2014 Sustainability Report

EcoSynthetix

Our Journey to Sustainability

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CEO Message

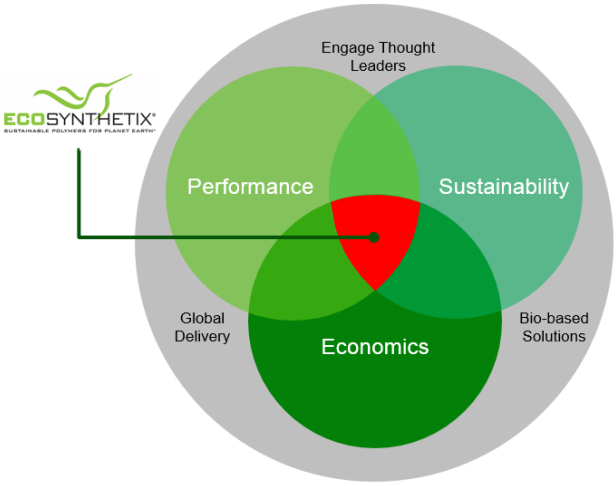
In 2014, the EcoSynthetix team re-examined our "reason for being" as an enterprise. In doing so, we adopted a practical methodology branded as the "hedgehog concept" by business guru Jim Collins. The concept has an organization explore three key questions in defining who they are and what they do:

1. What are you deeply passionate about?
2. What can you be best in the world at?
3. What drives your economic engine?

The result of this exercise wasn't a revelation, but rather a reconfirmation and clarification of the common purpose we have in our work at EcoSynthetix:

We transform industries toward sustainability by offering a range of engineered biopolymers for targeted markets which enable profitable growth for our customers. By working closely and more responsively with our customers, we bring these solutions to market the fastest and most effectively in our industry. We do this in a unique and collaborative work environment using green chemistry, proprietary reactive extrusion and complementary manufacturing technologies to achieve low production costs using minimal capital.

We realized that this definition of "who we are" puts us in an interesting position, between the two prevalent business models in today's greening economy. One model is the mainstream business which is successful in creating traditional value, but trying to adopt and project a more sustainable approach to its products, services and activities. The second is the typical green-tech business which has a noble purpose and often an interesting technology or service, but lacks the performance or economics needed to create a viable business opportunity vs. incumbent products and services.



At EcoSynthetix, our business is *Sustainable Polymers For Planet Earth*. While traditional businesses annually report the percentage of their products derived from sustainable sources, 100% of our products are environmentally responsible, sustainable products. And our founders realized from the beginning that sustainability was not enough to create a winning enterprise. Products also need to perform technically at incumbent levels, with competitive economics. It's at this intersection of performance, economics and sustainability that we create value.

By keeping a disciplined approach to this value creation model, we have successfully applied our renewable, nano-scale biopolymers as a latex coating replacement in the paper and paperboard manufacturing process, selling more than 130 million pounds of EcoSphere to date. This substitution results in a Green House Gas reduction of 67% for every kg used. And, it yields the same product quality and throughput, with hundreds of millions of dollars of new value created in the paper industry through improved economics – a win, win, win.

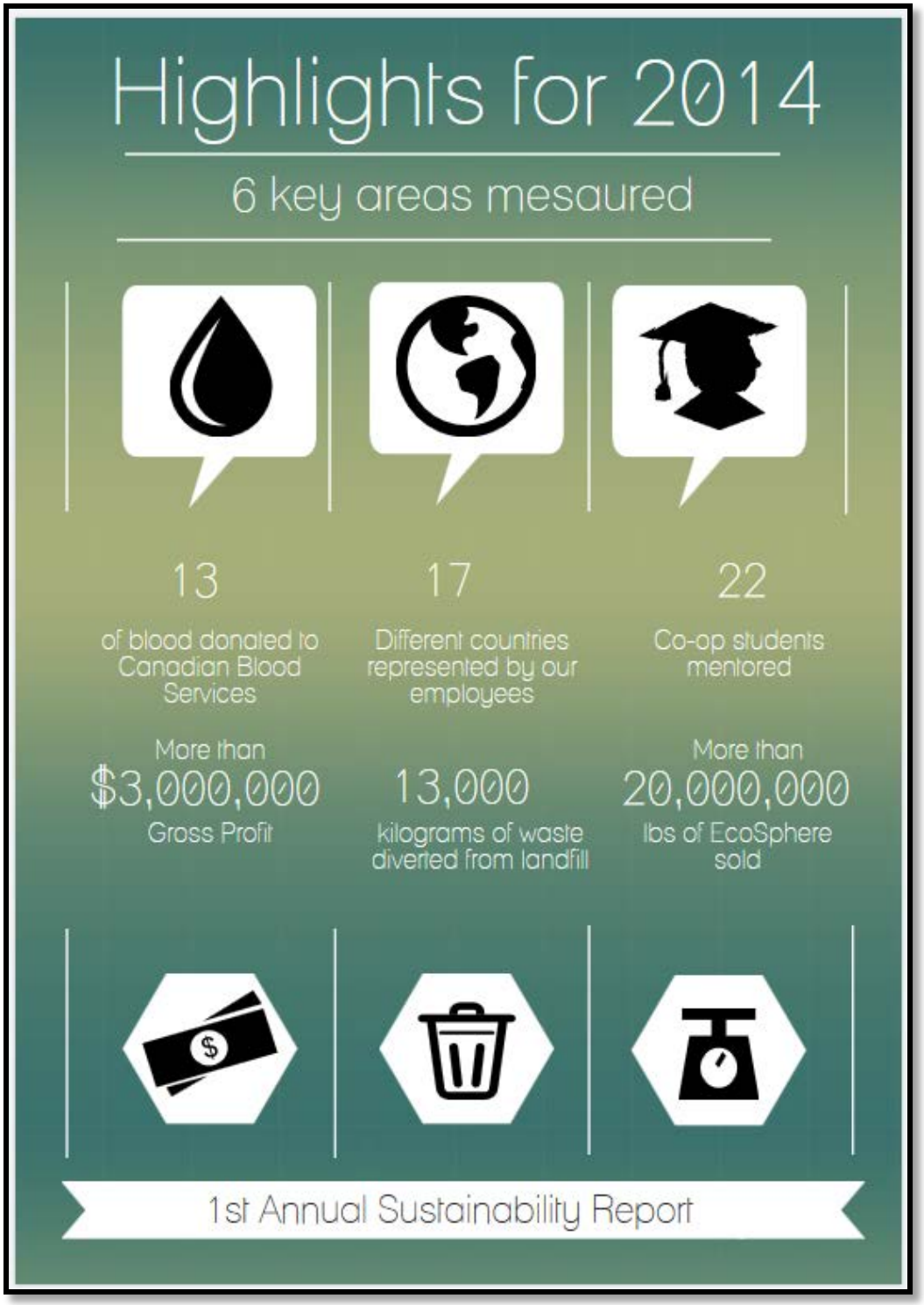
We're working hard to replicate this model in new markets where we can reduce the dependence on fossil fuels and/or curb the use of chemicals which are harmful to people and our planet. Our second product line, currently in the final stages of mill trials, is DuraBind, a sustainable biopolymer resin which allows a reduction or elimination in the use of harmful formaldehyde in the production of composite wood products like particle board and MDF.

