



10 Million Acres of Opportunity

Planning for a decade
of sustainable growth and innovation
in the Canadian soybean industry



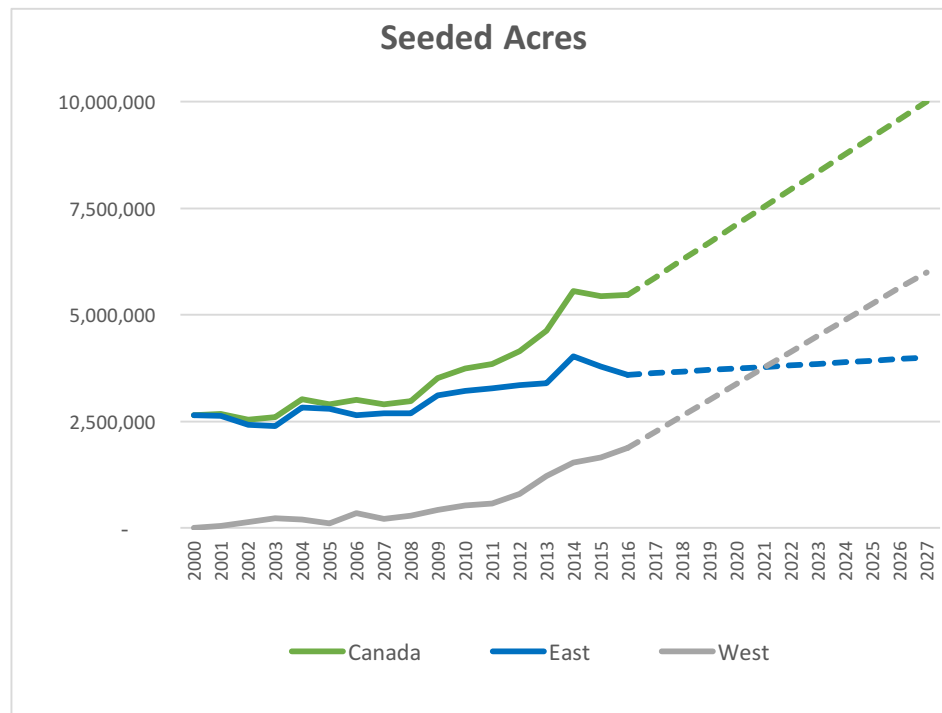


Canada's soybean sector is poised for explosive growth.

We welcome your input as we develop an industry plan to make the most of the exciting opportunities ahead.

Innovation has opened the door to tremendous expansion in the Canadian soybean industry. Seeded area has grown from 3 million acres to 5.5 million acres in the last 10 years, and is expected to grow to 10 million acres by the year 2027. At the same time, world demand for soybeans will continue to grow.

To make the most of this potential, Soy Canada is developing a comprehensive strategic market readiness plan for the industry – the first plan of this kind to involve the entire soybean value chain, including plant breeders, growers, exporters, processors and other value-chain partners.



Soy Canada has defined the destination for this strategic plan. Now we are seeking the industry's input as we develop the roadmap to reach our goals. We want to hear your views on the priorities and targets we have set for the next decade, and how we can work together to confront challenges and build on our strengths.

As we look forward, we see that a solid foundation for growth is in place. Canada has:

- Skilled growers who are eager to diversify and chose profitable new crops like soybeans and who are using best-in-class production practices and new short-season varieties;
- A first-class natural environment for agriculture production featuring healthy soil and water and producers committed to continued improvement in stewardship practices;
- A value chain heavily invested in seed, food and feed research and innovation;
- Dependable, customer-focused grain handlers and exporters, plus growing domestic crush capacity and processing; and
- An international reputation for meeting the highest standards of soybean quality.

Working together, we can leverage these opportunities to grow our industry and make an even greater contribution to Canada's economic growth. It begins with this strategic market readiness plan and your valuable insights.



