Study on the economic value of implementing new animal welfare standards in regard to market requirements and social expectations

PRESENTED TO
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FINAL REPORT

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EXECUTIVE SUMMARY

CONTEXT
Market expectations are growing beyond food safety: agricultural producers and processors are under increasing pressure to ensure animals are treated with respect. The concern for animal welfare is becoming a mainstream issue for consumers and citizens. It is becoming a condition for access to markets in many parts of the world—sometimes it can even be a regulatory requirement.

In the face of these trends, the Canadian pork industry is far from indifferent. In order to take into account changing market expectations as well as new scientific knowledge in the field of animal welfare, the National Farm Animal Care Council started a process in 2010 to revise its Code of Practice for the Care and Handling of Pigs. When the Code is adopted, it should provide an opportunity to showcase the entire pork sector as a model for societal animal welfare expectations.

While some industry stakeholders are concerned about the cost of upgrading the standard, it is also important to consider the cost of non-compliance with the Code or compliance on a voluntary basis only. What would the potential losses be for the Canadian sector if it were to maintain the status quo for animal welfare? What would be the effects on the Canadian industry’s position compared to its main competitors? Are there any risks of losing market share, either at home or abroad?

In order to shed light on these questions, this study has assessed the potential economic implications for the Canadian swine industry of non-compliance with the recommendations and requirements of the new Code of Practice for the Care and Handling of Pigs, or compliance on a voluntary basis only.

APPROACH
The hog industry is evolving in a globalized and highly competitive market. To assess the potential economic implications of non-compliance with the Code, a review of market expectations, both domestic and foreign, was first conducted along with a review of the stances taken and activities implemented by the main competitors in the Canadian industry with regard to animal welfare.

This information was then complemented through several interviews with Canadian and international market players operating in the production sector as well as in the processing and retail industry. Finally, based on four scenarios defined using documented market trends, the monetary impacts (market losses) of failing to adopt the Code of Practice were assessed.

RESULTS
While the review shows that health and hygiene are still the most important standards required on both domestic and international markets, the issue of animal welfare is undoubtedly a growing concern, especially in English-speaking countries. Food chains have...
been the quickest to act on this matter, in large part in reaction to campaigns led by animal welfare groups, pressure from shareholders, and changing consumer expectations. In Australia and the United Kingdom, consumer concern over how animals raised for food are treated during their lives has been the catalyst behind significant retailer involvement in improving welfare standards. While there is a similar, nascent trend in other parts of the world, including in North America, inspired by increased consumer awareness of animal welfare issues and changing expectations in this area, there remains a gap between how consumers indicate they make purchasing choices, in market surveys, for example, and the products they buy in practice.

On the supply side, the report indicates that products meeting animal welfare standards are still a niche market in Canada and the United States. Legislation is however being enacted in many countries where the Canadian pork industry is exporting (except in Asian countries such as China and Japan) and codes of practice are being adopted by most competitors. In most cases, these animal welfare initiatives specifically tackle the issue of gestation stalls. Consequently, the combination of this legislative control and market positioning is likely to result, within a ten-year period and with few exceptions, in the animal welfare issue becoming a condition for market access in the pork industry worldwide. The economic impacts of adopting the Code of Practice—or not—therefore need to be understood in terms of gain or loss of market opportunities for the Canadian pork industry.

In order to measure these opportunities, four scenarios were drawn up to identify the potential short-term (5-year) and long-term (10-year) effects, holding all other factors constant.

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Potential gain</th>
<th>Potential losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of the code, short term horizon (3-5 years)</td>
<td>EU: $190 M - $400 M</td>
<td></td>
</tr>
<tr>
<td>Failure to phase out gestation crate housing system, short term horizon (3-5 years)</td>
<td></td>
<td>EU: $190 M - $400 M</td>
</tr>
<tr>
<td>Adoption of the code, long term horizon (10-15 years)</td>
<td>EU: $190 M - $400 M</td>
<td></td>
</tr>
<tr>
<td>Failure to phase out gestation crate housing system, long term horizon (10-15 years)</td>
<td></td>
<td>Total: $0,89 B - $1,77 B</td>
</tr>
</tbody>
</table>

The report shows that in the short term, failure to adopt a mandatory phase-out of gestation crate housing for sows in an updated Code of Practice is unlikely to result in a loss of market share for the Canadian pork industry, but rather in a loss of market opportunities. This loss of market opportunities will, it should be noted, limit access to certain markets, which will put
pressure on the price of pork in remaining open markets and therefore on pork industry revenues. The short-term economic implications are estimated at $190M to $400M of market opportunity losses—specifically due to the incapacity to source the European market, assuming the ratification and implementation of the Canada – European Union free trade agreement.

In the light of the current market trends, failure to commit to an industry-wide shift to group housing for sows could however result, on the long-term horizon, in a loss of market share on both domestic and international markets. To protect its market share, the Canadian pork industry would have no choice but to comply with the new standards for sow housing in line with those currently implemented by major trading partners as well as the expectations of major buyers in Canada. Doing otherwise would inevitably push the industry toward less-profitable markets. If such were the case, long-term market opportunity losses are estimated at $0.89B to $1.77B annually.

The Canadian pork industry remains dependent on exports; in order to compete on an international level, a structured transition away from the use of gestation crates for breeding sows, accepted on an industry-wide basis, appears to be necessary to keep the industry competitive. In the short term, this would help ensure access to European markets, and in the longer term would ensure buyers’ requirements can be met—in Canada and internationally.