These great opportunities only come to life through people. And we've found that having this strong sense of purpose makes it easy to attract the right people. The EcoSynthetix team is, to a large degree, together because of this common purpose in creating a better world. We believe that by developing and marketing sustainable chemistries we will appeal to consumers and business leaders who want to make a difference through their own products. In keeping with this, in 2015 we expect to receive our first *Cradle to Cradle* certification which positions us as a leader in providing sustainable materials into our customers' products.

Also in 2014, a small volunteer team within EcoSynthetix came together with Sustainable Hamilton to define and advance our commitment to responsible sustainable practices in our daily work lives. Our Green Team is leading us in our first steps to ensure that our internal practices are also a strong part of our green industry leadership.

At EcoSynthetix we're very proud to be a business whose primary purpose *is* sustainability.

Highlights from 2014



Company Profile

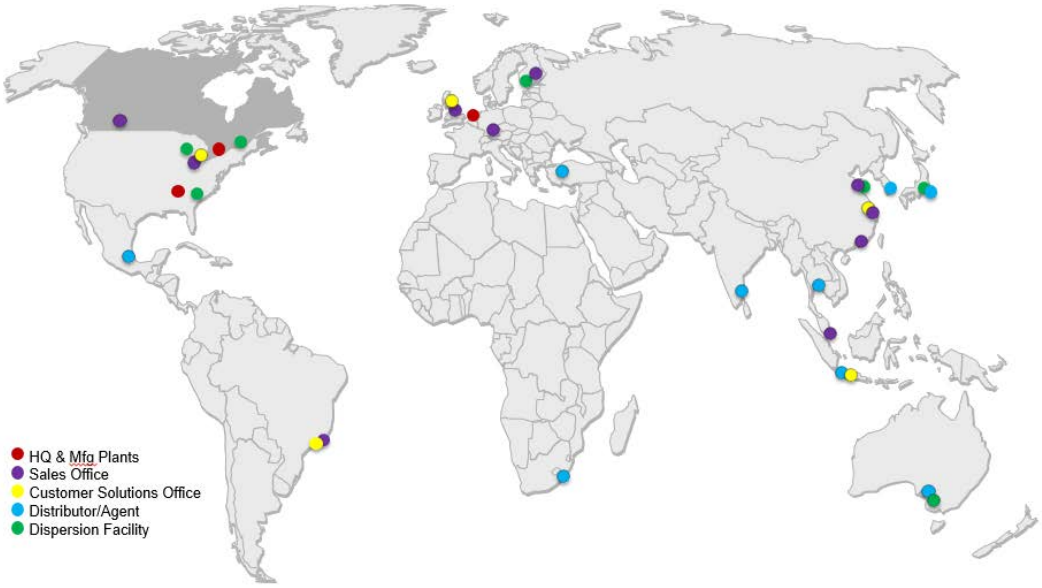
At Ecosynthetix we pride ourselves on having a sustainable vision for the future. Our vision statement reads "To be one of the world's leading technology and market developers of bio-based materials through value-added substitution of fossil-based products. Our enterprise will benefit society as a result of our products being sustainable based on green chemistry and a reduced carbon footprint". We strive to be a leading edge example of a company whose corporate strategy and vision are built on a foundation of sustainable development.

Our core values are centered on innovation, teamwork and our customers.

- ✓ **Innovation is the engine of our business** – we are a leading biomaterials company built through continuous innovation of biobased products
- ✓ **Rapid growth and shareholder value** – we will focus on rapid sustainable growth and are committed to creating exemplary shareholder value.
- ✓ **Customers** – biobased solutions will be developed via a focus on customer needs and our ability to inspire those customers to transform their businesses to sustainable products
- ✓ **Entrepreneurial teamwork** – our employees are a valued resource and we will strive to achieve success based on highly qualified staff and teamwork
- ✓ **Respect and reputation** – we will treat all our stakeholders with respect and integrity. A good reputation is our most valued currency.
- ✓ **Responsibility and stewardship** – we will be responsible stewards of our environment and the resources we will use to make our product. Part of our earnings will be used to support causes in line with our vision.
- ✓ **Health and Safety** – the health and safety of our employees is fundamental to our operations; all incidents, injuries, and occupational illnesses can be prevented

Locations

We have several locations globally which handle different aspects of our process including manufacturing, dispersion preparation, sales, customer solutions and distribution. Our headquarters are located in Burlington and they include research and development and customer solution lab facilities along with a pilot scale manufacturing line and support functionalities. The Centre of Innovation, is located at 3365 Mainway, Burlington, Ontario L7M 1A6



Report Profile

This is our first year reporting with Sustainable Hamilton and we are doing so based on the Global Reporting Initiative guidelines. This year's report will serve as a baseline as we continue to strive and improve annually.

This report will cover the operations at our Burlington location only. As we grow our report in coming years we will work to expand the boundaries and include our other facilities. Similarly, we engaged solely with internal stakeholders for this report. As we continue our journey in sustainability reporting we will reach out to external stakeholders for input.

The data represented in this report was generated between January 1st 2014 and December 31st 2014. For further information regarding EcoSynthetix sustainability report, please contact Emma Hughes (ehughes@ecosynthetix.com)

Review of the Process:

Introduction:

We pride ourselves on having a business model with a triple-bottom line that is not only focused on helping our local communities and other organizations in preserving the environment; we also believe that it is essential for business to be economically practical and profitable across the value chain. We are committed to preserving the earth for future generations.

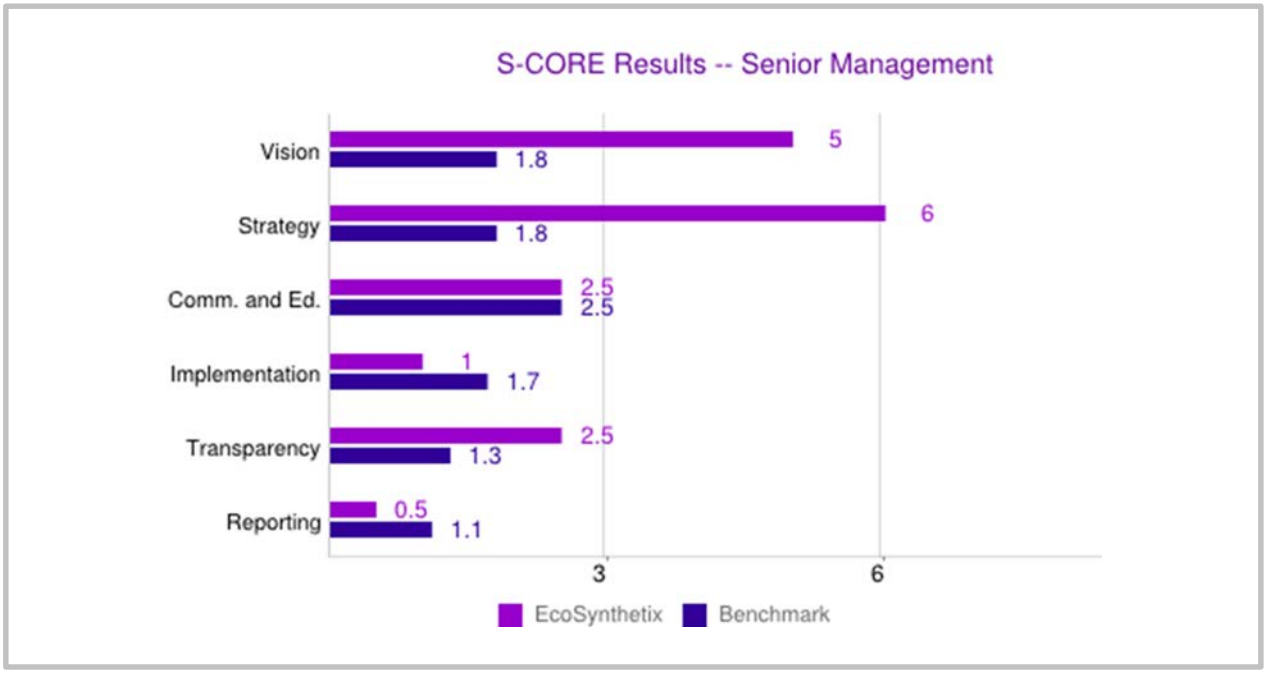
As a small company, employee education and awareness in identification of sustainability issues within the organization is vital. Employees should feel an increased level of accountability towards ensuring their actions and decisions are carried out in a manner that includes the identification of sustainability issues. Our CEO has mandated that we drive accountability through our reporting of sustainability practices via the Global Reporting Initiative.