Our vision for the industry

To be recognized as the global leader
in sustainable production
of high-quality soybeans



Our goals and targets

for a decade of sustainable growth and innovation

2027

GOAL

Double production in the next decade

| | 2016 | 2027 |
|----------------------------------|------------------|-------------------|
| TOTAL SEEDED AREA (ACRES) | 5,467,100 | 10,000,000 |
| <i>Eastern Canada</i> | 3,592,100 | 4,000,000 |
| <i>Western Canada</i> | 1,875,000 | 6,000,000 |
| YIELD (BUSHEL/ACRE) | 44.1 | 48.2 |
| <i>Eastern Canada</i> | 46.1 | 53 |
| <i>Western Canada</i> | 40.1 | 45 |
| TOTAL PRODUCTION (TONNES) | 6,462,700 | 13,000,000 |
| <i>Eastern Canada</i> | 4,491,200 | 5,750,000 |
| <i>Western Canada</i> | 1,971,500 | 7,250,000 |

2027

GOAL

Build on Canadian soybeans' contribution to natural capital

- Improve the natural environment that supports our industry
- Be recognized in Canada and around the world as a global leader in sustainable production of high-quality soybeans

2027

GOAL

Increase world-leading high-quality food grade production by 25%

| | 2016 | 2027 |
|--|------------------|------------------|
| FOOD-GRADE PRODUCTION (TONNES)* | 1,250,000 | 1,800,000 |
| SEEDED ACRES | 1,000,000 | 1,250,000 |

* Food grade supply numbers are a sub-set of total production and seeded acres.

2027

GOAL

Increase competitiveness, exports and processing of commodity soybeans

| | 2016 | 2027 |
|--|--------------------|-------------------|
| PROTEIN CONTENT <i>Dry matter basis (13% moisture)</i> | | |
| <i>Eastern Canada</i> | 40.6 (35.3) | 41.1 (36) |
| <i>Western Canada</i> | 38.7 (33.7) | 40.2 (35) |
| WHOLE SOYBEAN EXPORTS (TONNES) | 4,500,000 | 10,500,000 |
| PROCESSING CAPACITY (TONNES) | 1,878,000 | 2,500,000 |

2027

GOAL

Double production in the next decade

Progress to date

Innovation in plant breeding is dramatically changing the boundaries of where soybeans can be profitably cultivated in Canada. New short-season varieties have expanded soybean acreage to new regions of Ontario, Quebec and Atlantic Canada, and significantly across Western Canada. These new varieties have caused Canadian soybean production to double in the last 10 years.

The growth has been particularly dramatic in Manitoba. The province went from producing virtually no soybeans in 2000 to being the second largest soybean-producing province in 2013. In the Prairies as a whole, there has been an eight-fold increase in soybean production over the past decade.

There is no doubt that more farmers will become soybean growers in the decade ahead. The profitability of the crop is strong. In fact, in 2017, the Manitoba Government expects marginal returns (gross revenue minus operating and fixed costs) for soybeans to be almost \$100 per acre, making it one of the most profitable crops a farmer can grow. Farmers in Western Canada also recognize that adding soybeans to their crop rotations can help manage disease pressures and maintain soil fertility.

Further, although Canadian acres seeded to soybeans have nearly doubled in the last 10 years, there is still tremendous opportunity to expand soybean production to new areas. It is anticipated that over 35 million acres in Western Canada will be suitable for production by 2027, as new short-term, high-yielding soybean varieties come to market.

With the introduction of new short-season varieties, soybean production has expanded into new regions. Soybean production is now growing in Manitoba, Saskatchewan and Alberta and in new regions of Ontario and Quebec.



Building Blocks

35 million more acres suitable for new short-season varieties in Western Canada

Continued innovation to improve yield and pest management

Industry-wide commitment to assist new soybean growers

The path to 2027

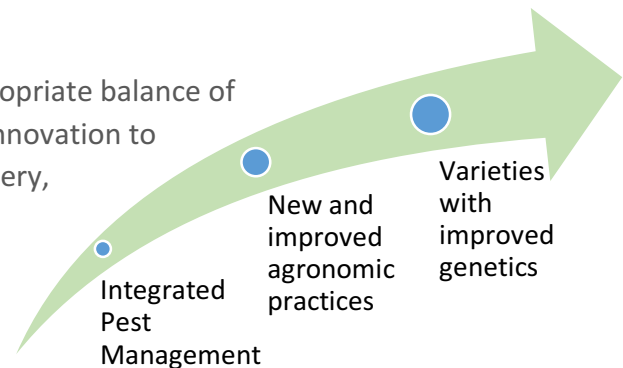
In the years ahead, Soy Canada wants to see the industry build on the tremendous growth achieved over the past decade by doubling production again over the next 10 years. To reach this goal, the industry must increase seeded acres while investing in innovations that will maximize yields and profitability.