**CONCLUSION**

Over the next five years, while there will not be a quantifiable loss of market share if the industry fails to adopt a ban on continuously housing sows in gestation stalls, the development of the European market could be put at risk. Within ten years, however, a failure to implement plans to modernize housing systems will have a tangible impact. If Canada fails to adapt to the demand for pork products from gestation crate-free production systems, others could change accordingly to meet the demand. This could result in a loss of market access for Canadian pork and put pressure on prices in the markets that remain.

Notwithstanding the cost of phasing out the use of gestation stall housing, the Code of Practice seems to present an opportunity for the Canadian industry to position itself favourably on the international market. Trading partners stay well-informed on the standards of their competitors and their suppliers, and while strict animal welfare standards are not currently in place in every market, this does not rule out such standards being preferred by influential buyers within those markets. Domestically, the most influential buyers have taken a clear stance on animal welfare standards in the pork industry. If the Canadian industry does not meet these demands in the time frames set out by major Canadian retailers, that demand could be met by some specific U.S. producers/processors, some of whom are moving quickly toward group housing systems. However, several Canadian stakeholders see this evolution at a North American level and are of the opinion that Canada must follow suit. This position is shared by the Retail Council of Canada: their commitment regarding animal welfare is for fresh pork sourced from North America.

It is worth noting that while the standard proposed in the draft Code of Practice would be considered a significant improvement in animal welfare standards by many buyers, some
industries are already moving past this standard. Specifically, the industries in Australia and some member states in the European Union have already moved to restrict housing in gestation stalls to no more than a few days following insemination and before farrowing. In Australia, this restriction was voluntarily put in place by the industry after they faced public and retailer backlash to their Code of Practice, which allowed for sows to be housed in gestation crates for up to six weeks per pregnancy.

If the Canadian industry fails to take this step now, a loss of access to current markets is most likely, as is the opportunity to further develop potentially high-value markets. This restriction of potential markets will also put pressure on market price, since pork-producing countries that fail to comply with evolving animal welfare standards will be competing for a shrinking list of open markets.

While it will take five to ten years to feel the financial impacts of a failure to transition away from gestation crates, during this time, other pork-producing countries will develop the capacity to meet the demand for gestation crate-free pork—resulting in a loss of both market access and future opportunities for Canadian pork. In Canada, the major food chains are leading the trend away from suppliers who allow the use of gestation stalls. As major purchasers of Canadian pork, they are driving the demand for gestation crate-free pork and creating much of the incentive for the industry to adapt as a whole to meet the production expectations of these buyers.

In summary, given the strong market trend against the use of gestation stalls, adopting the Code of Practice appears to be a step that the Canadian pork industry should take in order to remain economically viable in the long run.
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1. CONTEXT

Market expectations are growing beyond food safety: agricultural producers and processors (slaughteringhouses) are under increasing pressure to ensure animals are treated with respect. For example, in last April, the Retail Council of Canada announced its intention to stop sourcing from suppliers who use cages for housing gestating sows. This announcement is part of a worldwide trend. In 2012, for instance, some 30 companies in the field of food and beverage services, retail and distribution, including players such as McDonald’s, Burger King, Tim Hortons, Costco and Target, took a stance on the issue of animal welfare. Governments are not outdone: since January 1, 2013, a European directive now prohibits the use of gestation cages. New Zealand and the Australia pork industry have also announced they will prohibit the use of cages in 2015 and 2017 respectively. In the United States, nine states have already passed legislation on their use. It therefore seems that the concern for animal welfare is becoming a mainstream issue for consumers and citizens. It is increasingly becoming a condition for access to markets in many parts of the world—sometimes it can even be a regulatory requirement.

In the face of these trends, Canadian pork producers are far from indifferent. Through their association, they have taken an interest in the issue, documented best practices and contributed, with scientists and interest groups, to the development of guidelines and codes of best practice. Moreover, since 1984, the Canadian pork industry has adhered to a voluntary Code of Practice for the Care and Handling of Pigs. Last revised in 1993, the Code provides nationwide guidelines for the care and handling of farm animals. In 2005, the Canadian Pork Council (CPC) set up the Animal Care Assessment (ACA) program to certify that farmers comply with the requirements and recommendations of the Code of Practice.

In order to take into account changing market expectations as well as new scientific knowledge in the field of animal welfare, the National Farm Animal Care Council started a process in 2010 to revise the Code. The new Code, which is expected to be adopted by the end of 2014, presents recommendations and requirements for all issues related to animal welfare: housing and facilities, food and water, animal health, farming practices, transport and euthanasia. When the Code is adopted, it should provide an opportunity to showcase the entire pork sector as a model for societal animal welfare expectations. The ACA program will also be updated to reflect these new requirements.

However, upgrading standards and industry certifications often entails costs and affects more than one link in the chain. These costs may be recurrent (changes in practice, record registry, etc.) or one-off (acquisition of equipment, for example). Changes therefore put further pressure on production costs, and forcibly on the competitive position of the sector. This situation also raises questions—even reluctance—among some players in the industry regarding compliance with the requirements of the new Code, many of whom would prefer a voluntary approach.
In order to measure the practical implications of this upgrading, the industry is already working to assess the economic impact of compliance with the new requirements. But what would be the cost of non-compliance with the Code, or indeed compliance on a voluntary basis only? In other words, taking into account the increasing requirements of the markets, what would be the potential costs for the Canadian sector of maintaining the status quo for animal welfare? What would be the effects on the Canadian industry’s position compared to its main competitors? Are there any risks of losing market share, either at home or abroad? It is for this specific reason, to try to assess these potential economic implications for the Canadian swine industry, that the Human Society has sought the services of a consultant.