To drive this process, he has sought out assistance via the S-CORE Assessment to understand where we currently are and where we need to go. Sustainability - Competency, Opportunity, Reporting, and Evaluation (SCORE) is a sustainability rapid assessment tool that measures the degree to which an organization has embedded sustainability into its business practices. S-CORE for Small Business is a subset of the full S-CORE assessment that is appropriate for small organizations (e.g., with fewer than 100 employees). S-CORE is an assessment tool made available by AXIS Performance Advisors and Sustainable Measures, LLC.

The S-CORE assessment involved major contributions from all functional areas within EcoSynthetix, allowing for an accurate and fair representation of our current operations from a sustainability perspective. We expected to rank highly by virtue of our well-publicized green products and processes; however the results were surprising to a lot of employees. The assessment discovered a significant gap between how we think and act at a strategic level compared to internal business practices. Although there were many good initiatives in place, there was a need to formalize internal processes, policies and improve communications and engagement with employees with respect to sustainability.

EcoSynthetix is well-recognized for our innovation and visionary thinking, qualities which are embodied by our senior management team and which have set the tone for the rest of the organization. As a starting-point this provides a strong foundation for success. Our green product/market positioning and positive early efforts around dematerialization, waste management, chemicals/toxic management and volunteering have created early wins that create excitement among employees with regard to sustainable environmental and social practices. The challenge will be to maintain this momentum long-term so that sustainability becomes embedded in all aspects of our organization.

Senior Management



Areas for Consideration from the SCORE report

- Embedding sustainability even further within the company culture needs to start with clear communication of the corporate sustainability vision and strategy, goals and objectives.
- There is a need to have an understanding of the business case for sustainability.
- Regular, formalized engagement with key stakeholder groups will be a key input to the corporate sustainability strategy.
- Every functional area of the company needs to know how it fits into this strategy.
- An implementation plan will be needed that identifies top priorities, recommended actions, timelines, responsibilities and any associated costs.

- Clear policies and guidelines for purchasing will be very important.
- A Sustainability Coordinator and/or Green Team should be designated to lead the implementation process and be responsible for adhering to timelines.
- Regular, ongoing communication to all employees about progress, ideas, new developments, etc. will be key to keeping this top of mind.
- Be sure to celebrate successes!

Analysis

Kudos: things to celebrate and build on	Opportunities: things to explore in the near future and over time
Senior-level long-term vision and commitment to sustainability-driven innovation is the key driver of EcoSynthetix success.	Communicate sustainability vision and strategy to employees and provide training in sustainability.
Internal buy-in to vision strong, staff appear motivated by sense of being part of a larger cause, high volunteerism.	Financial analysis should consider triple bottom line: include environmental and social impacts/issues.
Marketing, especially its "disruptive" product positioning or platform clearly differentiates EcoSynthetix in the marketplace.	Develop a cohesive sustainability strategy and plan: track and report on results internally and to external stakeholders.
Dematerialization (use of e-communications and IT), waste (impressive recycling process) and materials management.	Formalize sustainability policies re: purchasing, contracts, transportation, and e-waste disposal.

A key action driven from this report was the formation of our Eco Green Team. The Green Team is a group of volunteer EcoSynthetix employees who are committed to making our company's operations more environmentally friendly. Through the report we learned that there was very clear high level thinking from our executive team around sustainability, we want to ensure that filters all the way down the organization. The team was carefully assembled to represent as many different corporate functions as possible.

The Green Team includes representatives from the following areas at Ecosynthetix:

- Corporate Administration
- Human Resources
- Manufacturing
- Finance
- Research and Development
- Customer Solutions

Structuring the team in this way allows us to get valuable input from multiple different views and mindset within the company. Having different departments represented provides us with a very strong team with a wide variety of skill sets. We also ensured we had management represented on the team along with continuous engagement with our leadership team.

The objectives of the Green Team are to:

- Support the continuous improvements in our ISO 14001 Environmental Plan
- Establish a long term plan for sustainability at Ecosynthetix
- Develop initiatives that coincide with our company vision
- Build relationships with local sustainability community groups

Kickoff Meeting

Subsequent to the formation of our Green Team and following the guidance provided by Sustainable Hamilton, we began our internal assessment on materiality. The Green Team met for an initial brainstorming session to determine all the activities we undertake within the company. Due to the diversity of our team we were able to collect a lot of information very quickly.

We broke down our functions into four main roles:

- Procurement
- Manufacturing
- Social
- Marketing

Within each of these functions we began to list out our daily activities and how they could impact our overall sustainability as a company. This kickoff meeting generated a lot of fresh thinking within the group on how we could make a positive impact at Ecosynthetix. However we quickly came to realize that in order for that impact to be meaningful we could have to engage with our co-workers and other stakeholders within the company.

Details of Brainstorming Session

Procurement	Manufacturing

• Sourcing RMs
• Office Supplies
• Lab consumables
• Cleaning supplies
• Supplier Assessments
	• Energy Utilization
	• Facilities Maintenance
	• Emissions from extruder
	• Water consumption/ Waste Water
	• Waste generation (Office/Lab/Extruder)
	• Chemical Waste
	• Machine/Operator Efficiency
	  o Reduce off spec/scrap product
	• Noise Pollution
	• Odour Pollution
	• Carbon Footprint
	  o Manufacturing and Shipping
	• Travel of company employees

Marketing	Social

• Marketing Materials
  o Sustainable
  o Origin
  o What is it made of (recyclable?)
• Promotional Handouts
  o Business cards
  o Pamphlets
  o Disposal process
  o Take a look at our messaging
  ▪ Websites
  ▪ Email signoffs
  o Logos (consistency)
	• Diversity of employees
	• Equal opportunity
	• Audit of other areas/toll manufacturers
	• Training and education of employees
	• Health and safety of our product
	• Local communities
	• Equal remuneration for employees
	• Grievance mechanisms
	• Corporate governance
	• Charities
	• How do we support our community
	• Our image in the community
	• Joining community days

Survey of Stakeholder Engagement

After detailing our activities at Ecosynthetix, the next step was to gain valuable insight from the stakeholders of the company. As this is our first year reporting and we have not gained any other insight from employees of the company, we determined that they would be the sole focus of our assessment. In the coming years we plan to widen this scope to other stakeholders of the company.

The Green Team determined that best way for us to gather a lot of information quickly and efficiently was to compile a survey which we would then send for staff members to complete online. The purpose of the survey was to have staff rank all the activities discovered during the kickoff meeting and using that data we could determine what tasks are material to sustainability at Ecosynthetix. We also used this opportunity to gauge the importance and engagement levels on sustainability of employees. Below are some screenshots of the questions we asked.