Over the next decade, Soy Canada has set a yield growth target of 5 bu/acre. To achieve this target, growers will need the right yield-boosting tools, including new varieties with improved genetics, new plant protection products and improved agronomic practices.

The entire industry will need to work in partnership to identify the greatest agronomic challenges faced by growers and the areas of discovery that offer the greatest potential return. This will ensure that investments in research and innovation are focused on the most pressing needs and competitive opportunities.

The industry also requires an appropriate balance of public and private investment in innovation to support a strong pipeline of discovery, commercialization and technology transfer to the field. Many industry partners can play an important role in transforming new research

findings into better varieties, processes and agronomic practices. As many Canadian farmers grow soybeans for the first time in the years ahead, it will be essential for all partners to work together on these important challenges.



Questions for the industry

- *What are the most important things we must do to achieve this goal?*
- *How do we ensure continued public and private investment in variety development, agronomic innovation and commercialization?*
- *What are the most critical agronomic priorities, and how can the industry support producers in meeting these challenges?*
- *How can value-chain partners ensure that growers are equipped with the latest agronomic information to ensure they have good experiences with soybeans?*

2027

GOAL

Build on Canadian soybeans' contribution to natural capital

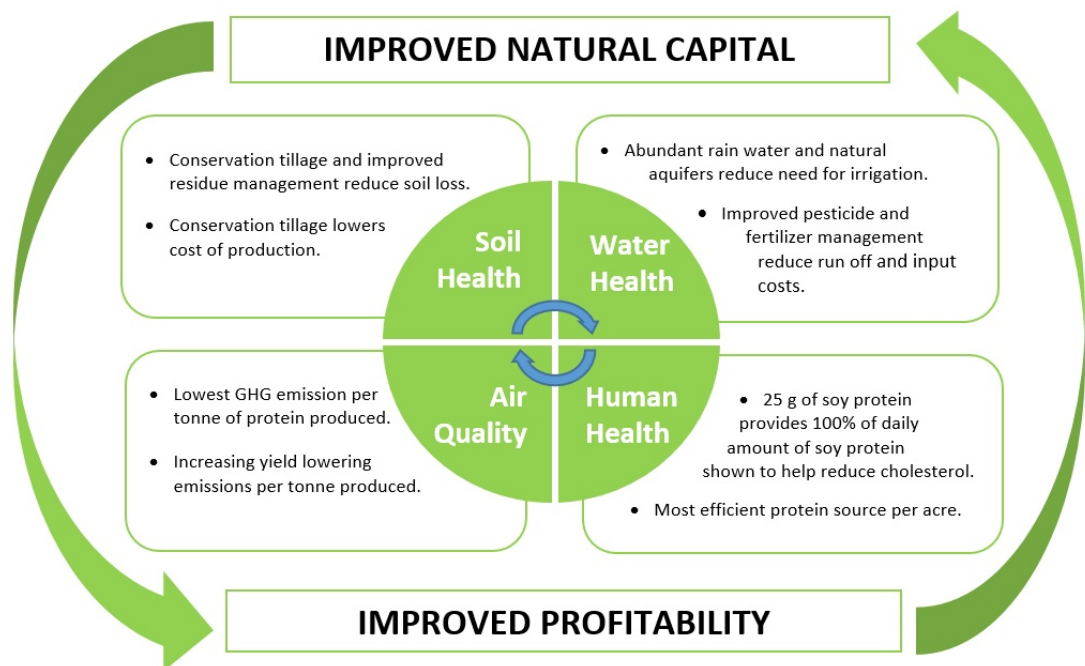
Progress to date

Canada has one of the best agriculture production environments in the world. Our deep, fertile soil, abundant water supplies and healthy biodiversity are ideal for a thriving, growing industry that sets the global standard for sustainable production.

Canadian soybean growers are committed to preserving and improving this natural capital because they understand that their ability to farm profitably and efficiently depends on it. This commitment is reinforced by our nation's strong legal framework for environmental protection.

In the last 35 years, Canadian soybean growers have made substantial improvements in their environmental practices. Since 1981, their energy use has decreased by 26%, and the net greenhouse gas footprint per unit of soybean output has decreased by 17% (*source: Canadian Field Print Initiative*).

By choosing to grow soybeans, growers are also making efficient use of farmland to provide a healthy, environmentally sustainable source of protein for a growing world. Compared to other sources of protein, soybeans have the lowest GHG



Building Blocks

Ongoing refinement of industry best practices

Canadian reputation for environmental responsibility

Continued innovation to expand role in Canadian bioeconomy

emissions per tonne of protein produced, and soy protein has a positive effect on cholesterol (*source: Health Canada*).

