

# **Sarnia Lambton Energy and Environment Summit**

**Championed by the City of Sarnia**

Summit held May 17, 2022



**BRYAN BOYLE & ASSOCIATES**  
FACILITATING YOUR FUTURE

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## Executive Summary

On May 17, 2022, seventy-five participants with a genuine interest in the success of the Sarnia Lambton community were involved in an Energy and Environment Summit. Online input was also accepted. Participants represented a broad spectrum, including organization and agency representatives, elected officials, First Nations, business owners and representatives, environmentalists, educators, and students.

The purpose of the Summit was to solicit valuable input from the community to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

Chief Jason Henry, Kettle and Stony Point First Nation provided a welcome and land acknowledgement. Matthew Slotwinski, Senior Economic Development Officer, Sarnia Lambton Economic Partnership presented the Ongoing History of Energy and Environment in Sarnia Lambton (Past, Present, and Future).

Four key community members participated in a panel discussion relating to energy and environment. The Summit participants welcomed the information provided by these experts as it helped to inspire some creative thinking at the table discussions that followed.

- Chief Chris Plain, Aamjiwnaang First Nation
- Darryl Arnold, Manager of Operations, Enbridge Gas
- Gary Martin, Farmer and President, Lambton Federation of Agriculture
- Sandy Marshall, Executive Director, Bioindustrial Innovation Canada

Participants were asked to share the first one or two words that come to mind when they hear “Energy and Environment in Sarnia Lambton”.

| Rank                | Themes                                      | Number of Comments |
|---------------------|---|--------------------|
| 1 <sup>st</sup>     | Relationship Between Energy and Environment | 20                 |
| 2 <sup>nd</sup>     | Basic Components                            | 19                 |
| 3 <sup>rd</sup>     | Potential for Change                        | 14                 |
| 4 <sup>th</sup> Tie | Action Needed                               | 13                 |
| 4 <sup>th</sup> Tie | Personal Perceptions                        | 13                 |
| 6 <sup>th</sup>     | Opportunities Available                     | 12                 |
| 7 <sup>th</sup>     | Showing Leadership                          | 11                 |
| 8 <sup>th</sup>     | Collaboration                               | 9                  |
| 9 <sup>th</sup>     | Concerns                                    | 6                  |
| 10 <sup>th</sup>    | Sustainability                              | 5                  |
| 11 <sup>th</sup>    | Innovation                                  | 4                  |
| 12 <sup>th</sup>    | Social responsibility                       | 3                  |

On a scale from 1 to 30, participants were asked to indicate the number that they feel most accurately describes the current status of Sarnia Lambton as a community that plays an active role in building a vibrant economy while working towards the goal of net zero.

#30 = “Top of our Game”: A well-coordinated, effective, and innovative approach in building a vibrant economy while working towards the goal of net zero plays a vital role in Sarnia Lambton’s economic development and provides excellent value to Sarnia Lambton’s businesses and communities.

#1 = “Dead in the Water”: An uncoordinated, ineffective, and unimaginative approach in building a vibrant economy while working towards the goal of net zero in Sarnia Lambton plays a minor role in Sarnia Lambton’s economic development and provides very limited value to Sarnia Lambton’s businesses and communities.

The graph that was created based on the participants’ responses ranged widely with a 14.77 average score.

Participants were asked, “How will we know that we “got it right” with a rewarding role in building a vibrant economy while working towards the goal of net zero?”

Their comments have been grouped into themes.

| Rank                 | Desired Outcomes Themes                      | Number of Comments |
|----------------------|--|--------------------|
| 1 <sup>st</sup>      | Diversified and Sustainable Economy          | 14                 |
| 2 <sup>nd</sup>      | Recognition of Our Progress                  | 13                 |
| 3 <sup>rd</sup>      | Reduced Energy Use and More Renewable Energy | 10                 |
| 4 <sup>th</sup>      | Positive Approach Evident                    | 9                  |
| 5 <sup>th</sup>      | Enhanced Environmental Activities            | 8                  |
| 6 <sup>th</sup> Tie  | Community Engagement                         | 5                  |
| 6 <sup>th</sup> Tie  | Reduction in Greenhouse Gases                | 5                  |
| 6 <sup>th</sup> Tie  | Positive Community Indicators                | 5                  |
| 9 <sup>th</sup>      | Collaboration                                | 4                  |
| 10 <sup>th</sup> Tie | Effective Recycling and Waste Reduction      | 3                  |
| 10 <sup>th</sup> Tie | Improved Education and Awareness             | 3                  |
| 12 <sup>th</sup>     | Better Public Transit                        | 2                  |

Summit participants identified many merits that could help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero. Their comments were grouped into themes and prioritized by participants based on which merits are most important on which to build.