We separately surveyed two employee groups at Ecosynthetix, general employees and the leadership team. The reasoning for surveying the leadership team separately was that they are responsible for the overall direction the company takes and in doing so have the broadest perspective of the organization, its stakeholders, customers, employees and community. Due to their extended vision and perspective we felt they should be treated as a separate group. The leadership groups consists of four individuals and as a result of the smaller group size, the opinions of each individual are more heavily weighted than those of a general employee.

*** 4. Please rank the following in relation to how significant you deem them to be with respect to sustainability at Eco**

	Not significant	Low significance	Moderately significant	Significant	Extremely significant	Don't Know
Emissions from the extruder/facility	○	○	○	○	○	○
Water consumption	○	○	○	○	○	○
Waste generation	○	○	○	○	○	○
Chemical waste	○	○	○	○	○	○
Machine efficiency	○	○	○	○	○	○
Noise pollution	○	○	○	○	○	○
Odour Pollution	○	○	○	○	○	○
Carbon Footprint (with respect to manufacturing and shipping of products)	○	○	○	○	○	○

*** 5. Please rank the following in relation to how significant you deem them to be with respect to sustainability at Eco**

	Not significant	Low significance	Moderately significant	Significant	Extremely significant	Don't Know
Sourcing of raw materials/office supplies/lab consumables	○	○	○	○	○	○
Cleaning supplies/chemicals used onsite	○	○	○	○	○	○
Supplier assessments	○	○	○	○	○	○
Travel of company employees	○	○	○	○	○	○

*** 6. Please rank the following in relation to how significant you deem them to be with respect to sustainability at Eco**

	Not significant	Low significance	Moderately significant	Significant	Extremely significant	Don't Know
Diversity of employees	○	○	○	○	○	○
Equal opportunities for all employees	○	○	○	○	○	○
Training and education	○	○	○	○	○	○
Grievance Mechanisms	○	○	○	○	○	○
Corporate Governance	○	○	○	○	○	○
Supporting local communities events	○	○	○	○	○	○
Our image in the community	○	○	○	○	○	○

*** 7. Please rank the following in relation to how significant you deem them to be with respect to sustainability at Eco**

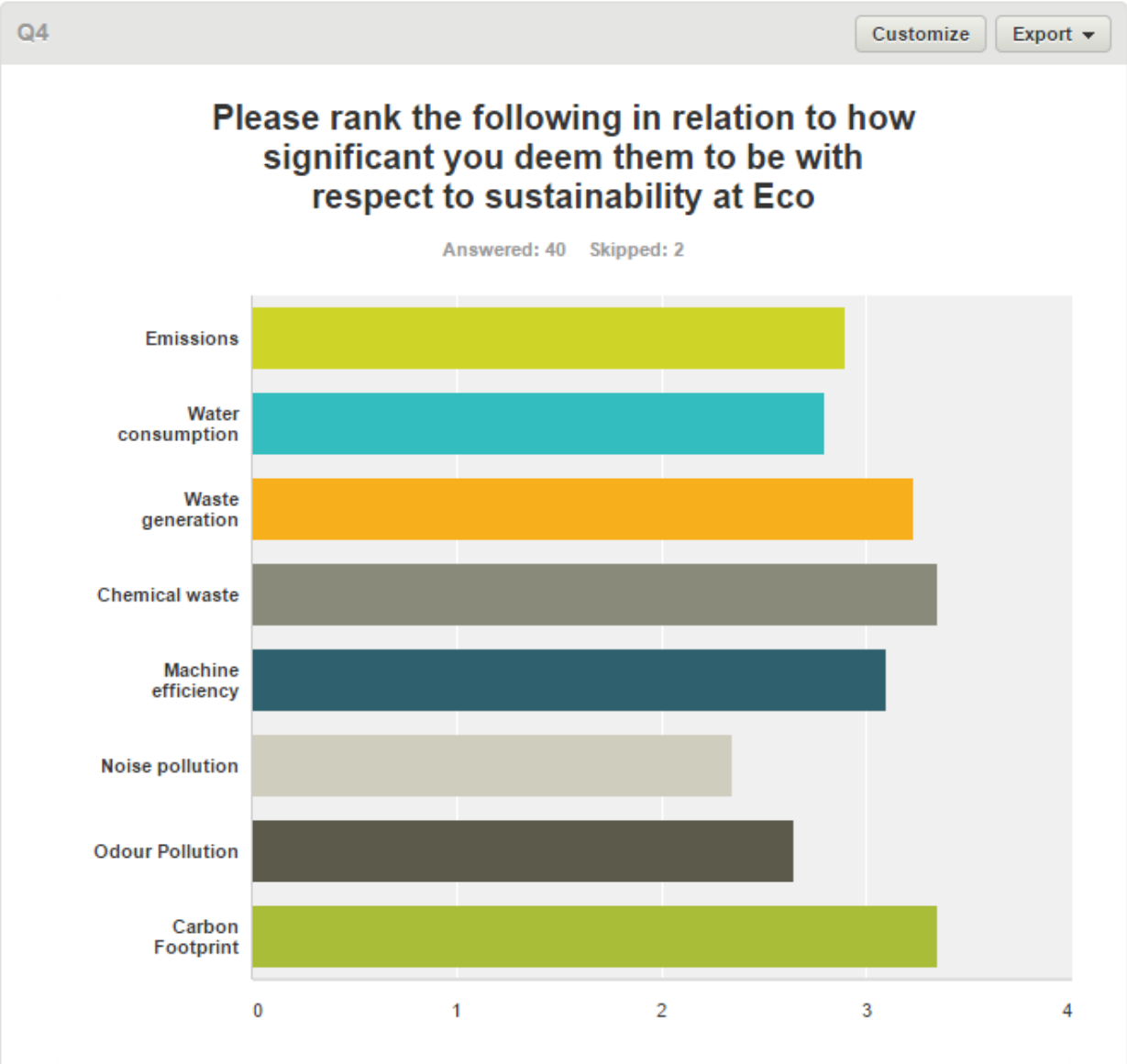
	Not significant	Low significance	Moderately significant	Significant	Extremely significant	Don't Know
Health and safety of our product	○	○	○	○	○	○
Origins of our marketing materials (recyclable materials, sustainably sourced)	○	○	○	○	○	○
Quality of promotional handouts(Business cards, pamphlets)	○	○	○	○	○	○
Disposal of promotional handouts(recyclability)	○	○	○	○	○	○
Corporate messaging (website and email sign offs)	○	○	○	○	○	○
Consistency of our logo	○	○	○	○	○	○

8. Do you have any other comments, questions, or concerns on sustainability at Ecosynthetix?

Assessment of Results

Over 73% of the global employees engaged in the exercise and completed the survey which provided us with a very broad insight. The results provided some valuable results on the perceptions of sustainability and our views as a company.