It is with interest that Groupe AGÉCO offers its services and expertise to document the issue.
2. **OBJECTIVES**

The overall objective is to conduct a study to assess the potential economic implications for the Canadian swine industry of a failure to comply, or to comply only on a voluntary basis, with the recommendations and requirements of the new Code of Practice for the Care and Handling of Pigs.

Specifically, the proposed objectives are the following:

- To identify the stance taken and activities implemented by major pork-producing countries with regard to animal welfare, particularly production areas competing with Canada that serve the same markets internationally (United States, Denmark, Brazil, Mexico, Chile and China).
- To document the expectations of markets served by the Canadian swine industry (domestic and export), specifically markets that have high requirements (Japan, Australia, Europe, etc.).
- To assess the monetary (loss of market) and non-monetary impacts related to a failure of the Canadian pork industry to adapt to animal welfare requirements.

First, this report presents an overview of international trade for Canadian pork. In a second phase, it identifies the main legislation, positions and actions taken by the various markets and stakeholders regarding animal welfare. In a third part, it details the expectations of markets served by the Canadian swine industry. Finally, it proposes scenarios that estimate the potential economic impacts associated with a failure to adopt the Code of Practice for the Care and Handling of Pigs.
3. **OVERVIEW OF INTERNATIONAL TRADE FOR CANADIAN PORK**

This section presents a brief overview of international trade for Canadian pork. More specifically, it shows the trade flows of Canadian pork, characterizes demand for products on principal export markets and describes the competitors present in these markets. The purpose of this overview is to establish the current market situation and form a basis for understanding the potential implications for the Canadian industry of a failure to comply with animal welfare standards.

3.1 **TRADE FLOWS FOR CANADIAN PORK**

3.1.1 **EXPORTS**

More than 50% of Canada’s pork production is destined for export markets.\(^1\) Canada figures as the sixth-largest exporter of pork worldwide; if all of the European member states are considered together, it is the third-largest exporter behind the United States and the European Union.\(^2\) In 2012, Canadian pork exports amounted to about 1.2 million tons—the equivalent of CDN$3.2B. Canadian pork products are exported to over 100 countries. Figure 3.2 shows the distribution of Canadian pork exports on the international market, in terms of quantity and value, for 2012. Table 3.1 shows the profile of pork exports (quantity, value and types of products) in markets where Canadian pork is mainly exported.

- The United States is the most significant market for pork exports in terms of both quantity and value. The U.S. alone accounts for 27% of pork exports in terms of quantity and 31% in terms of value. Most of the pork products destined for the U.S. are high value products. Fresh and chilled pork accounts for two-thirds of all exports. In the U.S., New York is the number one destination for Canadian pork exports (19% of total exports). Ohio, Illinois, California, New Jersey and Pennsylvania are also among the top U.S. export destinations.

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Japan is also a significant market for Canadian pork. Although it only accounts for 18% of exports in terms of quantity, it represents 27% of exports in terms of value. This high proportion in terms of value can be explained by the large amount of high value cuts imported by the country.

Likewise, Russia and China are significant importers of Canadian pork. Together they account for 29% of Canadian pork exports in terms of quantity and 22% in terms of value. While China imports low value products such as offal, Russia is very sensitive to the price of pork products. Exports to Russia are expected to considerably decline in 2013 and 2014, as the country has restricted imports from Canada to plants that are able to prove their production is ractopamine-free.\(^3\)

Although less significant, Mexico and Korea each represent 5% of Canadian pork exports in terms of quantity. Like Russia, Mexico is also highly sensitive to the price of pork products. As for Korea, it represents a low value market. It should be noted that exports to Korea are expected to decline in the near future due to the gradual implementation of a free trade agreement between the United States and Korea which will make U.S. exports more competitive on the Korean market.\(^4\)

Other significant export markets include the Philippines, Australia and Taiwan. They each account for less than 3% of Canadian exports, in terms of both quantity and value. In contrast to Australia, which buys high value products, the Philippines mainly import low value products such as fat and offal.


• It should be noted that Asian countries are identified as the markets where Canadian pork exports have the best opportunities in the near future, with a growing urban middle class, eating more meat, to feed.  

Figure 3.2
Distribution of Canadian pork exports by quantity and value, 2012

Q = Proportion in quantity (tons). V = Proportion in value (SCDN).
Source: CANADA PORK INTERNATIONAL, 2013.

▲ Interview with Olymel, November 2013.
Table 3.1
Profile of Canadian pork exports in the markets served by Canada, 2012

<table>
<thead>
<tr>
<th>Markets</th>
<th>Quantity (tons)</th>
<th>Value (CDN $ '000)</th>
<th>Types of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>320,407</td>
<td>981,113</td>
<td>• High value products (cuts and pieces such as loins, ham, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Fresh/chilled products = 2/3 of imports</td>
</tr>
<tr>
<td>Japan</td>
<td>212,633</td>
<td>877,591</td>
<td>• High value products (cuts and pieces such as loins, ham, etc.)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Fresh/chilled products = 1/3 of imports</td>
</tr>
<tr>
<td>Russia</td>
<td>207,046</td>
<td>491,887</td>
<td>• Extremely price sensitive</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Frozen cuts boneless</td>
</tr>
<tr>
<td>China</td>
<td>139,403</td>
<td>239,769</td>
<td>• Low value products</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Offal = 50% of imports</td>
</tr>
<tr>
<td>Mexico</td>
<td>60,941</td>
<td>82,433</td>
<td>• Extremely price sensitive</td>
</tr>
<tr>
<td>Korea</td>
<td>58,900</td>
<td>129,252</td>
<td>• Low value products (offal, bones, and fatty cuts (bellies and shoulders) etc.)</td>
</tr>
<tr>
<td>Philippines</td>
<td>40,545</td>
<td>54,592</td>
<td>• Low value markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Large importer of offal and fat</td>
</tr>
<tr>
<td>Australia</td>
<td>29,150</td>
<td>99,260</td>
<td>• High value frozen products (cuts and pieces such as loins, ham, etc.)</td>
</tr>
<tr>
<td>Taiwan</td>
<td>19,920</td>
<td>36,328</td>
<td>• Imports mainly frozen cuts</td>
</tr>
<tr>
<td>Total</td>
<td>1,189,260</td>
<td>3,199,858</td>
<td>• Not applicable</td>
</tr>
</tbody>
</table>