In addition, soybeans are able to take nitrogen out of the air and “fix” it in the soil through their root systems. In this way, soybeans help to naturally sustain the fertility of farmland and reduce the need for nutrient applications.

The path to 2027

Building on our past success, Canada’s soybean sector will continue to improve the natural environment that supports our industry while ensuring our responsible approach is understood and acknowledged. We want our industry to be recognized, in Canada and beyond, as the global leader in sustainable production of high-quality soybeans.

To achieve this objective, Soy Canada will identify meaningful metrics and best practices for responsible environmental stewardship, as well as a plan to demonstrate that our industry is meeting these expectations. We will also explore opportunities to cooperate with other commodity groups on an approach that could extend across the Canadian agricultural economy.

As we develop our plan, we will consult with our partners to identify the metrics that are most meaningful to customers, influencers and policymakers. Soy Canada will act as the link between our industry and these groups to ensure that our mutual goals for enhancing natural capital are communicated and understood.

Questions for the industry

- *What are the most important things we must do to achieve this goal?*
- *Certification schemes are often suggested as the means of measuring environmental sustainability. Is certification the best solution for our industry?*
- *What sustainability metrics are most meaningful to environmental stakeholders and industry members?*
- *How can we ensure the soybean industry’s contributions to natural capital are better understood by customers, policy makers and other stakeholders?*

2027

GOAL

Increase world-leading high-quality food grade production by 25%

Progress to date

It's an exciting time to be a Canadian supplier of high quality, Identity Preserved (IP) and non-GMO soybeans for food use, which earn premium prices for Canadian growers. Over the past several decades, Canada has earned a worldwide reputation for its commitment to customers and has established itself as a trusted supplier of these products.

In Asian markets, demand is growing for specialty products such as tofu, miso, tempe, natto and other end-use products. Demand has also been increasing in the U.S. and Europe, and will continue to grow in the years ahead, fueled by consumer interest in high quality soybean foods, vegetable protein sources, organic foods and functional foods. In Canada, value will be further kindled by the recently approved health claim for soyfoods.

Because of our sterling food grade reputation, we are well positioned to capitalize on these opportunities. Our industry has invested substantially in IP segregation, quality control infrastructure and other industry best practices.

One of our greatest assets is the Canadian Identity Preserved Recognition System (CIPRS), a program that certifies production from the farm through to handling, transportation, labeling and shipping. Administered by the Canadian Grain Commission, this voluntary national program is considered the best in the world for ensuring food grade soybeans meet customer specifications for protein content, colour, size and other factors.

The path to 2027

In light of growing demand and our existing strengths in this market, our goal is to increase both the production and exports of food grade, non-GMO soybeans by 25% over the next 10 years.

To realize this goal, we must be ready to deal with some important challenges faced by growers of these products. Crop protection options are more limited and quality standards are rigorous. A key challenge for the industry is to ensure that the value of food grade soybeans remains high so that these specialty crops continue to be an attractive choice for growers.

Building Blocks

Global reputation for quality

World's best system for identity preserved soybeans

Experienced, knowledgeable growers

Well-developed infrastructure

Processing expansion

We also need to work with partners to build up the industry's domestic food processing capabilities, which provide additional opportunity to increase the value Canada derives from production of food grade soybeans.

In addition, we require continued investment in food grade varieties with higher yield potential and resistance to pest pressures, as well as continued advances in production practices. Both public and private resources must be directed toward these priorities.

And finally, we must ensure that our food grade production continues to align with the quality, trait and composition standards of important global customers, and we must partner with food manufacturers on the adoption of new varieties.

Questions for the industry

- *What are the most important things we must do to achieve this goal?*
- *How can we maintain grower interest in food grade varieties as commodity soybean production expands? How can the value chain support new growers of food grade varieties?*
- *How can we leverage competitive advantages like CIPRS and Canada's reputation for high quality?*
- *What are the most important traits to pursue in food grade variety development?*
- *What challenges must be addressed to facilitate and encourage producers to grow food grade soybeans? How can we make food grade production more competitive against other options?*