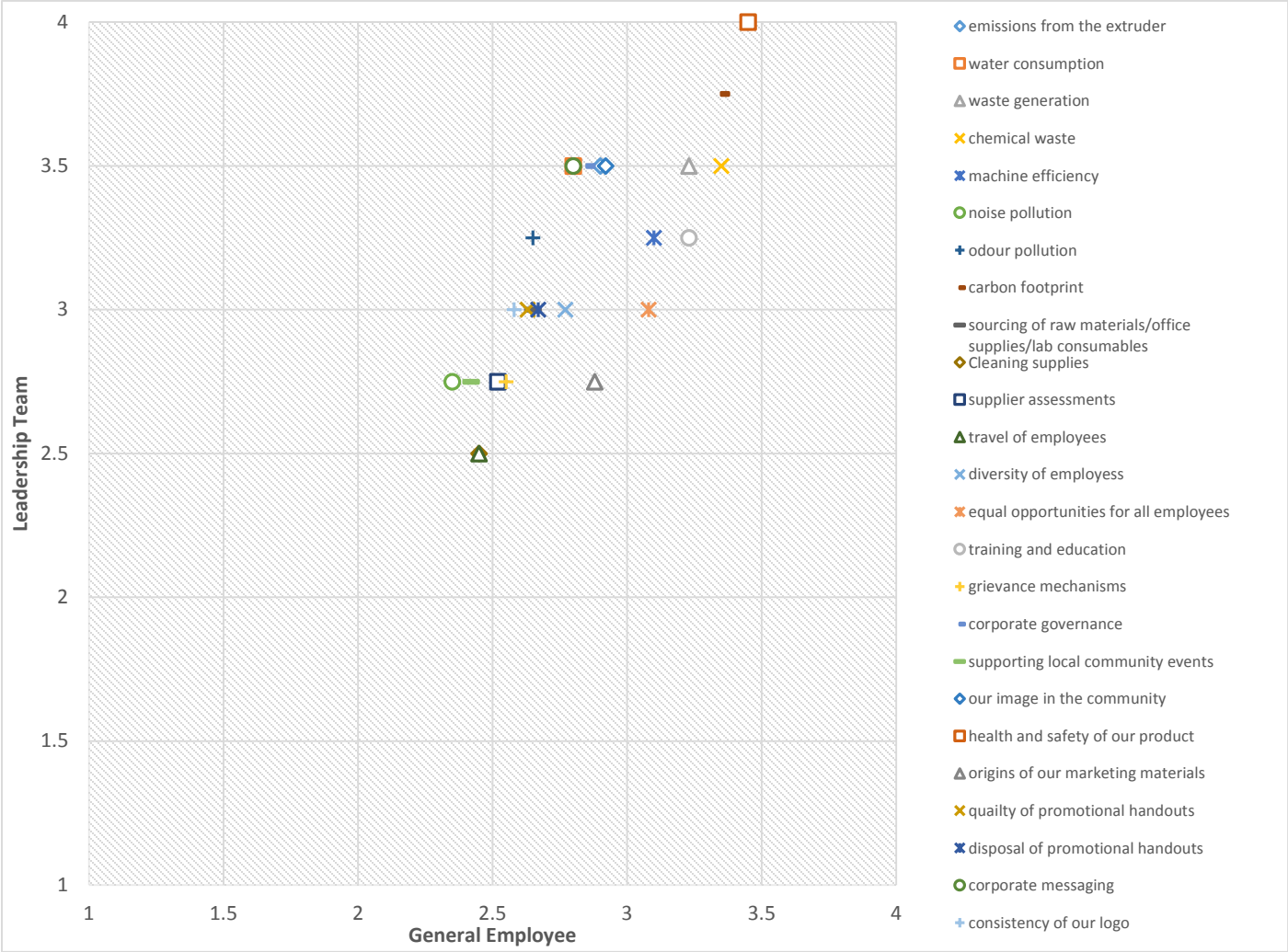
For the most part the general employees' thoughts were very closely tied. There did not appear to be a massive divide in the thinking of the group. In fact some areas were so closely tied that it was hard to decipher a clear priority issue or focus in the rankings. An example of this is outlined below.



	Not significant	Low significance	Moderately significant	Significant	Extremely significant	Don't Know	Total	Weighted Average
Emissions from the extruder/facility	0.00% 0	7.50% 3	22.50% 9	30.00% 12	35.00% 14	5.00% 2	40	2.90
Water consumption	2.50% 1	12.50% 5	25.00% 10	37.50% 15	22.50% 9	0.00% 0	40	2.80
Waste generation	0.00% 0	7.50% 3	15.00% 6	32.50% 13	45.00% 18	0.00% 0	40	3.23
Chemical waste	0.00% 0	7.50% 3	12.50% 5	25.00% 10	55.00% 22	0.00% 0	40	3.35
Machine efficiency	0.00% 0	10.00% 4	10.00% 4	50.00% 20	30.00% 12	0.00% 0	40	3.10
Noise pollution	12.50% 5	37.50% 15	17.50% 7	17.50% 7	15.00% 6	0.00% 0	40	2.35
Odour Pollution	7.50% 3	27.50% 11	17.50% 7	22.50% 9	25.00% 10	0.00% 0	40	2.65
Carbon Footprint (with respect to manufacturing and shipping of products)	2.50% 1	5.00% 2	10.00% 4	27.50% 11	55.00% 22	0.00% 0	40	3.35

The best method we had in a case such as the one outlined above was to compare the opinions of both different groups the ranking. We used these combined rankings to determine the overall assessment of materiality at Ecosynthetix. Each factor was ranked from 0-4 for both groups when submitting results. The results were subsequently plotted to compare the different groups and the issues ranking highest to both groups appearing in the top right corner of the graph on the next page.

The value in approaching the results in this manner was that we could then allow the leadership team to weigh into the final decision in a very clear and unbiased way.



The top five factors as determined using this method were:

1. Health and Safety of Our Product
2. Carbon Footprint
3. Chemical Waste
4. Waste Generation
5. Training and Education

These aspects have become our focus area for the coming year.

Focus Areas for 2015

Planet

Health and Safety of Our Product (G4-EN27/G4-EN7)

The safety of our product and its health benefits when compared with other available chemistries has always been an extreme source of pride for us at EcoSynthetix. Since our product is plant based, in contrast to the current petrol chemical based technologies, it brings an inherent improvement in terms of physical safety. This has been qualified and represented in our products Health and Safety Data Sheets.

In many cases, by replacing the current offering with our EcoSynthetix Biolatex™ binder you can dramatically reduce the greenhouse gas emissions. We had an independent group, The Delphi Group, access this claim in 2010 based on our paper coating division and they provided us with a concise report on their findings.

The greenhouse gas (GHG) emissions of EcoSphere Biolatex were assessed on a quantitative basis. These are compared to the GHG emissions of an equivalent product, styrene butadiene latex, estimated using a published emission factor for a surrogate product, acrylonitrile-butadiene-styrene.

The estimated GHG emissions associated with the production of the two products are:

	Product	**Emission factor [kg-CO_2e/kg-product]**
Project	EcoSphere Latex	2.128
Baseline	Styrene Butadiene Latex	6.453

These emissions are on a “cradle-to-gate” basis. That is, they include emissions associated with the production and transportation of feedstock’s, manufacturing emissions, etc., to the gate of the production factory. Note that the calculations also account for differences in the origin of the carbon for the project and baseline cases (i.e., fossil-based or biogenic carbon).