3.1.2 IMPORTS

Although Canada is one of the largest pork exporters worldwide, it is also a significant importer of pork, after Japan, Russia, Mexico, China, Hong Kong, South Korea and the United States. Canada principally imports pork to provide specific meat cuts that are in shorter supply on the market. In 2012, Canadian pork imports totalled about 220,000 tons, the equivalent of CDN$970 million. Figure 3.3 shows international import flows for Canadian pork.

- The United States is the main exporter of pork to Canada. About 95% of pork imports come from this country. U.S. meat has seen tremendous growth on the Canadian market in recent years: between 2011 and 2012 alone, Canadian imports of U.S. meat increased by 16% in terms of value.\(^6\) Given the fierce competition from the

\(^6\) Statcan, compilation CDPQ, 2013.
United States on both domestic and international markets, it would appear even more relevant to look at the position of the American pork industry concerning animal welfare and determine whether or not it constitutes a threat to Canada. This is discussed in Section 3.2 below.

- Chile, Denmark, Germany, the Netherlands and Italy are among Canada’s other sources of imports. They each contribute 1% or less to Canada’s total pork imports.

![Figure 3.3](image-url)

_Distribution of Canadian pork imports in quantity and value, 2012_

<table>
<thead>
<tr>
<th>Markets</th>
<th>Quantity (tons)</th>
<th>Value ($CDN ’000)</th>
<th>Types of products</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>210,774</td>
<td>911,819</td>
<td>• Mainly fresh/chilled cut boneless</td>
</tr>
<tr>
<td>Chile</td>
<td>2,569</td>
<td>11,600</td>
<td>• Frozen cuts bone in</td>
</tr>
<tr>
<td>Denmark</td>
<td>1,921</td>
<td>11,190</td>
<td>• Frozen cuts bone in</td>
</tr>
<tr>
<td>Italy</td>
<td>804</td>
<td>10,488</td>
<td>• Mainly cured meat</td>
</tr>
<tr>
<td>Germany</td>
<td>1,798</td>
<td>9,451</td>
<td>• Not available</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1,496</td>
<td>6,574</td>
<td>• Not available</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>221 106</strong></td>
<td><strong>971 419</strong></td>
<td>• Non applicable</td>
</tr>
</tbody>
</table>

Q = Proportion in quantity (tons). V =Proportion in value (CNĐ$).
Source: CANADA PORK INTERNATIONAL, 2013.

Table 3.2
Features of principal export markets served by Canada, 2012


### 3.2 Competitors of Canadian Pork on Local and International Markets

Canada competes mainly with the top exporters of pork on both local and international markets. These include the European Union (including Denmark), United States, and Brazil. Although not listed in the top 10, China and Chile are also significant pork exporters.

**Table 3.3**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Millions of ton (MT)</th>
<th>Market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Germany (EU)</td>
<td>2,796</td>
<td>17.1%</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>2,390</td>
<td>14.6%</td>
</tr>
<tr>
<td>3</td>
<td>Denmark (EU)</td>
<td>1,569</td>
<td>9.6%</td>
</tr>
<tr>
<td>4</td>
<td>Spain (EU)</td>
<td>1,385</td>
<td>8.5%</td>
</tr>
<tr>
<td>5</td>
<td>Netherlands (EU)</td>
<td>1,206</td>
<td>7.4%</td>
</tr>
<tr>
<td>6</td>
<td>Canada</td>
<td>1,170</td>
<td>7.2%</td>
</tr>
<tr>
<td>7</td>
<td>Belgium (EU)</td>
<td>909</td>
<td>5.6%</td>
</tr>
<tr>
<td>8</td>
<td>France (EU)</td>
<td>710</td>
<td>4.3%</td>
</tr>
<tr>
<td>9</td>
<td>Brazil</td>
<td>663</td>
<td>4.1%</td>
</tr>
<tr>
<td>10</td>
<td>Poland (EU)</td>
<td>649</td>
<td>4.0%</td>
</tr>
</tbody>
</table>


Figure 3.2 shows the market shares of importers on the main markets served by Canadian pork:

- Most of the pork imported by the United States comes from Canada (80%). Denmark is the second-largest supplier, accounting for 10% of imports.
- In Japan, nearly 45% of pork imports come from the United States. Canada ranks second in percentage (20%), followed by Denmark (11%).
- In Mexico, pork imports from Canada account for only 10% of total imports. Most imports originate from the United States (88%).
- Canadian imports account for 20% of total pork imports in Australia. The United States rank first with 41% of total imports, while Denmark ranks second (26% of total imports).
- In South Korea, Canada is the second-largest importer and accounts for 15% of total imports. The United States lead the market with nearly 35% of total imports, while Chile and Germany each have a 9% import share.
- So far, Canada has only exported very small quantities of pork to the EU market. This could change, however, in light of the Canada-EU trade agreement, which could boost trade and open the market for the Canadian pork industry. This subject will be discussed in a following section. In the EU, the majority of pork imports come from Switzerland (54%), Chile (21%) and the United States (7%).
Figure 3.4
Market shares of competitors on the main markets served by Canadian pork, 2012