| Rank                | Merit Themes            | Total Score |
|---------------------|-------------------------|-------------|
| 1 <sup>st</sup>     | Skilled Workforce       | 1,105       |
| 2 <sup>nd</sup>     | Infrastructure          | 905         |
| 3 <sup>rd</sup> Tie | Community Collaboration | 890         |
| 3 <sup>rd</sup> Tie | Geographic Location     | 890         |
| 5 <sup>th</sup>     | Cluster Development     | 870         |
| 6 <sup>th</sup>     | Political Support       | 750         |
| 7 <sup>th</sup>     | Integrated Industry     | 685         |
| 8 <sup>th</sup>     | Perceptions             | 510         |

Summit participants identified many challenges that must be addressed to help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero. Their comments were grouped into themes and prioritized by participants based on which challenges are most important to address.

| Rank            | Challenges Themes                         | Total Score |
|-----------------|---|-------------|
| 1 <sup>st</sup> | Political Support                         | 1,465       |
| 2 <sup>nd</sup> | Investment Attraction and Diversification | 1,250       |
| 3 <sup>rd</sup> | Negative Perceptions                      | 1,050       |
| 4 <sup>th</sup> | Environment and Climate Change            | 970         |
| 5 <sup>th</sup> | Youth Retention                           | 930         |
| 6 <sup>th</sup> | Workforce Issues                          | 880         |
| 7 <sup>th</sup> | Infrastructure Gaps                       | 725         |
| 8 <sup>th</sup> | Community Limitations                     | 645         |

There are many actions that could help to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero. These actions should build on the merits, reduce or eliminate the challenges, all the while keeping in mind the desired outcomes.

Participants identified and grouped these potential actions into areas of focus. Participants prioritized the areas of focus based on where action would have the most positive impact to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

| Rank            | Areas of Focus                               | Total Score |
|-----------------|--|-------------|
| 1 <sup>st</sup> | Improve Government and Political Interaction | 1,335       |
| 2 <sup>nd</sup> | Initiate or Expand Environmental Activities  | 1,140       |
| 3 <sup>rd</sup> | Enhance Collaboration                        | 920         |
| 4 <sup>th</sup> | Develop a Stronger Approach                  | 905         |
| 5 <sup>th</sup> | Expand Education and Data Sharing            | 805         |
| 6 <sup>th</sup> | Enhance Economic Development                 | 715         |
| 7 <sup>th</sup> | Build Stronger Human Resources Base          | 630         |

The Energy and Environment Summit of community members from Sarnia Lambton was a very productive activity. The participants were very engaged and committed to the process. The community members took an important step by providing valuable input to help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

**Sarnia Lambton Energy and Environment Summit**  
 May 17, 2022 at Lambton College Event Centre  
 Facilitated by Bryan Boyle

## **Purpose**

To solicit valuable input from the community to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

## **Participants**

Seventy-five participants with a genuine interest in the success of the Sarnia Lambton community were involved in the Summit or provided online input. Participants represented a broad spectrum including organization and agency representatives, elected officials, First Nations, business owners and representatives, environmentalists, educators, and students.

*\*Note: Throughout this report whenever two or more participants offered the same or very similar comments they are noted with an “x” and the number, e.g. (x3).*

## **Introductory Remarks**

Chief Jason Henry, Kettle and Stony Point First Nation provided a welcome and land acknowledgement. Matthew Slotwinski, Senior Economic Development Officer, Sarnia Lambton Economic Partnership presented the Ongoing History of Energy and Environment in Sarnia Lambton (Past, Present, and Future).

Four key community members participated in a panel discussion relating to energy and environment. The Summit participants welcomed the information provided by these experts as it helped to inspire some creative thinking at the table discussions that followed.

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- Darryl Arnold, Manager of Operations, Enbridge Gas
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## **First Impressions**

Participants were asked to share the first one or two words that come to mind when they hear “Energy and Environment in Sarnia Lambton”.

Their comments have been grouped into themes. The specific comments are listed under each theme immediately following this summary chart.

| Rank                | Themes                                      | Number of Comments |
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| 1 <sup>st</sup>     | Relationship Between Energy and Environment | 20                 |
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| 11 <sup>th</sup>    | Innovation                                  | 4                  |
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#### Relationship Between Energy and Environment

- Environment and energy finally converging
- Need to co-exist
- Energy and environment can co-exist
- Energy development and environmental protection can happen in tandem
- Environment is energy and energy is the environment
- Mutually exclusive
- Energy and environment are a contradiction of terms
- Opposing forces
- Disjointed
- Trauma
- Delicate balance
- Balance
- Economy first
- Needed
- Needs to be clean and sustainable
- Complex
- Impacts surrounding communities
- Impact
- Jobs
- Jobs go hand in hand