The emissions were also quantified for a typical latex application – paper coating. The estimated GHG emissions associated with this application are:

	Coating material	**Emission factor [kg-CO_2e/1000 m2 paper]**
Project	EcoSphere Latex	79.14
Baseline	Styrene Butadiene Latex	237.8

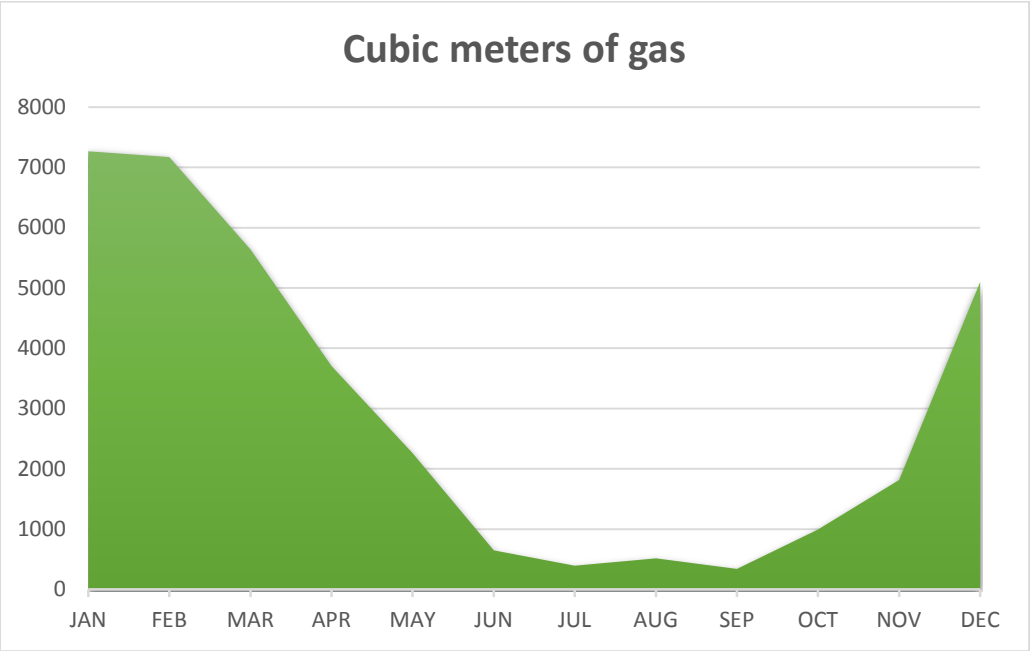
Note that this quantification should be regarded as indicative and may be subject to significant variation as a result of differences in paper type and grade, coating thickness, facility-specific processing conditions, and other factors. The values presented include emissions associated with the production of the coating and the paper coating process.

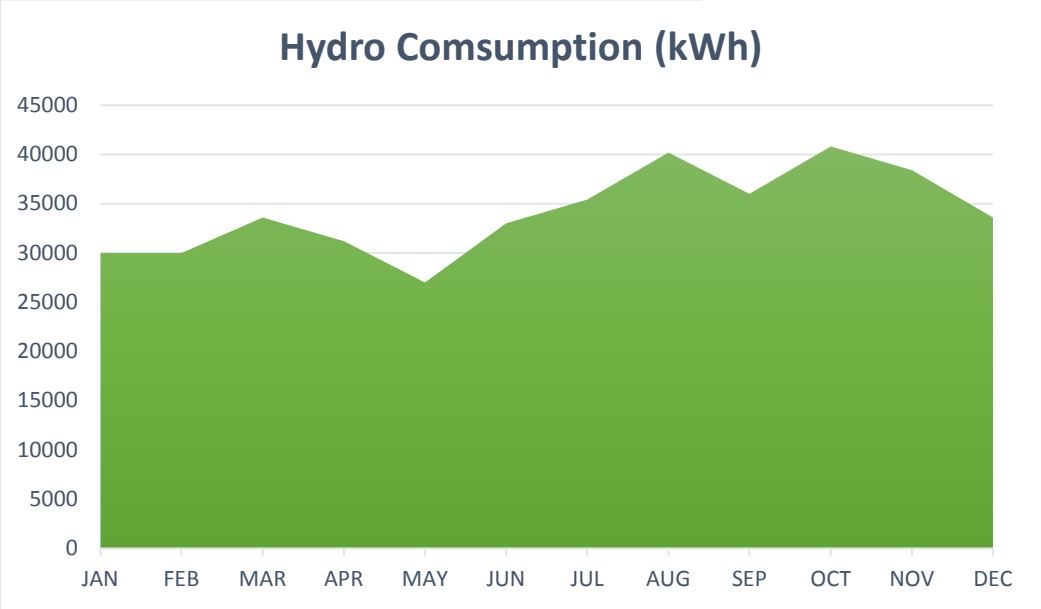
Goal for 2015: As we move into new areas with our Biolatex™ binder, we want to be able to provide the same emissions savings or comparable health and safety improvements for our customers. We do so by accessing improvements in those specific areas, such as, air quality improvements, VOCs, ease of handling etc.

Carbon Footprint (G4-EN15/G4-EN16/G4-EN6)

Another aspect which was highlighted by our employee engagement survey as an area of interest was our carbon footprint. We use two types of energy to run our operations onsite at the Centre of Innovation in Burlington. Gas is used to run parts of our manufacturing facility supplemented with electricity which is also used to run all our other operations. We had never measured the amount of either source of energy we were using and so we had no way to manage it.

In 2014 we developed a baseline for both of these sources of emissions so we could begin to manage them.





	2014
	GHG Emissions (tonnes)
Direct emissions from operations (Scope 1)	67.66
Indirect emissions from operations (Scope 2)	69.56

Goal for 2015: To continue to measure emissions and develop a strategy to reduce them in the coming year. This will prove to be a very challenging goal for us. As a research facility running a pilot line, higher levels of scope 1 and 2 emissions can be attributed to running more research and development trials. In future reports, we will attempt to correlate the level of emissions to the number of commercial products developed.

Waste Generation (G4-EN23)

Another key area of interest from our employees was waste generation. We currently have a segregated waste stream system in operation at our Centre of Innovation. Our waste management company then provides us with a monthly breakdown of how much waste we have diverted from landfill through recycling. The system in place at present requires employees to bring their recyclable materials to a designated area and determine if they are suitable for recycling. We hope to move to a co-mingled single stream recycling in the coming year to encourage employees to recycle from their desks.

	2014
Total Waste (tonnes)	92.49
Waste sent to landfill (tonnes)	46.25
Waste recycled (tonnes)	12.94
% recycled	21.9

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
WASTE COLLECTED	5.96	5.00	6.87	7.23	6.29	10.50	8.01	8.27	11.25	6.01	8.51	8.59	92.49
WASTE TO LANDFILL	2.98	2.50	3.44	3.62	3.15	5.25	4.01	4.14	5.63	3.01	4.26	4.30	46.25
OFFICE PAPER	0.40	0.55	0.60	0.60	0.58	0.59	0.59	0.59	0.59	0.59	0.45	0.40	6.53
CARDBOARD	0.12	0.06	0.12	0.12	0.12	0.12	0.18	0.12	0.12	0.12	0.12	0.12	1.44
CANS & BOTTLES	0.10	0.05	0.10	0.10	0.10	0.05	0.10	0.10	0.20	0.20	1.17	0.10	2.37
ORGANICS	0.40	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.10	0.30	0.10	0.20	2.60
TOTAL	**4.00**	**3.36**	**4.46**	**4.64**	**4.15**	**6.21**	**5.08**	**5.25**	**6.64**	**4.22**	**6.10**	**5.12**	**59.19**

We generate a significant portion of our waste as part of our manufacturing operations which is currently treated as waste to landfill. As our raw materials are primarily plant based, we believe that it may be a possible to treat this waste as organics. This is a project we could peruse in 2015 to reduce our waste to landfill.