United States
- CAN 80%
- Others 4%
- MEX 2%
- POL 3%
- DNK 10%
- ITA 2%

Japan
- CAN 20%
- Others 9%
- MEX 3%
- CHN 5%
- CHL 3%
- ESP 3%

Mexico
- USA 88%
- CAN 10%
- CHL 1%

Australia
- USA 41%
- DNK 26%
- NZL 1%
- NLD 11%

South Korea
- USA 34%
- CAN 15%
- Others 14%
- NLD 4%
- DNK 4%
- POL 4%
- ESP 7%
- DEU 9%
- CHL 9%

European Union
- DEU 54%
- USA 7%
- CHL 21%
- Others 4%
- AUS 4%
- NOR 5%
- ISG 2%

AUS = Australia  CAN = Canada  CHE = Switzerland  CHL = Chile
CHN = China  DEU = Germany  DNK = Denmark  ESP = Spain
ISR = Israel  ITA = Italy  MEX = Mexico  NLD = Netherlands
NOR = Norway  NZL = New Zealand  POL = Poland  USA = United States of America
3.2.2 **EUROPEAN UNION**

The European Union (EU) is the largest pork exporter on a global scale. In 2012, its exports accounted for more than 65% of total world pork exports.\(^7\) Germany is by far the largest pork exporter in the EU. In 2012, its exports (2,796 MT) surpassed those of the United States (2,390 MT). Spain and the Netherlands are also significant exporters within the EU. They each export larger volumes of pork than Canada. However, it is important to note that European exporters’ first priority is the intra-European market.

Russia is the top market for EU pork exports. These come mainly from Denmark, the Benelux countries, Ireland and Poland. Japan is the second-largest market for pork exports. It is followed by South Korea, Hong Kong and China. Figure 3.5 shows the distribution of EU pork exports in 2011.

![Figure 3.5](image_url)

*Source: Eurostat. COMEXT, 2013.*

EU pork production is forecast to fall throughout 2013 and 2014. The rising costs of compliance with the new animal welfare regulations for sows enforced since January 1, 2013, combined with high feed prices, have forced many breeders to stop production. In 2012 alone, the EU sow stock decreased by 4.2%. According to Eurostat, the most significant cuts were in Germany, Spain, Poland and Italy. In 2014, further cuts are expected in Poland, Hungary and France. So far in France, only about 50% of breeders fully comply with the EU animal regulations. Member states’ sectors that are not in compliance could be subject to penalties or withholding of subsidies.\(^8\) According to a report published by the U.S. Meat Export Federation (USMEF) based on interviews with EU importers, retailers and processors,

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\(^7\) Global Trade Atlas. Calculations made by Groupe AGECO using data in terms of quantities.

this situation could increase opportunities for pork imports to the EU market or to export markets currently served by the EU (if EU pork is held back for domestic consumption).\(^9\)

**DENMARK**

Denmark is the third-largest exporter of pork worldwide, after the United States and Germany. It is also the main pork exporter in the EU. Figure 3.6 shows the distribution of Danish pork exports in 2012.

- Demark exports nearly 65%\(^{10}\) of its pork products within the European Union (EU), principally to Germany, the United Kingdom, Poland and Italy.
- Like Canada and United States, Denmark also exports to Japan (13%), China/Hong Kong (9%) and Russia (6%).

![Figure 3.6](image.png)

*Distribution of pork exports, Denmark, 2012*

*Without live pigs and sows.*


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\(^{10}\) Percentage without live pigs and sows.
On October 18, 2013, Canada and the European Union (EU) announced an agreement in principle on a Comprehensive Economic and Trade Agreement (CETA). This agreement, which must now be ratified by the European Parliament, will provide Canada with preferential market access to the European Union, a market that currently generates $17 trillion in annual economic activity.\(^\text{11}\) For the pork industry, the agreement will secure free access for processed pork products and will offer a preferential quota equivalent to over 80 thousand tons of pork cuts.\(^\text{12}\) In return, the EU will retain duty-free access to the Canadian pork market and will reciprocally receive duty-free and quota-free access for processed meats. According to Canada Pork International, the agreement could lead, over the next years, to exports valued at $400M annually.\(^\text{13}\) This agreement will allow the Canadian industry to diversify its export markets and maximize the productivity of Canadian companies. It should be noted that the EU is the last significant market yet to be conquered by the Canadian industry.

3.2.3 United States

Globally, the United States is the second largest exporter of pork after Germany. It is also Canada’s main competitor on both the domestic and international pork markets. The United States exports its pork products to markets targeted by Canada. Figure 3.7 shows the distribution of its pork exports in 2012.

- As is the case for Canada, Japan is the largest market for U.S exports, accounting for 31% of total exports.
- With 18% of total exports, Mexico ranks second, followed by Canada (14%), China (11%) and South Korea (7%).
- It should be noted that while the US and the European Union are still negotiating a free trade agreement, the agreement between Canada and EU (CETA) is on the verge of being signed, likely giving the Canadian pork industry several years’ head start in establishing their products on the European market.