### Basic Components

- Greenhouse gas emissions
- Demand
- Fossil fuels
- Petrochemical
- Green
- Renewable
- Net Zero
- Clean energy
- Low carbon future is a great term but needs definition
- Harvesting agriculture and forest biomass sustainably
- Mostly electrical
- Transport and building
- Heating and cooling
- People
- Categories of industry, agriculture, municipalities, and individuals
- Labour
- Hydroelectricity
- Hydrocarbons
- Hydrogen

### Potential for Change

- Future (x3)
- Time to transition
- Transition to renewable mix
- Momentum
- Great assets to facilitate change
- Growth with responsibility
- Need for positive growth
- Growth
- Centre of change
- Prosperity
- Slow to change

### Action Needed

- Building on our strengths
- Conserve energy by personal and corporate choices
- Protect the environment by smart choices
- Accessible and available transportation
- Look at future technologies, e.g., batteries
- Action plan needed

- Remove landfills
- Transferable skills
- Act, act, act
- Industry diversification to bio and hydrogen
- Progress has been made but we need to remain mindful that there is more to be done
- Need to move
- Strong policy needed

#### Personal Perceptions

- Need an end game
- We can do so much more
- Petrochemical dependency
- We don't recycle, we dump, we landfill; circular does not exist
- Economies that use energy wisely will prosper
- Old school
- Clearly state, "Net zero greenhouse gas emissions". Even the acronym GHG's is not obvious to John Q Public.
- Government impact
- Political
- Lessons learned
- Electrical costs, affordable energy
- Essential
- Affordability
- Energy in the environment relating to oil and gas is past thinking and protectionist

#### Opportunities Available

- Lots of potential (x2)
- Opportunity (x2)
- Significant opportunity
- Opportunity for positive change
- Skilled workforce
- Market for low carbon hydrogen
- Opportunity to become a leader in hydrogen
- Opportunity to share
- Uniting opportunities
- Opportunities in transportation and new industries

#### Showing Leadership

- Leading
- Strong leadership can help to direct along the right path
- Energy and environment cluster

- Done a great job to date
- Leader in incorporating new technology
- Forefront of green revolution in Canada
- Global leader
- Collaboration leaders
- Progress
- Leadership
- Progressive

#### Collaboration

- Collaboration (x2)
- Need to collaborate
- Engagement of community focus
- Community working together
- Need more input from all community members
- Investment in educating community
- Education
- Cooperation
- Local expertise

#### Concerns

- Pollution (x3)
- Damaged
- Limited
- Health and wellness concerns

#### Sustainability

- Sustainability (x4)
- Effective sustainability

#### Innovation

- Innovation (x2)
- Forward thinking
- Need to innovate faster

#### Social Responsibility

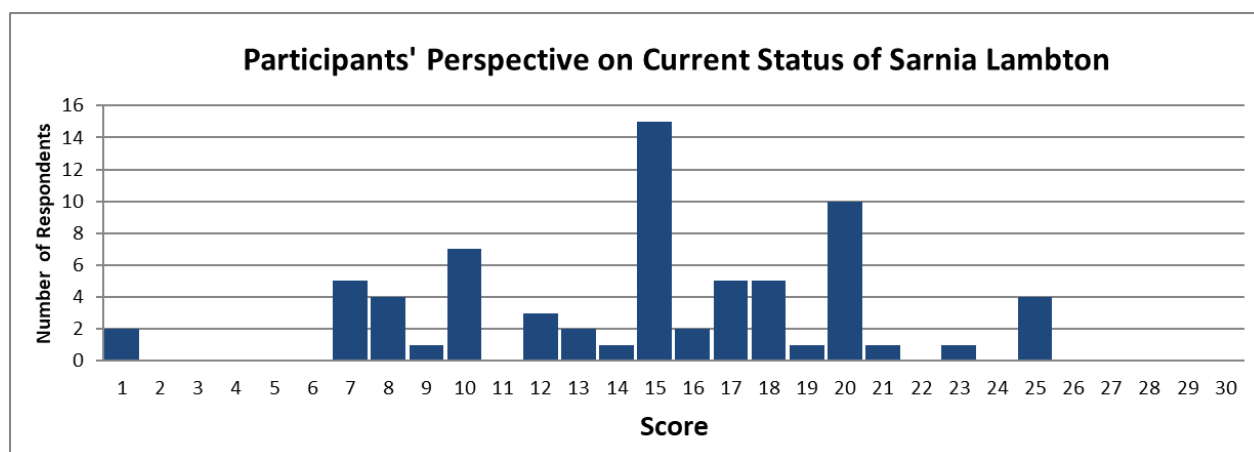
- Support of a just transition
- All citizens are earth stewards and need to live in the right relationship with all living beings

## Evaluating Sarnia Lambton's Current Status

On a scale from 1 to 30, participants were asked to indicate the number that they feel most accurately describes the current status of Sarnia Lambton as a community that plays an active role in building a vibrant economy while working towards the goal of net zero.