Goal for 2015: We have committed to reducing our waste to landfill by 20% in 2015

Chemical Waste (G4-EN25)

Due to the nature of our operations at the Center of Innovation, we generate waste which must be classified as hazardous chemical waste. This waste is removed from our facility and treated by the third party company. As part of the removal process a manifest is signed declaring that the waste is no longer property of EcoSynthetix and it is now the responsibility of our contractor to dispose of it safely. The table below outlines the type of chemicals and their quantities which were removed for treatment in 2014.

Description	Amount (L)
Hazardous Waste	2630.5
Paper coating solutions	1660
Other Polymeric Solutions	28995

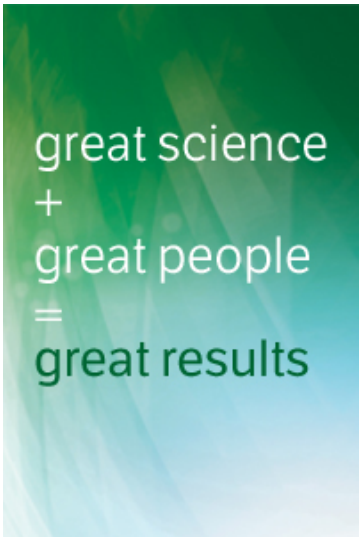
Goal for 2015: In the coming year to combat the generation of large volumes of hazardous waste, we will have more diligence around what samples we prepare and when we prepare them. Due to the plant based components which form the backbone of our biopolymer, samples prepared in the lab can sometimes spoil before they are fully utilized or analysed. The report will serve as a reminder to only prepare samples when needed.

People

Training and Education (G4-LA9)

A major finding from the employee engagement was that they believed training and education were vital to preforming sustainably. In order to fill this need we have committed to have sustainability specific training in 2015, holding more educational events for employees and training them on initiatives which the Green Team will roll out over the course of the year.

To build on this and help everyone gain a fundamental understanding of what sustainability is and how we can improve on it, this report will be circulated to all employees.



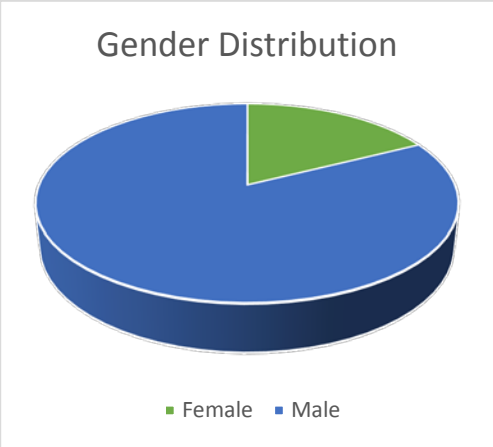
Goal for 2015: By the end of 2015, we will have engaged our employees in sustainability based training and events in order to grow our understanding and build on our current foundation of sustainable development. These events will include:

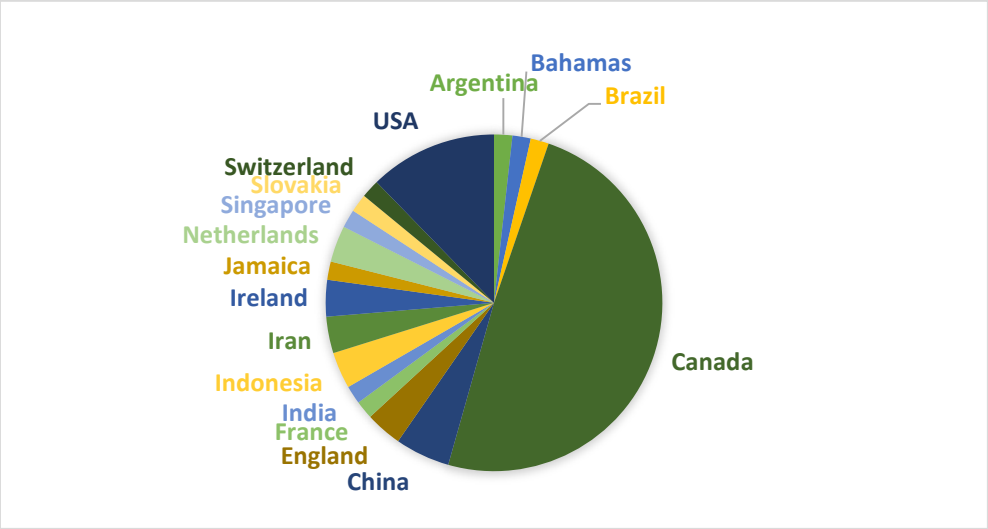
- Rolling out of this report to all employees
- Movie screenings on sustainability based issues
- Companywide community involvement days such as Burlington's " Community Clean up, Green up day"

These events will serve to train and educate employees on the importance of sustainable behaviors and the impact we can have on improving society.

Diversity of Employees (G4-LA1)

At Ecosynthetix we pride ourselves on having a diverse spread of employees. We currently employ 47 people on a full time basis in our company, 38 of whom are based in our Centre of Innovation, along with a constant stream of coop students which will be discussed in the next section. 17 different countries are represented as places of birth for our employees. Our knowledge spans the globe from Canada to China and everywhere in-between. In our total workforce we have 19% representation of female with 3.5 % occupying management positions.

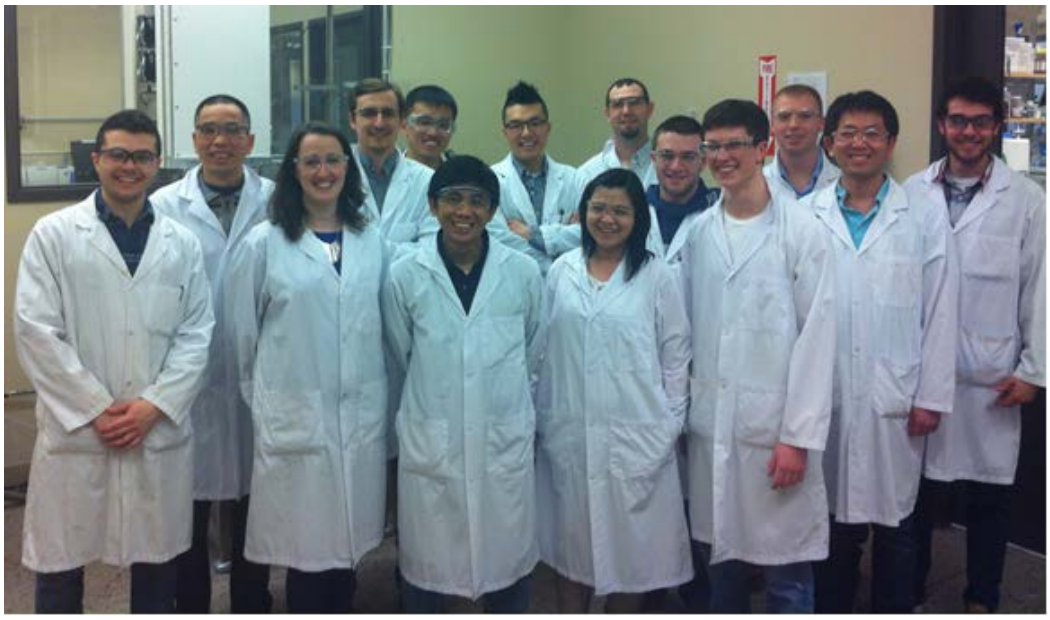




Goal for 2015: EcoSynthetix is an equal opportunity employer and we select candidates based on the best fit for the role and the company. We will continue to build on our vibrant workplace by celebrating our different cultural backgrounds and embracing what we can learn from each other's experiences. We aim to have 90% of the right people in the right roles by end of 2015. This will be measured through our annual performance reviews and general company performance.