\(^{13}\) CANADA PORK INTERNATIONAL. CPI in Action, November 2013, Free trade agreement to provide access to the EU market.
3.2.4 Brazil

Brazil is also a relevant exporter of pork on the international market. However, its principal export markets are somewhat different to Canada’s. Indeed, Brazil exports its pork products mainly to low value markets such as the Ukraine, Russia and Hong Kong (Figure 3.8). This situation could however change in the near future if Brazil continues to improve its sanitary status (animal health). In the past, this has been the weak link of the Brazilian pork industry: because of this problem, some export markets have been closed to this country for many years. Recently however, the state of Santa Catarina has won OIE (World Organization for Animal Health) recognition as being free of foot-and-mouth disease without vaccination. Because of this new condition, some more demanding markets are now open to Brazilian pork, such as Japan, which opened its doors in July 2013. Traders believe that it will become a significant market for Brazilian pork. Nonetheless, many countries such as Canada and the United States remain closed to Brazilian pork.

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PIGPROGRESS. Brazil exports first pork shipment to Japan, July 2013, http://www.pigprogress.net/Pork-Processing/Markets/2013/7/Brazil-exports-first-pork-shipment-to-Japan-1310350W/.

USDA FAS Gain Report, Brazil, Livestock and Products Annual, Annual Livestock 2013, 8/21/2013.
3.2.5 CHINA

China is the largest producer and consumer country of pig meat. Over the past few years, it increased its export operations and is now one of the major exporters of pork. China exports its pork products mainly to low-price markets, such as the Asian countries. Hong Kong is its largest market. Chinese pork exports are expected to rise in 2014 due to China’s competitive export prices.¹⁶

3.2.6 CHILE

Chile is also one of the top pork exporters worldwide. Like the United States, Chilean pork competes with Canadian pork on both the domestic and international markets. In 2012, the main destinations for Chilean exports were Japan (35%), South Korea (24%), Russia (11%) and China (6%).¹⁷ Chile is well-known for its good sanitary status. Because of this, it has access to the most demanding countries in terms of health and hygiene standards (e.g., Japan). In the future, Chilean pork exports are likely to remain the same since the country has a limited capacity for pork production, and for this reason it is not seen to be a major player on the global market.¹⁸

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¹⁸ Interview with Olymel, November 2013.
4. LEGISLATION, POSITIONS AND ACTIONS IMPLEMENTED CONCERNING ANIMAL WELFARE

In response to increased concerns about animal welfare, many countries and organizations have implemented different tools to encourage sound animal welfare practices. These include:

- Legislation
- Voluntary codes of practice and animal care standards developed by industry
- Corporate programs established by retailers and food services
- Product differentiation programs that allow consumers to purchase selectively
- International agreements created by treaties or intergovernmental organizations

This section provides a brief overview of the main legislation, positions and actions implemented by the various markets regarding animal welfare. It primarily focuses on the pork industry and on countries where Canadian pork is exported.

4.1 CANADA

In Canada, the provinces and territories are responsible for protecting the welfare of animals, including farm animals. All of the provinces and territories have laws concerning animal welfare, but they are, for the most part, general in scope and they exclude agricultural practices from their jurisdictions. There is no specific legislation on pork production.

Canadian pork producers have followed a recommended Code of Practice for the Care and Handling of Farm Animals for some twenty years. They also have a certification program, the Canadian Pork Council’s Canadian Quality Assurance Program (CQA), which, since January 1, 2012, includes an animal welfare component: the Animal Care Assessment (ACA). The ACA component includes elements such as care of animals, space allowances, housing and environment, employee training, etc. To earn CQA certification, producers must meet the requirements of the ACA program and this is audited. Currently, more than 95% of pork production is in compliance with the CQA program (including the ACA).

Recently, the Pig Code was reviewed to take into account all the main issues that have shaken the pork industry over the last few years: gestation stalls for sows, tail docking and castration, tooth removal, transportation, etc. Currently, the revised Code is under discussion within the industry. One major area of concern is the requirement to shift to loose housing for malted gilts and sows by July 1, 2024. The transition to new group housing systems involves significant costs for Canadian pork producers. According to an analysis conducted by

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the Canadian Pork Council, implementing new systems could cost between $820 and $1,155 per sow, not including transition costs. For the industry, this could represent half a billion dollars.\textsuperscript{20} Currently, there is not much talk of sharing these costs with governments or the marketplace. It should be noted that the final code will be implemented through the Animal Care Assessment (ACA) as a part of the Canadian Pork Council’s Canadian Quality Assurance Program (CQA).

Last April, the Retail Council of Canada (RRC) made a voluntary commitment to only purchase fresh pork from alternative housing environments by 2022. RCC grocery members, namely Co-op Atlantic, Canada Safeway, Costco Wholesale Canada, Federated Co-operatives Limited, Loblaw Companies Limited, Metro Inc., Sobeys Inc. and Walmart Canada Corp, support the Canadian Pork Council’s process to update the Pig Code of Practice.\textsuperscript{21} Some other retailers and food chains that have set deadlines to end the use of crates are Safeway, McDonald’s, Burger King and Tim Hortons. It should be noted that food chains are very proactive in terms of animal welfare. Among the stakeholders in the food industry, they are the first to have defined their expectations concerning animal welfare. In Canada, most of the large food chains have audit programs that include animal welfare issues. They audit their suppliers to ensure that they meet government regulations and recognized industry guidelines.

Besides retailers and food chains, some Canadian processors such as Quebec meat packer Olymel, Canada’s second-largest pork production company, have also committed to ban the use of gestation crates by 2022. According to Olymel, “a ban on the use of gestation crates is inevitable in the medium and long term. Canada, along with the U.S., must follow suit.”\textsuperscript{22} Maple Leaf has also pledged to end the use of gestation crates in its facilities by 2017, as has Kraft Foods (Oscar Mayer’s pork supply chain) by 2022.

