there is no shortage of hard work to achieve these goals.

Are we ready for this big challenge? The correct answer might be “yes and no”.

There are a few claims that can be put in the “yes” column:

- ◆ We seem to be on the right track.
- ◆ We have made steady progress.
- ◆ We are a lot more “biomass savvy” than we were just a short while ago.
- ◆ We managed to demonstrate some success (not just failures) in our fields.
- ◆ We get more respect and recognition than we possibly deserved in the past.

We also have a few facts that fit well into the “no” column:

- ◆ We do not have sufficient funding to take on major projects.
- ◆ We can no longer do our work just depending on volunteers; we need to add more professional help.
- ◆ We cannot afford to go into hibernation during busy farming periods.
- ◆ We cannot count on professional support forever from our current partners, like OSCIA, OMAFRA, UofG, etc.
- ◆ We do not have a sufficient membership base. There are still way too many farmers on the sideline, who are watching us to open biomass markets and only consider jumping on the biomass train once it seems absolutely safe to do so.

We are clearly at a crossroads!

We can make the necessary efforts and dare to take some risks and have an opportunity to be rewarded down the road. We can do the right thing by creating an acceptable revenue stream, which at the same time is environmentally responsible and can have a long-term future.

We can also wait for things to happen and not get our hands dirty. We can hope that

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An Invitation...

You are cordially invited to join us at the OBPC Biomass Forum and AGM event at 1 Stone Road W. in Guelph on January 23, 2013.

This free event is a collaborative effort of the Ontario Biomass Producers Co-op (OBPC), the Ontario Soil and Crop Improvement Association (OSCIA) and the Ontario Ministry of Agriculture and Rural Affairs (OMAFRA).

We encourage everyone to attend, who would like to get a current update and market assessment of the biomass industry of Ontario from the perspective of producers, researchers, processors and manufacturers. This event is an excellent opportunity to meet key people of the biomass industry of our province. ©

OBPC Biomass Forum & AGM

Wednesday, January 23, 2013
1 Stone Road W, Guelph, Ontario

Registration starts at 6:30pm

Feature Speaker starts at 7:00pm

"The Cents in Ontario Biomass - Budding Opportunities in an Emerging Biomass Market"

Presentation by **Nick Betts**, OSCIA

Topics to include: Biomass in Ontario, OBPC Growers' Guide, Membership Development

Introduction of Biomass Posters by UofG Students

"The Challenge of Connecting the Biomass Sectors"

A Panel Discussion - co-moderated by **Ian McDonald**, OMAFRA, and **Jim Todd**, OMAFRA

Panel members:

Murray McLaughlin - *Executive Director at Bioindustrial Innovation Center*
 Charles Lalonde - *Ontario Federation of Agriculture & Cj Agren Consulting*
 Barry S. Wortzman - *VP Business Development at Greenfield Ethanol*
 John Kelly - *Vice President, Erie Innovation and Commercialization*
 Don Nott - *Owner, Nott Farms and Switch Energy Corp.*
 Ralph C. Martin - *Prof. at UofG, Loblaw Chair in Sustainable Food Production*

Within this forum we will attempt to shed more light and look for answers to questions like:

- ◆ How can we engage biomass producers with end customers and players in the value chain?
- ◆ What are the attributes that manufacturers require in a feedstock?
- ◆ How can we leverage existing environmental opportunities, practically and market wise?
- ◆ How can we raise more effectively the awareness and knowledge of our biomass crops within the larger agricultural and industrial community?
- ◆ How can we learn from existing and successful Ag value chains?
- ◆ Which biomass applications have the best earliest and best opportunity of opening profitable markets for producers and industry?
- ◆ How can we convince the vast majority of farmers, who are passively sitting on the sideline, to join early adopters and become active participants in a new biomass industry?

Annual General Meeting

Including both an informal welcome and a formal meeting. Elections for new directors will be held.

by Karen Jacobs
Editorial

Hello! Nice to meet you! My name is Karen, and I am the new editor of the OBPC newsletter. If you think that name sounds familiar it is most likely because I also edit the Heartland Soil and Crop Improvement Association's newsletter.

I hope you're enjoying the new version of the Ontario Biomass Producers Cooperative's newsletter.

To take advantage of our online distribution, many things within this newsletter are hyperlinks. Please read with your mouse handy!

I have been learning a lot about biomass crops in the last few years, and I am just delighted to be a part of this organization.