Upskilling of Coops (G4-LA10)

Ecosynthetix is committed to running a coop placement program in collaboration with our local universities such as University of Waterloo and McMaster University. As part of this program in 2014 we mentored 22 students at our Center of Innovation in Burlington. These students used the knowledge they had gained at their respective universities to become key contributors in several of our key projects through the year.



The upskilling of students is also evident in that three full time employees of Ecosynthetix first began with us as coop students. Having them participate in the coop program gave them a knowledge of our industry and the skills require to be successful. It also gave Ecosynthetix the opportunity to access their abilities and how well they could potentially fit with the company mission and values.

Goal for 2015: We plan to mentor 15 students in 2015 under the coop placement program. Continued participation in the coop program will develop future scientists and engineers

Community Involvement (G4-SO1)

We are committed to enhancing our local community through engagement with local organizations. One such involvement we have committed to it with Canadian Blood Services and their Partners for Life program. Partners for Life is a nationwide program that is designed for corporate and community organizations. By joining the program, organizations make a commitment to save lives by donating blood as a team. The need for blood is ongoing, and patients that are treated for things such as cancer, surgery and trauma depend on a stable supply of blood year round, which is why Partners for Life organizations have the power to save lives!

Goal for 2015: Ecosynthetix employees have committed to donate 15 units of blood in 2015 to Canadian Blood Services and their Partners for Life program.

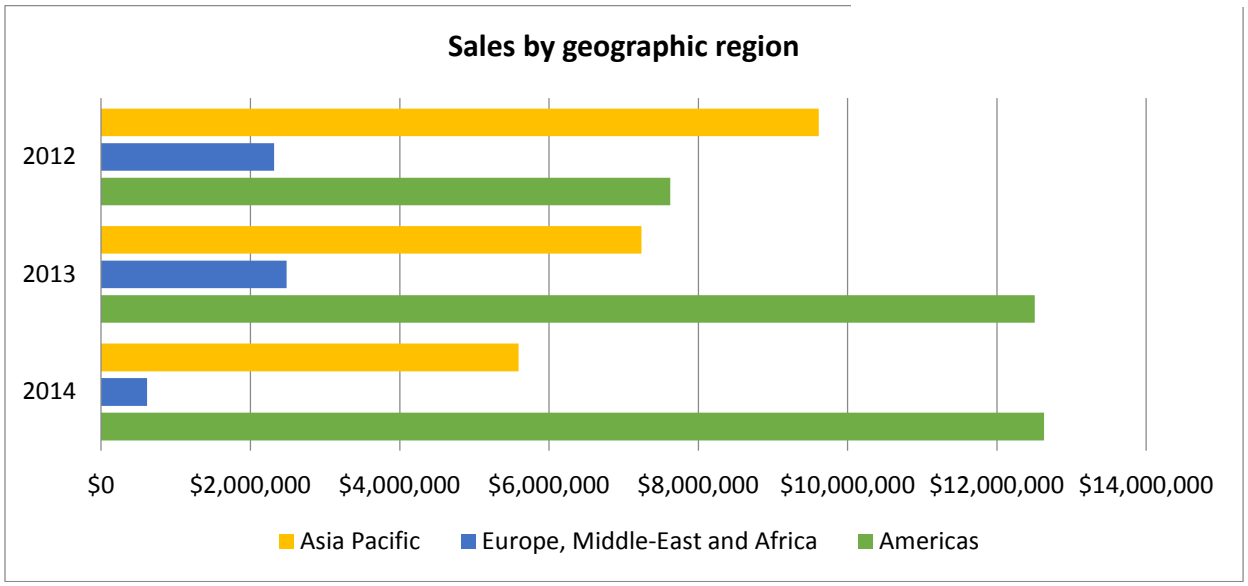
Profit:

Economic Performance (G4-EC1)

Economic value generated

EcoSynthetix was founded to transform the chemicals industry through the development and marketing of "Sustainable Polymers for Planet Earth." Our lead product, EcoSphere BioLatex binders, has generated substantially all of our revenues from the paper & paperboard market to date. The below charts illustrate the economic value generated of EcoSphere BioLatex binders and the revenue generated by geographic region.

Economic value generated			
	2014	**2013**	**2012**
Net sales	$18,841,745	$22,229,846	$19,552,345
Cost of sales	$15,671,096	$18,620,771	$15,694,487
Gross profit	$3,170,649	$3,609,075	$3,857,858



Goal for 2015: We will continue to expand our foundation in the paper & paperboard market to generate further economic value. In addition, we are currently in the midst of commercializing a product based on a biopolymer platform specifically for the building products space, namely insulation and wood composite applications.

Economic value distributed

EcoSynthetix's primary resource is its highly skilled workforce. Our business is complex and involves the research and development of new products and the selling, manufacturing, logistics, and supply chain management of its existing commercialized products. The below chart illustrates the economic value distributed as it relates to the research and development of new bio based products, selling and general administrative expenses, and the total salaries and benefits included in those costs.

Economic value distributed			
	2014	**2013**	**2012**
Selling, general and administrative	$12,446,687	$12,916,606	$11,266,518
Research and development	$5,569,632	$5,814,787	$4,382,854
Salaries and benefits (included in the above)	$9,529,925	$9,417,539	$6,793,528

Goal for 2015: We will need to hire additional qualified research and development and management personnel to succeed. EcoSynthetix will continue to invest in talent while maintaining a disciplined and focused cost structure to maximize bottom line profit for stakeholders.

Community investment

Our international headquarters is located at the Center of Innovation (COI) in Burlington, Ontario. The facility houses test equipment, labs and a pilot production line. As new products are being researched and developed towards the commercialization stage, or process improvements are being tested for commercialized products, it is crucial that the facility remain up to date with current technologies. In addition to the COI, we have significant assets located at our two toll manufacturers (in the United States and the Netherlands) that are used to produce EcoSphere BioLatex binders. As our product and market continue to evolve, investments are required in these facilities. The below chart illustrates the carrying value of these investments reported under International Financial Reporting Standards as at December 31st.

Community investment			
	2014	**2013**	**2012**
Canada	$3,046,242	$3,540,808	$2,727,975
United States	$4,939,357	$5,318,289	$6,087,898
Netherlands	$3,757,156	$4,040,100	$4,522,044

Goal for 2015: EcoSynthetix will be allocating capital to projects that can demonstrate both technical feasibility and commercial value in the short- and long-term.

Conclusions

The entire process has been enlightening and incredibly beneficial for the Green Team. We always had a belief that we were a very sustainable company as a result of our vision and the concept of our product. The SCORE report showed that although we have high level thinking around sustainability, our daily behaviors required a much deeper level of thought and discipline in order to practice business sustainably.

It was though employee engagement that we learned what was really important to us and began to find ways to measure our impact on sustainability. We can only improve on what we are measuring and now we have a focus on what is material to our business operations, we can hope to improve our practices year on year.

The goal of this report was to engage employees as they are the key to improving our daily practices. The journey to employee engagement has taken us from the initial SCORE assessment which showed that in practice employees weren't acting on the sustainability vision from management; to the employee survey on materiality where employees were a key stakeholder group engaged and were critical to defining our future path on sustainability; to future training programs on sustainability and circulation of this report as an education tool.

Special Thanks to the contributors of this report:

Brianne Bresolin, Justin Cote, Francois Hall, Emma Hughes, Spencer Imbrogno, Doug Ireland and Alessandra Profetto

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