4.2 \textbf{United States}

In the United States, pork production is not regulated by any federal legislation: farm animals raised for food are excluded from the \textit{Animal Welfare Act} (AWA; 7 U.S.C. 2131 et seq.). The only federal regulation affecting the pork industry concerns the slaughter and handling of livestock (\textit{Humane Methods of Slaughter Act} (7 U.S.C. 1901 et seq.)) and transportation (\textit{Twenty-Eight Hour Law} (49 U.S.C. 80502)).

At the state levels, some laws apply to farm animals but only a few regulate on-farm treatment standards. However, judging by the last few years, the tendency seems to be changing. Indeed, many states have enacted laws through typical legislative channels or as a result of a ballot initiative regarding the welfare of farm animals, in particular for pig

confinement. Currently, nine states have banned gestation crates (Ohio, Michigan, Colorado, Arizona, California, Florida, Oregon, Maine and Rhode Island) and two states have pending bills (New York and Massachusetts). In May 2013, New Jersey passed an anti-gestation crate bill through its house and senate. However, the bill that would have taken effect on December 31, 2018, was vetoed by the New Jersey Governor in June. Table 4.1 shows the date of implementation of laws in states that have banned gestation crates.\textsuperscript{23}

<table>
<thead>
<tr>
<th>States</th>
<th>Effective date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>December 31, 2012</td>
</tr>
<tr>
<td>California</td>
<td>January 1, 2015</td>
</tr>
<tr>
<td>Colorado</td>
<td>January 1, 2018</td>
</tr>
<tr>
<td>Florida</td>
<td>November 5, 2008</td>
</tr>
<tr>
<td>Maine</td>
<td>January 1, 2011</td>
</tr>
<tr>
<td>Michigan</td>
<td>October 12, 2019</td>
</tr>
<tr>
<td>Ohio</td>
<td>January 1, 2015</td>
</tr>
<tr>
<td>Oregon</td>
<td>January 1, 2012</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>January 1, 2017</td>
</tr>
</tbody>
</table>

Source: NATIONAL AGRICULTURE LAW CENTER. States’ Farm Animal Confinement Statutes.

In the United States, many retailers and food chains have animal welfare policies and audit programs regarding pork production. Following the trend, more than 60 leading food companies have also committed to stop using gestation crates.\textsuperscript{24} It should be noted that American food chains have similar expectations to Canadian food chains (see Section 4.1). The following lines show examples of companies that have animal welfare policies or that have made commitments regarding hog welfare.

- **Safeway**: The second-largest U.S. grocery store has a program to ensure that both of its supplier channels (national brand and private label) respect standards for the humane treatment of animals. In 2012, it made the commitment to stop using any pork suppliers that put pregnant sows in cages as part of the production process.

- **Tim Hortons**: The company has made a commitment to source pork from suppliers who have made a transition to alternative open housing by 2022.

- **Heritage Foods USA**: The company has its own label (Heritage Foods) that contains a traceability number so that consumers can find where the food was produced. To use the label, pork producers must meet humane standards through either the Certified Humane or the Animal Welfare Approved programs.


- **McDonald’s**: McDonald’s has an Animal Welfare Guiding Principles and a program of standards and audit procedures for its farmers. It also committed to ban gestation crates from all its supply chain in the U.S.

- **Wendy’s**: Wendy’s has animal welfare and handling audits. By 2022, the company intends to source pork from suppliers who have made a transition to alternative open housing.

- **Whole Foods Market**: The retailer works with Global Animal Partnership to certify producers’ animal welfare practices. Whole Foods Market has introduced the 5-Step™ Animal Welfare Rating Standards that rates how pigs are raised in every Canadian and American store (cf. Figure 4.1). The retailer appears to offer its customers pork from suppliers rated from 1 to 5, leaving it up to customers to buy the one they want.

- **Harris Teeter**: The company aims to have a gestation crate-free pork supply. It has committed, together with its suppliers such as Smithfield, to accomplish that goal within a reasonable timeframe.

- **ARAMARK**: Has committed to phasing out gestation crates from its U.S. supply chain by 2017.

In the United States, the policies adopted by food chains have put pressure on pork producers. Consequently, many have committed to ban the use of gestation crates. These include Smithfield Foods (SFD), the world’s largest pork producer that was recently bought by the Chinese company Shuanghui International, the multinational Cargill, and Hormel Foods. Smithfield and Hormel have pledged to stop using crates in their company-owned operations by 2017, while Cargill is already 50 percent crate-free.

In addition to laws, a number of certification programs on animal welfare, whether specific or not to the pork industry, have been implemented in the United States. These include:

- **The American PQA Plus® Program**[^26]: Launched in 2007 by the National Pork Board, the program includes an assessment component on animal welfare. Revised in 2013, it aims to build trust among consumers and stakeholders via 10 best production practices, including one related to swine care and welfare. Welfare assessments are either conducted by a trained PQA Plus® Advisor or a trained producer.[^27]

- **The Animal Welfare Approved Program (AWA)**: Launched in 2006, this program is a food label for meat and dairy products that aims to demonstrate the “farmer’s commitment to the care of their animals, the land and the local community.” Certified farmers are audited at least once a year to ensure compliance with specific standards to ensure animal welfare (social interaction, comfort, etc.) The program is voluntary.[^28]

- **Certified Humane Raised and Handled® label**: This certification program aims to ensure that food products come from facilities that meet standards for farm animal treatment. In this program, cages, crates and tie stalls are prohibited practices.