As you've hopefully noticed, we are holding a Forum and an AGM on January 23. I hope you are all planning to attend. Nick Betts, our feature speaker, and Ian McDonald and Jim Todd, our panel moderators are all speakers well worth hearing.

Hope to meet you soon!

Karen

OBPC Feature Speaker

Nick Betts is the Applied Research Coordinator with Ontario Soil and Crop Improvement Association. He works with government, university, and farmers to facilitate innovative and emerging agricultural research across the province. Nick has a B.Sc.(Ecology) from University of Guelph and is completing a M.Sc.(Biogeography) at WLU, in Waterloo, while holding an A.Ag. designation from the Ontario Institute of Agrology and Environmental Professional in Training designation from CECAB. He lives in Elmira with his wife, daughter, and dog. For the past three years, Nick has worked through various government funds, universities, and organizations, like the Ontario Biomass Producers Cooperative, to facilitate research of the agronomics and economics associated with developing the agricultural biomass value-chain in Ontario.



OBPC Panel Moderators

Dr. Ian McDonald has been the Applied Research Coordinator for the Field Crops Unit of the Ag Development Branch of OMAFRA since 2000. He is based at the University of Guelph main campus in the Plant Ag Dept. where he works with academic, farm organizations such as OSCIA, OMAFRA, GFO, IFAO, OFA members/staff and others to validate research successes within the scope of farm based adoption. Previously he spent 15 years working on pesticide research for two multi-national companies.

He has been working closely within and beyond OMAFRA and UofG on the potential opportunities of the emerging bioeconomy and is most interested in the profitable and sustainable supply of new and existing agricultural feedstock's to emerging industries in the bioeconomy.



Dr. Jim Todd joined OMAFRA as a crop transition specialist in 2005. Jim began his career with a BSc from the University of Waterloo, followed by a Ph.D. from the old horticulture department at the University of Guelph. After graduation, he began a series of post-doctoral positions which ultimately led to a position at Monsanto in St. Louis. While there, he worked on projects ranging from large scale gene expression analysis to looking for ways to increase the protein content of corn seed. As OMAFRA's transition crop specialist, Jim works on identifying crops with potential to serve as agricultural feedstocks for Ontario's developing bioeconomy.



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others will do the work for us anyway. We can squeeze every bit of profit possible out of our soil, disregarding our environment and opportunities for future generations.

Since we will not get showered with buckets of money, we probably only have one distinct option - OBPC needs to grow substantially. A lot more members are needed to carry the biomass movement and step up to the plate to meet future expectations.

Everyone sitting on the sideline should profoundly reflect on which direction to take.

Some wisdom from the late Steve Jobs, former CEO of Apple, might give us much needed motivation.

"The ones who are crazy enough to think they can change the world, are the ones that do" - Steve Jobs. ©



WE ARE CURRENTLY EXPLORING:

- ◆ Marketing opportunities
- ◆ Production of purpose grown biomass crops
- ◆ Harvesting of crop byproducts
- ◆ Transportation and storage issues
- ◆ Generating or co-generating electricity from biomass
- ◆ Structure and financing options for a biomass production co-operative
- ◆ Densifying of biomass (ie: pelleting, briquetting)
- ◆ Biomass heat energy
- ◆ Biomass as a feedstock for the productions of fuels
- ◆ Biomass for the production of composite fibre boards
- ◆ Biomass for the production of plastic products
- ◆ Animal Bedding (dairy, pet market etc)
- ◆ Biomass as a substrate for mushroom farming

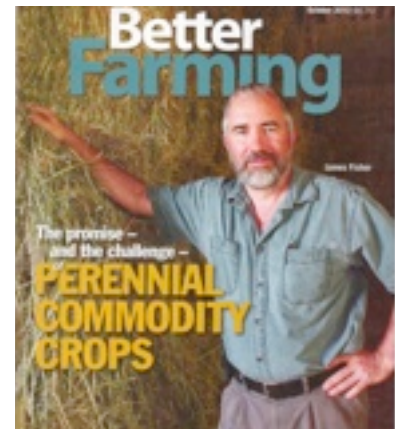
by James Fisher

President's Report

This past year put OBPC on the map. Firstly OBPC had attendance at the Toronto Farm Show and the Outdoor Show in Woodstock where we were able to connect with many farmers and others in the industry. Secondly OBPC not only obtained formal structure as a Co-op but we have or are in the process of completing a strategic plan that defines our identity and sets a path for moving forward. This work has facilitated OBPC developing a relationship with not only farmers but AMI, OMAFRA, OSCIA and the biomass market place. We thank these groups for working with us and look forward to continued involvement as we develop agriculture biomass markets that work for Ontario Farmers.