#30 = "Top of our Game": A well-coordinated, effective, and innovative approach in building a vibrant economy while working towards the goal of net zero plays a vital role in Sarnia Lambton's economic development and provides excellent value to Sarnia Lambton's businesses and communities.

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**Average = 14.77**

## Desired Outcomes

Participants were asked, “How will we know that we “got it right” with a rewarding role in building a vibrant economy while working towards the goal of net zero?”

Their comments have been grouped into themes. The specific comments are listed under each theme immediately following this summary chart.

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| Desired Outcomes  |
|---|
| <u>Diversified and Sustainable Economy</u> <ul style="list-style-type: none"> <li>• Jobs (x2)</li> <li>• Lots more jobs</li> <li>• Strong employment rate</li> <li>• Sustainability of industry</li> <li>• More sustainable chemistry facilities</li> <li>• Sustainable companies and projects</li> <li>• Diversified local economy</li> <li>• Build an economy locally that is known for innovation and social responsibility</li> <li>• Diverse economy that is both sustainable and environmentally conscious</li> <li>• Achieved economic benchmarks</li> <li>• Lambton leads the nation in sustainable job creation</li> <li>• Enable community development</li> <li>• Energy will be available without interruption in supply</li> <li>• Energy will be affordable</li> </ul> |

### Recognition of Our Progress

- Recognition from other communities that we are leaders and innovators
- Brand shift from “Chemical Valley” to “Green Valley”
- Switching dialogue from the “Chemical Valley” label stigma, e.g., unhealthy, polluted
- Seen as leader and model in transition to renewable energy
- Sarnia's reputation is an example of sustainability
- Declared most green community in Ontario
- Positive civic image
- Hear respect for our community
- Community identified as a leader
- Population growth as a desired destination
- When Sarnia Lambton becomes a destination of choice for people to live
- Be the centre of excellence in research
- Rest of Canada paying attention

### Reduced Energy Use and More Renewable Energy

- Small modular nuclear reactor
- Step change to make energy renewable
- Visible renewable energy sources
- Distributed resiliency in food and energy
- Alternate power sources
- Targets for energy usage are reached
- Visually we would see more environmentally friendly neighbourhoods, e.g., biking, walkers, trees
- Transition to clean and renewable energy
- Reduced energy use, e.g., buildings, transport
- Energy will be based on processes that do not have a detrimental environmental impact

### Positive Approach Evident

- Incentivization through strong leadership and motivation
- Triple bottom line is a part of the new vision
- Benchmarking is key since we cannot manage what we cannot measure
- While acknowledging our past, we must recognize best practices from previous generations and learn from other people's success here and around the world
- Common messaging for rebranding
- Producing goods people want and need
- Reducing stereotypes
- When we believe it is possible
- Event purpose reversed. We have a climate emergency not an economic emergency. Purpose should be to reduce emissions to zero while maintaining a vibrant economy.

### Enhanced Environmental Activities

- St. Clair River is delisted as an area of concern
- Sarnia hires a designated environmental specialist and climate specialist to balance the conversation, like in other cities, e.g., Guelph, Sault Saint Marie, St. Catharines, Oakville
- Balance of carbon offset, e.g., tree planting
- Achieve environmental benchmarks
- More green bio development
- No more landfills
- Set the goal of 30% tree coverage through mandatory green coverage, e.g., every household must plant one native tree
- Sustainable agriculture through biodiversity and conservation

### Community Engagement

- Community feels engaged and involved
- Our next generation feels comfortable with our direction
- Community pride in accomplishments
- The entire community plays an active role in achieving net zero
- Money is designated and used by a non-partisan think tank made up of community volunteers to achieve specific environmental goals

### Reduction in Greenhouse Gases

- Zero emissions (x2)
- Industry meets more stringent air quality control regulations
- Reduced emissions and improved air quality
- Targets for pollution control are reached

### Positive Community Indicators

- Children stay in the community
- Young people stay in the community with high valued jobs that are not in the traditional oil and gas industry
- Healthy population
- Community benefits
- People will be safe and protected against climate change

### Collaboration

- Open and honest conversation will find common ground
- More engagement with more stakeholders outside of industry, e.g., First Nations, high schools, etc.
- Industry, government, and the public are all on the same page working cooperatively
- Fewer committees

### Effective Recycling and Waste Reduction

- Much reduced waste
- Return to emphasizing Reduce, Reuse and Recycle
- Nearly 90% of all waste is recycled

### Improved Education and Awareness

- Education includes curriculum with environmental focus
- Improved education and awareness
- All Sarnia Lambton sees the collective impact of changes, both positive and negative

### Better Public Transit

- Public transit
- Frequent and accessible public transportation with better connected buses and rail as well as electric buses

## **Merits**

(To help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero)

These may be strengths:

Any factors or conditions that are considered positive and over which we have some control, e.g. skills, expertise, involvement, facilities, etc.