2027

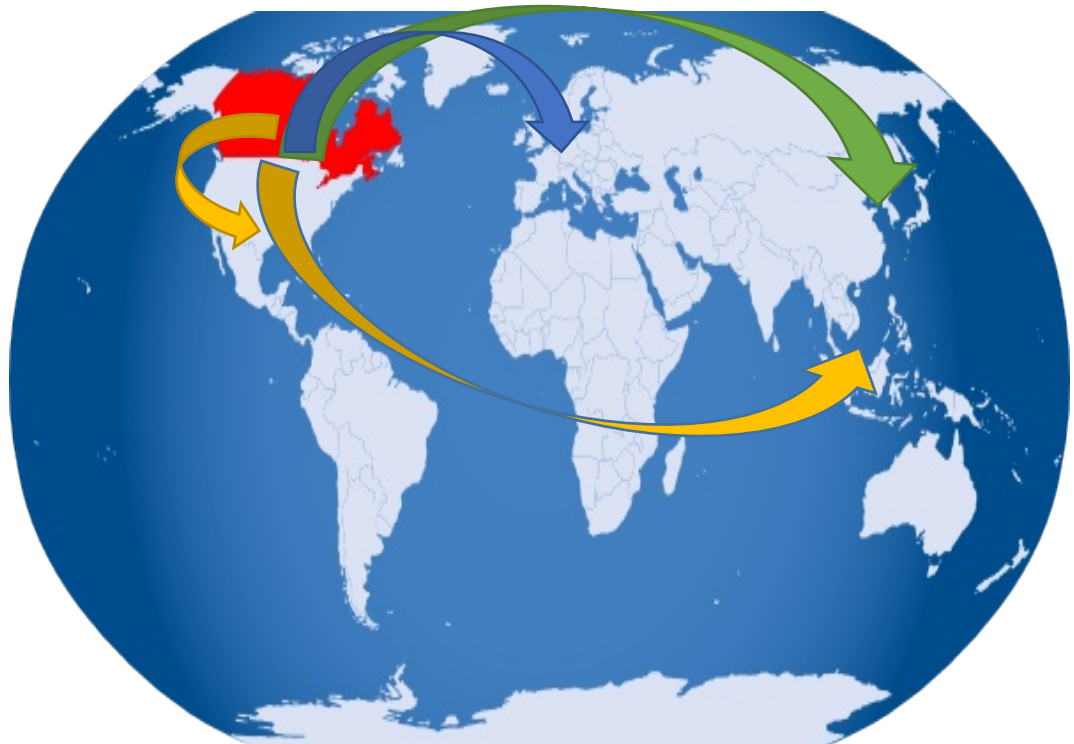
GOAL

Increase competitiveness, exports and processing of commodity soybeans

Progress to date

The huge increase in Canada's commodity soybean production has coincided with a rapid rise in world demand. Global imports of whole soybeans almost doubled between 2006 and 2015. The world soybean trade is projected to rise by 25% over the next decade, climbing to 179 million tonnes (*source: USDA*).

Canada's soybean industry has capitalized on this growth in demand with an ambitious market development and access strategy focused on North and South Asia, the EU and U.S. markets. Advancements in innovation, such as the development of short-term varieties, have enabled our sector to produce more and get more product to markets. The value of Canadian soybean and soybean product exports doubled between 2009 and 2015 and has grown more than four-fold since 2006.



Building Blocks

Innovation to increase protein content

Soy Canada market development strategy

Growing domestic crush capacity

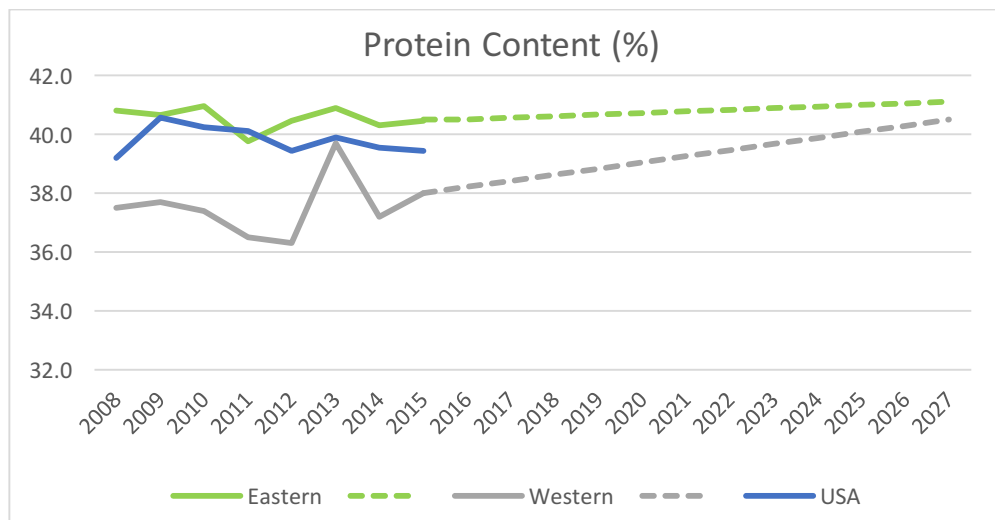
Well-established infrastructure for moving product to market