The concept of farmers working together to develop markets that work for farmers is still new as is the biomass market place. I believe OBPC is now positioned to deliver results. For a very modest investment (compared to developing markets on your own) any farmer can participate. The more that participate the stronger OBPC is and the better the odds of success. The opportunities for

a group are greater than for individuals. I encourage all farmers to take a few moments to think about the future. If you think new market opportunities are important give serious thought to joining OBPC.



The OBPC has an excellent opportunity for you to learn more about our organization on Jan 23 (details in this newsletter). If you missed our last AGM with Dr Gord Surgeoner speaking about Food vs Fuel you missed a great presentation. This year's program looks equally interesting. I look forward to meeting you there. If you are unable to attend or would like an OBPC Board member to meet with you or your group please feel free to contact us. ©

The New Green Rural Opportunities Summit

The new Green Rural Opportunities Summit is a bold departure from the successful and well-regarded Growing the Margins and Canadian Farm and Food Biogas conferences and exhibitions of recent years.

The GRO Summit and its exhibition, held in London March 4-5, 2013, will showcase achievement and further opportunities for greening a range of operations and organizations throughout rural Canada. As in previous years, the Canadian Biogas Conference will be held in parallel and will

focus on managing the system and taking farm and rural biogas applications to the next step.

Attention now shifts to the users of green energy, clean technologies, bioproducts and byproducts, and how together players in these fields build the supply chain and connect the dots, from farm to consumer.

Delegates will learn how leaders are greening farm operations, food processing and products, transport fleets, rural

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WHO WE ARE

The Ontario Biomass Producers is a group of Ontario farmers exploring the sustainable production and marketing of biomass crops. This group is open to all Ontario farm operations, from small to large scale.

Non-farmers who are engaged in the biomass industry can participate at OBPC with an associate membership.

For information, please email memberships@ontariobiomass.com



by Urs Eggimann

Biomass year 2012 - a look though the rearview mirror

It is hard to imagine that another biomass year is again tucked away in our history books. We can look back on an eventful year with significant biomass progress reports and milestones.

“What kind of biomass markets do we have in Ontario?” is probably the most frequently asked question by anyone interested in the production of Ag biomass. In the past year we have witnessed some remarkable progress.

As a result of elevated wheat straw prices, our major biomass growers, [Switch Energy Corp.](#), lead by Don Nott, saw significant interest in switchgrass from the mushroom industry. Mushroom operations see a clear advantage in using composted switchgrass as a substrate and are happy to have an alternative to wheat straw. The characteristics of switchgrass seem to be very suitable for growing mushrooms. Purpose grown biomass is far less subject to price and availability fluctuations than wheat straw, and which is a real incentive for mushroom growers to have another look at their established composting source.

Switchgrass growers enjoyed increased interest from dairy farmers struggling to get sufficient feed for the winter season. Even though switchgrass is most likely not on top of the list of preferred hay varieties, switchgrass hay sold for up to 12¢ per pound at Ontario hay auctions- not bad for an unexpected market opportunity. Another “Plan B” biomass option, animal bedding, created increased demands in 2012.

Even though straw prices might eventually come down again, biomass producers managed to increase the general awareness of their products. Producers can be confident that most of these low-tech opportunities will not disappear.

During the past year there has been considerable progress with research of cellulose-based fuels. It is no longer a distant target to produce fuel within a competitive cost range, using purpose grown biomass. We also witnessed numerous new announcements and discoveries of bio-based products in the plastic industry.

Organic composite boards (fibreboards) are another promising biomass application with a long-term view. [WhiteCloud Innovations](#), under the leadership of Catherine Tredway, have made steady progress, and their prototype products are nearing production status in Alberta. The characteristics of Ag biomass based fibreboards greatly outperform regular wood products in terms of strength, fire resistance and low moisture absorption. [Switch Energy Corp.](#), lead by Don Nott, has been actively involved in this project by providing sound Ag advice. For the production of this exciting product they will supply one of the required base components, pulverized plastic, originating from their [Bale Wrap Program](#). Without Don Nott's consulting efforts and direct contributions an actual production target date would most likely be a fair bit farther on the horizon.