They may be opportunities:

Any factors or conditions that are considered positive, over which we have little or no control but may be seized by ourselves or others, e.g. demographics, location, funding, etc.

Summit participants identified many merits that could help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

Their comments were grouped into themes and prioritized by participants. Participants were each given 100 points to allocate to these merits to show their relative importance. They based their allocation on which merit themes are most important on which to build.



The specific comments are listed under each theme immediately following this summary chart.

| Rank                | Merit Themes            | Total Score |
|---------------------|-------------------------|-------------|
| 1 <sup>st</sup>     | Skilled Workforce       | 1,105       |
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| 7 <sup>th</sup>     | Integrated Industry     | 685         |
| 8 <sup>th</sup>     | Perceptions             | 510         |

The individual merits identified by Summit participants and used to generate the themes are shown below.

#### 1. Skilled Workforce

- Skilled workforce (x7)
- Knowledgeable workforce
- Knowledge base and experience
- Educated and knowledgeable citizens
- Historic influx of top technical people
- We have the people
- Skilled trade
- Local greenhouse gas experts
- Education
- Human resources
- Top human potential
- Talent

#### 2. Infrastructure

- Transportation (x4)
- Infrastructure, e.g., pipelines (x2)
- Existing infrastructure
- Industrial base
- Petrochemical infrastructure
- Supportive infrastructure and industries
- Intermodal rail, marine, and roadways
- Port of Sarnia
- Pipeline corridors
- Airport

- CF Industries re: NH4 production
- Inventory of brownfield lands
- Natural and built resources
- Large companies
- Indigenous communities
- Many professionals

### 3. Community Collaboration

- Collaboration
- Untapped collaboration
- Collaborative community
- Cooperation of sectors, e.g., petrochemical, unions, agriculture
- Diversity in agriculture and industry
- Increased collaboration between City and County
- Motivated community
- Contribution and value of Indigenous voices
- Community will move to net zero
- Community awareness
- Collaboration between Lambton College and the Research Park
- Lack of opposition to industry locally
- Community open to innovation
- Holistic viewpoint where we look at all aspects of an issue
- Integrated sustainable communities, e.g., bike paths, communal skating rinks, district energy, community gardens, using our access to land to create new communities
- Legacy advantages
- Demographics
- Live and work in the same community
- Excellent volunteerism
- Core group of highly engaged citizens

### 4. Geographic Location

- Geography (x2)
- Geographic location
- Very well situated
- Access to waterways
- St. Clair River
- Climate and weather
- Beautiful environment with the river
- Beautiful natural heritage
- Home of the largest Carolinian forest in the world
- Bordered by three First Nations communities

## 5. Cluster Development

- Successful cluster
- Hydrogen hub for Canada
- Green hydrogen hub
- Energy hub
- Research hub in sustainable chemistry
- Model for sustainable chemistry
- Lambton College, Bioindustrial Innovation Canada, Western/Sarnia Lambton Research Park, and Sarnia Lambton Economic Partnership become the four Points of Light
- Tech alliance becomes the fifth Point of Light
- Lambton College
- Existing salt caverns

## 6. Political Support

- Utilizing federal governments funds from petrochemical revenue
- Opportunity to influence policy
- Political focus in programs on the environment to achieve net zero
- Government funding security

## 7. Integrated Industry

- Integrated industry featuring synergy and connectivity
- Opportunity for industry buy-in
- Potential to redefine the industry
- Economic diversification
- Job growth
- Innovation such as algae farms, vertical farms
- Develop tourism more extensively

## 8. Perceptions

- Forward thinking
- Need to be open minded
- Innovation
- Motivation and resources exists but needs coordination
- Quality of life and a desirable place to live
- Attractive for families and retirees
- Youth voices with a desire to return to the community
- Encourage young people to stay in community
- Healing damage already done
- Create more diversity
- Ability to be a leader in net zero, an example to other communities

## Challenges

(To be addressed to help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero)

These may be weaknesses:

Any factors or conditions that are considered negative and over which we have some control, e.g. inactivity, lack of direction, lack of stakeholder support, etc.

These may be threats:

Any factors or conditions that could negatively impact us, over which we have little or no control, e.g. political climate, COVID-19, national or world conditions, etc.