The path to 2027

Canada has the resources to grow more soybeans and we are confident of growing international demand. The challenge now is to continually improve the competitiveness of our products and the value we derive from the industry.

In terms of competitiveness, our goal is to ensure Canada's commodity soybeans meet or exceed the quality standards of other major soybean producing countries. The biggest driver for increasing the value of Canadian commodity soybeans will be our ability to grow protein levels.

Similarly, attracting new domestic crushing capacity will increase demand and the volume of product our industry can supply to the world. To date, Canadian variety development and agronomy has mostly focused on increasing yields and shortening maturity times. We must include protein levels in these efforts to ensure Canadian soybeans stay competitive in a global trade environment.



It will also be important to assist industry members as they make the transition to larger scale production, processing and marketing of a crop that is still relatively new to many Canadian farmers and agri-businesses. We will need to ensure that growers and small-to-medium-sized exporters have the tools they need to pursue the opportunities ahead.

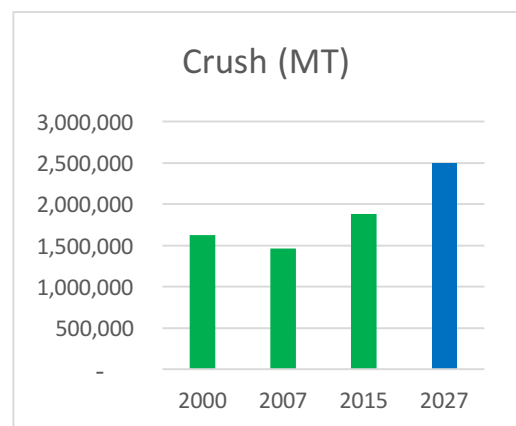
We must also anticipate and address any obstacles that could limit our export opportunities, including rail transportation and other handling infrastructure used to move growing supply to market, changes in customer preferences, import standards and market access issues.

Attracting processing capacity

In terms of maximizing the industry's contribution to the Canadian economy, an important area of promise is domestic processing. Today almost 90% of soybeans exported from Canada are in whole soybean form, which means there is tremendous opportunity for Canada to derive more economic value by processing more of the product here at home. New trends and innovations, such as high oleic oils, will be attractive opportunities for the processing community. Continued investment in domestic capacity will also allow us to increase the number of jobs, wages and export revenues generated for Canada by our industry.

Questions for the industry

- *What are the most important things we must do to achieve this goal?*
- *In Western Canada, how can plant breeders, growers and agronomists work together most effectively to increase protein content?*
- *What type of value chain and partner support will Canadian soybean exporters require to keep pace with much larger competitors in world markets?*
- *How can we ensure the reliability of our grain handling infrastructure, especially port and rail infrastructure, to meet growing production volumes? Will an increase in soybean production affect an already difficult rail transportation environment for grains?*
- *In comparison to other large soybean export nations, what potential market access barriers must we address?*
- *What conditions need to be in place to secure investment in soy crush processing in Western Canada?*





Next steps

This discussion paper outlines a destination for our industry and a framework for getting there. This framework will be the basis for a strategic plan focused on expanding the Canadian soybean sector and capitalizing on the growth potential of our industry over the next 10 years.

To this end, our goals include:

- Doubling production in the next decade;
- Building on Canadian soybeans' contribution to natural capital;
- Increasing world-leading high-quality food-grade production by 25%; and
- Increasing competitiveness, exports and processing of commodity soybeans.

We welcome your views on these issues as we develop plans to drive towards our goals. Over the coming months, Soy Canada will be meeting with all parts of the soybean value chain to gather ideas and answer the important questions outlined in this document. The information collected will shape our final strategy to grow the soybean industry over the next decade.

You can provide feedback by visiting our website www.soycanada.ca or by contacting us at info@soycanada.ca.

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