The [Ontario Field-scale Agricultural Biomass Research program of OSCIA](#), with the active cooperation of [OMAFRA](#) and the [University of Guelph](#), is an important stepping-stone to create a successful biomass value chain for producers in our province. Several members of OBPC are very active “cooperators” of the OSCIA research program. The “Knowledge Exchange”, held in Cambridge, ON, was a great venue to solidify the gained knowledge within the group of 27 growers and identify critical gaps. The 2nd Annual Biomass Tour was another fine effort of OSCIA, OMAFRA and the UofG, which elevated the

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Prototype fibreboards by WhiteCloud Innovations

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awareness and increased the knowledge base of biomass.

Being a switchgrass producer, my miscanthus knowledge is fairly basic, and therefore my writing might probably be a bit switchgrass biased. Nevertheless, I am happy to report that there has been major progress made on the miscanthus front as well. [New Energy Farms](#), under the

leadership of Dean Tiessen, have made substantial breakthroughs last year, bringing down the miscanthus establishment costs with their [Ceedz™](#) propagation method. NEF have a very significant presence around the globe; oddly enough Canada still represents just a minor portion of NEF's customer base, so there is a lot of catching up to do. NEF made a great biomass education effort with their successful Open House, held last year at their Leamington location. The event attracted numerous visitors from both Canada and bordering US states, who appreciated this generous opportunity to become more "miscanthus savvy".

A Canadian "biomass delegation", with the lead of Charlie Lalonde, visited several biomass based power and heat generation stations in European countries. After this European tour Charlie staged a biomass event in Guelph and skillfully shared his newly acquired biomass wisdom with an audience, interested in biomass energy. Charlie's presentation clearly proved the point that biomass based energy can be a viable option, especially if carbon credits can be included in the equation.

[The Biomass Discovery and Development Centre of the University of Guelph](#), lead by Dr. Amar Mohanty, staged a number of highly educational biomass "Public Lecture" sessions. These events provide an excellent opportunity to acquire knowledge of various biomass subjects and to meet key players of the biomass industry.

At last year's AGM Dr. Gord Surgeoner, president of [Ontario Agri-Food Technologies](#), was our keynote speaker. His presentation "Food Versus Fuel: The Debate Is Over" offered documented and very convincing arguments against some major misconceptions. Dr. Surgeoner, with his numerous contributions, has been demonstrating solid leadership in the evolving biomass industry of our province.

Another noteworthy event before year-end was the [Agricultural Biomass Business Forum](#), staged at the University of Guelph Arboretum Centre. This event was the last session of a 3-segment series addressing the Commercialization of Agricultural Biomass for Combustion Energy.

Last year's [Growing the Margins Conference](#), in London, ON, was a solid indication that the biomass movement is gaining momentum. The number of biomass sessions have now become a dominant part of the conference schedule, clearly outpacing other renewable energy streams, like wind and solar.

Another piece of evidence that purpose grown biomass has become a credible crop in the farming sector, is the addition of biomass crops in the [AAFC Advance Payment Program](#). The APP now includes switchgrass, miscanthus and sorghum.

2012 was a busy and productive year for [OBPC](#). The organization adopted a Co-op structure and with its new logo now has a more visible identity. The OBPC website has been enjoying a great deal of popularity, which can be measured with a continuously increased traffic. The ultimate goal is to be recognized as the biomass portal of choice in Ontario.

The "AMI Project" required a lot of our resources, especially during the 2nd half of the year.

The direct presence at the International Farm Show in Toronto and the Canadian Outdoor Farm Show in Woodstock gave us an opportunity to engage with interesting visitors and strengthened our biomass network. At the Woodstock location we joined forces with [REAP-Canada](#), Ontario Agri-Food Technologies ([OAFT](#)) and the Bioproducts Discovery and Development Centre ([BDDC](#)) of the University of Guelph.

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At the Outdoor Farm Show in Woodstock

by Nancy Comber

Strategic Planning for OBPC

In the spring of 2012 the Ontario Biomass Producers Group (OBPG) applied to the Agricultural Management Institute (AMI) for funding to assist in moving to a new level of industry engagement and to dramatically impact the business opportunities and business planning for biomass producers. OBPG was successful in receiving funding for this initiative.