Summit participants identified many challenges that must be addressed to help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero. Their comments were grouped into themes and prioritized by participants. Participants were each given 100 points to allocate to these challenges to show their relative importance. They based their allocation on which challenge themes are most important to address to achieve success.

The specific comments are listed under each theme immediately following this summary chart.

| Rank            | Challenges Themes                         | Total Score |
|-----------------|---|-------------|
| 1 <sup>st</sup> | Political Support                         | 1,465       |
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The individual challenges used to generate the themes are noted below.

### 1. Limited Political Support

- Lack of government support for the transition to net zero
- Limited funding for net zero initiatives
- Lack of stable and sustainable government funding to support transition
- Missing legislation leading to action
- Lagging government timelines for legislation and regulations
- Unclear regulatory framework
- Burdensome regulatory framework and red tape
- Fragmentation of politics in Lambton County
- Politicians are a barrier to reaching consensus and resolving issues
- Governments change
- Government is investing elsewhere and not here in Sarnia Lambton
- Lack of coordination between federal and provincial governments
- Limited political influence

### 2. Investment Attraction and Diversification

- Inability to attract new foreign investment
- Challenge to attract new business
- Lack of strategic investment
- Lack of diversification
- Lacking economic diversity
- New companies misunderstand financial impacts
- Industry leaving our area
- The need for Canada to be self-sufficient in materials needed for new technology
- Industry and citizens have different goals
- Not all industry buys in to net zero
- Need to diversify away from petrochemicals
- Dependence on petrochemicals e.g., Line 5 issue
- Our local economy is at the mercy of the global economy
- Risk of missing innovative opportunities
- Need for an energy source that has enough power to supply industries

### 3. Negative Perceptions

- Overcoming the negative perception and poor reputation (x2)
- Negative external perception of Sarnia Lambton
- Image as Chemical Valley
- Negative media perception outside of County borders
- We are selfish
- Not responsive enough

- Complacency
- Complacency, especially on environmental matters
- Lack of growth
- Former residents' negative perception
- Uncertainty of identity
- No sense of urgency
- Weak approach to striving for perfection
- Afraid of what we cannot do instead of trying our best
- Sense of entitlement
- Fear of change
- "Old Boys' Club" that is reluctant to change
- Past reputation
- Heavy petrochemical presence in this area is a huge challenge due to the nature of the business. All sites need to be on board.
- Oil companies owned by US corporations are likely to only do a bare minimum, not drive to zero emissions

#### 4. Environment and Climate Change

- Carbon leakage, as plants move abroad
- Not able to stop the rise of the temperature of the earth
- A belief that the economy and the environment cannot co-exist
- View that addressing climate change is anti-industry which it is not
- Resistance to change from petroleum to environmental future
- Threat of climate change to agriculture
- Urban sprawl
- Climate change will not wait for us
- Gas and oil industries shut down and leave

#### 5. Youth Retention

- Lack of youth involvement
- Lack of growth in population because we do not retain youth
- Youth retention
- Where are our amazing youth?

#### 6. Workforce Issues

- Aging workforce (x3)
- Not all are skilled in the green economy
- Need to build a bridge to employment for international students
- Need international students for employment
- Brain drain
- Skills gap

- Labour shortage
- Labour exodus for perceived greener pastures
- Lacking skills and expertise
- Labour disruptions
- High wages
- We do not have enough labour diversity
- Jobs are not enough as expectations have changed and increased
- Need to grow Sarnia Lambton

## 7. Infrastructure Gaps

- Lack of pipelines within Canada
- Rail disruptions
- Lack of connection of assets
- Lack connectivity
- Limited public transit
- Lack of mass transit
- Limited cycling infrastructure
- Aging infrastructure
- Lack of shovel ready and customizable properties
- Limited automobile charging infrastructure
- Lack of enhanced airport services both commercial and cargo
- Housing costs
- Lack of critical thinking to combat misinformation
- We have always done it this way, so why change?
- Some are resistant to change
- Inertia
- Mindset of “I want”

## 8. Community Limitations

- Lack of diversity in the community (x3)
- Internal competition between communities
- Lack of action due to disagreements
- Spending too much time on current needs instead of the future
- Not focusing on the best way to use resources sustainably
- Ontario's Bermuda Triangle (Windsor, London, Sarnia)
- Border community
- Polarization stops the deep conversations that are necessary
- Political agendas win the day, e.g., real estate development versus green consideration
- Aging community means a loss of vitality

## Key Areas of Focus

There are many actions that could help to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero. These actions should build on the merits, reduce or eliminate the challenges, all the while keeping in mind the desired outcomes.

Participants identified and grouped these potential actions into Areas of Focus using the following method. Each participant was given 100 points. They were asked to allocate their points to several Areas of Focus to show their relative importance. They based their allocation on where action would have the most positive impact to ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.

| Rank            | Areas of Focus                               | Total Score |
|-----------------|--|-------------|
| 1 <sup>st</sup> | Improve Government and Political Interaction | 1,335       |
| 2 <sup>nd</sup> | Initiate or Expand Environmental Activities  | 1,140       |
| 3 <sup>rd</sup> | Enhance Collaboration                        | 920         |
| 4 <sup>th</sup> | Develop a Stronger Approach                  | 905         |
| 5 <sup>th</sup> | Expand Education and Data Sharing            | 805         |
| 6 <sup>th</sup> | Enhance Economic Development                 | 715         |
| 7 <sup>th</sup> | Build Stronger Human Resources Base          | 630         |

## Specific Actions that Created Areas of Focus

The actions identified by the participants that were grouped and prioritized to create the Areas of Focus table above are listed below:

### 1. Improve Government and Political Interaction

- Implement stronger advocacy with government
- Increase government lobbying and advocacy for Sarnia Lambton area
- Elect inspiring leaders
- Educate and implement education modules on the environment for City Councillors
- Improve communication with governments
- Implement term limits on political positions
- Demand political leadership for sustainable policies: municipal, provincial, and federal
- Create a united front for political action and lobbying
- Develop strong policies to make change
- Advocate and encourage political support for industry change
- Incentivize emissions reduction at the local level
- Engage the MP and MPP to lead and drive Sarnia's transition
- Support regulations to help improve



## 2. Initiate or Expand Environmental Activities

- Build more bike paths and pedestrian-friendly areas (x3)
- Explore and pursue new technology for energy storage (x2)
- Transition to clean and renewable energy
- Focus on the energy system, with clean energy as the key enabler
- Fund research to develop new power sources
- Implement district energy
- Build commercialization assets for the bioeconomy
- Expand the role of the Research Park in economic development
- Collaborate on environmental infrastructure projects with neighbouring cities
- Use resources of Ring of Fire development in Ontario here in Sarnia Lambton
- Create rail, bus, and car links for an interconnected transportation system
- Install electric vehicle stations at the former VIA train station
- Create a transportation hub, e.g., electrical charge stations
- Understand the capability of infrastructure to charge electric cars
- Create a green public transit strategy
- Implement sustainable and efficient transportation, e.g., mass transit, electric vehicles, cycling
- Implement a composting program
- Create a green bin compost program
- Implement household composting
- Support regional waste and compost initiatives
- Expand recycling program, e.g., Oakville's leaf collection, Milton's composting
- Strengthen the approach for managing brownfield sites, and stop creating more
- Create and implement a logical climate change plan, not just local ones
- Develop a climate action plan with baseline indicators and target metrics
- Mandate solar on every new south facing roof
- Install ground and air source heat pumps
- Prioritize energy efficiency in new developments and existing buildings
- Develop a hydrogen hub for Canada strategy
- Offset emissions through tree plantings
- Develop a county-wide tree policy
- Create more tree planting joint initiatives, e.g., City Hall lead, populate all parks with more native trees
- Develop wetland restoration projects
- Use electric buses for City transit
- Invest in waterfront assets to change or build the brand for Sarnia Lambton
- Sarnia Lambton Environmental Association (SLEA) to create a marketplace for industry to list wastes or byproducts available, so others can create circular industries
- Create more retrofit opportunities for residents or share current ones

- Commercialize stranded energy with Bitcoin for value added
- Change building codes to lower environmental impacts
- Promote reduced consumption
- Choose community projects that support net zero thinking
- Remove landfills
- Reduce single use plastic locally
- Install a small modular reactor

### 3. Enhance Collaboration

- Create one coordinating body
- Identify a lead organization to ensure momentum and goals are achieved
- Build a vision within the community
- Collect perceptions of the community and industry
- Provide forums for people and companies to share ideas
- Work toward common growth both on sustainability and net zero
- Foster unity across all stakeholders to aim for net zero
- Work together in a team approach
- Encourage inclusive collaboration
- Use focus groups to bring people together
- Host more eco-friendly public forums that are cross-sectional since collaboration is essential
- Be a good neighbour
- Partner with First Nations as developers and proponents
- Foster empowerment of First Nations communities
- Encourage private and public partnership
- Collaborate with Lambton College, which is number one in research
- Collaborate with Western University, which is number one in sustainability
- Create an implementable road map to net zero by 2050
- Create community programs to change perception
- Instill a culture of innovation

### 4. Develop a Stronger Approach

- Focus on tangible acts to implement now
- Initially consider vision, not just process
- Need to see the big picture for the greater good
- Believe in our brand
- Make sure that we walk the talk
- Enhance the reputation of the City
- Recognize that change is not the enemy
- Decide to change
- Plan for change