OBPG's ultimate goal is to become the central facilitator and service provider that offers a full range of information support in the area of biomass energy. We will disseminate information, facilitate sharing between members, as well as research and communicate new business opportunities for biomass producers.

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Last year we introduced an Associate Membership level, with the idea of opening links to people and organizations without farm status, who have an interest or stake in the biomass industry. The new associate members have become a vital group of our organization. Being able to connect the right key people is one of the most significant success factors to getting things done and certainly also applies to the biomass industry. Our organization strives to be an important player in the biomass arena of our

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municipal operations and buildings, and more by producing renewable energy, switching to biomaterials and bioproducts, and taking advantage of byproducts. "The overriding theme of the GRO Summit," according to John McMullen, Conference Chair, "is how you can become more sustainable and profitable while reducing your carbon footprint."

"The GRO Summit will be the must-attend event for proactive individuals and organizations actively involved in

We would start by developing a strategic plan to move forward for future engagement with biomass producers.

Since funding was received, we have been successful in our application for incorporation and are now known as the Ontario Biomass Producers Co-operative Inc. (OBPC). Consultants have been engaged and the Board of Directors have been working diligently on our strategic planning. Please join us at our Annual General Meeting to hear more.

Sincere appreciation to AMI for this funding opportunity, which is supported by the Ministry of Agriculture, Food and Rural Affairs. ©

province and will make it a priority to contribute in the effort of establishing the much needed people connections.

OBPC is still in need of a larger membership and would like to convince people on the sideline that their active participation is very much needed.

I would like to encourage our readers to join us at our [OBPC AGM in Guelph](#), learn more about our latest projects and play an active part in the biomass story of our province. ©

greening the rural sector and those interested in playing a part and moving the agenda forward," according to McMullen.

Leading-edge agricultural producers, commodity groups, fleet managers, rural municipalities, technology and service providers, research centres, and utilities should take a close look at this interesting event and networking opportunity.

For more information on the Green Rural Opportunities Summit, Canadian Biogas Conference and their joint Exhibition, visit their website at www.gtmconference.ca ©

The OBPC would like to express appreciation to the following supporters of our organization:

- ◆ Agricultural Management Institute for funding for the development of a strategic plan
- ◆ The Regional Municipality of Halton for funding towards professional services
- ◆ Country Heritage Park for the use of a meeting room
- ◆ Georgetown Agricultural Society for the use of a tent during the Outdoor Farm Show
- ◆ Canadian International Farm Show for a free exhibit area and meeting room during their show
- ◆ Canadian Outdoor Farm Show for a free exhibition space
- ◆ Ontario Ministry of Agriculture, Food and Rural Affairs for their continued support
- ◆ Halton Region Federation of Agriculture for the use of their Quickbooks system
- ◆ Peter and Rachel Thoma for lending their BigPack baler during the Outdoor Farm Show
- ◆ To all our members who contributed time and material to make our Farm Shows a success



Upcoming Events

Annual General Meeting of the Ontario Biomass Producers Co-op

Jan 23, 2013 at 1 Stone Rd, Guelph. A detailed agenda to come.

Green Rural Opportunities Summit and Exhibition

March 4, 2013 at the London Convention Centre, London ON.

For a full list of coming events please visit our website!

Biomass in the News - a Collection of Articles

Straw Fired Power Plant in Poland

by Urs Eggimann, Jan 11, 2013

Poland being on the biomass leaders in Europe will commission a 30 MW power plant using straw as a feedstock.

Finnish Breakthrough Strengthens Bioplastics Potential

by Urs Eggimann, Dec 19, 2012

Bioplastic packaging applications have been strengthened, according to a Finnish research centre, after its development of a technique to dramatically improve the quality of bio-based packaging materials.

The Case for Switchgrass

by Urs Eggimann, Dec 2, 2012

Interesting switchgrass article, published in the CapeGazette, Delaware.

Is Ag Biomass Here to Stay?

by Urs Eggimann, Nov 27, 2012

An article in the Biomass Magazine, written by Dan Arnett, Biomass Coordinator at Ernst Seeds and board member of REAP-Canada.

New Energy Farms: Energy Crop Supply - Spring 2013

by Urs Eggimann, Oct 2, 2012

Don Nott in the News with new Biomass Market Opportunities

by Urs Eggimann, Oct 2, 2012

Switchgrass grower still confident about future.

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