- Overcome the decision paralysis
- Just do it!
- Break down silos
- Breakdown the silos in community advocacy
- Depolarize the perceptions through deep conversation
- Create a county-wide sustainable strategy
- Make the decision, build a plan, implement the plan, measure the impact, and make any changes required
- Include the planet-positive concept in planning
- Execute the plan
- Develop consensus
- Build a sustainable culture
- Embrace seven-generation thinking
- Think of future generations
- Instill confidence into who, what, where we fit into the future
- Develop metrics for all actions and monitor the impact
- Prioritize climate change, e.g., create a decision-making criteria checklist
- Progress beyond pilot projects
- Conduct research on the greenest municipalities and borrow some of their best practices
- Work on being more welcoming to outsiders
- Drive transition from legacy technology to the future
- Embrace technology
- Follow through on recommendations from this summit, i.e., document and enforce
- Understand the concept of lifecycle energy costs
- Develop programs that require buy-in and personal investment and input, e.g., Habitat for Humanity home ownership structure
- Apply the eco lens to decisions, not just the financial lens
- Promote the goals

##### 5. Expand Education and Data Sharing

- Prioritize environmental education from Kindergarten to Grade 12
- Invest in environmental education
- Expand education on sustainable development
- Encourage young people to learn about today to better prepare for the future
- Provide a strategy for dealing with eco resistance that is voluntary and could be believed for behaviour changing
- Educate and communicate
- Create more opportunities for the community to learn about innovative advancements
- Create community education on climate change
- Educate and involve the citizens of Sarnia Lambton as an integral part of the process

- Hold public debates on important issues
- Create a public campaign, “Make every day Earth Day!”
- Promote waste reduction benefits
- Calculate municipal greenhouse gas baseline
- Report annual progress in municipal greenhouse gas changes
- Create a local net zero index, e.g., trees planted, number of cars, gas used, beaches cleaned, etc.
- Set a target and report annual greenhouse gas emissions
- Collect and display data on progress in emissions, jobs, etc.
- Audit and report the effectiveness of the blue box program
- Create a website to highlight all the environmental actions and projects
- Show how local policies and bylaws achieve international treaties and goals
- Create public awareness on biodiversity loss and endangered species

#### 6. Enhance Economic Development

- Support and fund economic development
- Use existing tax dollars effectively to develop the economy
- Promote the circular economy that already exists here
- Start and fund more pilot projects
- Service industrial sites with utilities
- Buy local
- Achieve net zero to build a vibrant economy
- Attract new investment in sustainable industry
- Search out innovative companies to come here
- Attract and retain battery technology companies since there is a huge need and major investment opportunity
- Foster industrial diversity
- Develop a cluster across Canada
- Promote sustainable economic development in agriculture and industry
- Invest in the Research Park capacity
- Accelerate innovative activities
- Generate an abundance of energy to support innovation here and around the world

#### 7. Build Stronger Human Resources Base

- Create professional job opportunities for youth and new graduates
- Create a youth retention strategy for Sarnia Lambton
- Actively engage youth in all environmental community initiatives
- Embed youth leadership roles in decision making, e.g., one City Councillor under 30 years of age
- Prioritize our children and youth
- Hire an environmental specialist at City Hall

- Create a position to act as a liaison with First Nations
- Expand Lambton College programs in a Centre for Energy and Bioeconomy
- Create a Green Resource Centre to interlink eco initiatives and information
- Build an intermediate plan towards 50% of greenhouse gas reduction by 2030
- Implement a strategy to solve the skilled labour shortage
- Empower a diversity of community leaders
- Create space for people and labour in the new environment
- Invest in protecting local ecosystems
- Drive a significant Sarnia Lambton marketing strategy to improve our image
- Celebrate eco-wins to encourage progress and engage people
- Invest in workforce training and innovation in environmental practices
- Ensure that net zero is the goal on any project
- Create and implement environmental training modules for plant workers
- Create innovative replacement and retraining job opportunities

## Next Steps

The following activities will help to ensure that this successful Energy and Environment Summit 2022 leads to action.

- Summit report will be circulated to Sarnia City Council who championed the event
- Facilitator Bryan Boyle will make a presentation on highlights of the Summit to City Council on June 27, 2022
- Summit report will be shared with all Summit participants
- Champions of further action will be identified
- Municipalities and organizations from across Sarnia Lambton will be encouraged to come together to utilize the Summit report as a basis on which to create an action plan, including priorities and timelines

## Summary of the Summit

The Energy and Environment Summit of community members from Sarnia Lambton was a very productive activity. The participants were very engaged and committed to the process. The community members took an important step by providing valuable input to help ensure that Sarnia Lambton plays an active role in building a vibrant economy while working towards the goal of net zero.