[^27]: Evolved from the PQA and SWAP.
Currently, Certified Humane products are sold in nine of the top 10 retailers, the equivalent of 10,000 supermarkets all over the United States.\(^{29}\)

- **Global Animal Partnership’s (GAP) 5-Step Program**: GAP's 5-Step Animal Welfare Rating Standards is a voluntary certification program for farmers, ranchers, packers, and feeders, including hog producers. Producers are free to achieve the step level they wish. Each step has its own rating. The lowest step (Step 1) prohibits cages and crates. Figure 4.1 shows the different steps of the program. As at October 31, 2013, 562 pig farms\(^{30}\) had earned the certification, only two of which had achieved Step 5+ certification (cf. Table 4.2). As mentioned, this program has been implemented in Whole Food Markets stores in Canada and United States.

![Figure 4.1](source: Whole Food Markets, Official site, 2013.)


\(^{30}\) No information is available about the size of these and the volume they represents in tons of meat at each step.
### Table 4.2

**Audited and certified pig farms by 5-Step Program,**  
**as at October 31, 2013**

<table>
<thead>
<tr>
<th>Steps</th>
<th>Number of pig farms(^1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>378</td>
</tr>
<tr>
<td>Step 2</td>
<td>89</td>
</tr>
<tr>
<td>Step 3</td>
<td>64</td>
</tr>
<tr>
<td>Step 4</td>
<td>29</td>
</tr>
<tr>
<td>Step 5</td>
<td>0</td>
</tr>
<tr>
<td>Step 5 +</td>
<td>2</td>
</tr>
</tbody>
</table>


\(^1\) No information is available about the size of these and the volume they represent in tons of meat at each step.

### 4.3 European Union

As opposed to North America, where the voluntary approach is dominant regarding animal welfare, the European Union (EU) has a regulatory approach. Indeed, the EU has legislation that sets minimum requirements in order to spare animals from any unnecessary suffering in three main areas: farming, transport and slaughter. The Council Directive 2008/120/EC of December 18, 2008 lays down minimum standards for the protection of pigs, notably with regard to painful operations (e.g., castration, tail docking, etc.), space requirements for pigs, weaning of piglets, tethering of sows (banned in 2006), housing of pregnant sows (group housing since 2013), etc. It should be noted that the EU has the power to bring legal action before the EU Court of Justice against countries that do not respect EU legislation.

Among the regulations that have recently had an impact on pork producers, there is the legislation on gestation crates. Back in 2001, the EU passed a regulation stating that all pork producers must get rid of all their gestation crates by January 1, 2013, and replace them with group housing for pregnant sows. As at January 1, 2013, only five countries were in compliance with the new regulation: Austria, Estonia, Luxembourg, Sweden, and the United Kingdom. It should be noted that the United Kingdom and Sweden banned gestation crates in 1999. 0 shows the state of implementation of the partial sow stall ban as at December 2012.
Table 4.3
State of implementation of the partial sow stall ban, January 2013

<table>
<thead>
<tr>
<th>% of compliance</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>Austria, Estonia, Luxembourg, Sweden, United Kingdom</td>
</tr>
<tr>
<td>90% and higher</td>
<td>Bulgaria, Czech Republic, Hungary, Lithuania, Romania, Slovakia</td>
</tr>
<tr>
<td>70-90%</td>
<td>Denmark (85%), Finland (73%) Greece (83%), Latvia (82%), Malta (75%), Poland (80%) Slovenia (72%), Spain (70%).</td>
</tr>
<tr>
<td>Less than 70%</td>
<td>Cyprus (48%), Belgium (45%), France (33%), Germany (48%), Ireland (57%), Italy (69%), Netherlands (63%), Portugal (63%).</td>
</tr>
</tbody>
</table>


Recently, EU pig farmers also signed the European Partnership on alternatives to surgical castration of pigs. This voluntary declaration aims to end the surgical castration of pigs in Europe by January 1, 2018. Since January 1, 2012, surgical castration of pigs can only be performed with prolonged analgesia and/or anaesthesia. 31

To ensure fairness for European companies and exporters, the EU includes animal welfare issues in trade agreements. Thus, EU farmers that have to invest to meet the high animal welfare standards of the EU are not disadvantaged in comparison to competitors from countries with low animal welfare standards. This will have to be taken into account when the time comes to estimate the potential market that the EU-Canada trade agreement could open to the Canadian pork industry. We will discuss this point in the following section.

In addition to the EU legislation, some EU countries, including top pork exporters, have enacted their own legislation on animal welfare, which is sometimes more demanding than the EU legislation. Denmark is one of these countries. Although Denmark’s animal legislation (Danish Animal Protection Act) is linked to EU Directives, it surpasses the EU requirements in many areas. 32 For example, Denmark owns a mandatory provision of showering systems and specific requirements for fixed or drained flooring, hospital pens and vehicles for transporting pigs.

Besides legislation, other initiatives and practices are also in place in the EU to promote animal welfare. Recently, Danish Crown and Tican, two Danish meatpackers, launched a new initiative for a pork welfare label. The label, called 'Welfare Pig,' will be established in collaboration with animal welfare organizations and Danish Pig Research. Labelled pork will have to meet the following conditions: no tail docking, more straw-based pig housing and...

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32 But even with this stricter legislation, the degree of implementation in Denmark of the EU sow stall ban is not yet at 100% (0).
sows in group housing throughout the pig cycles. An incentive of €0.27/kg (CDN$0.38/kg)\(^{33}\) will be given to pork producers that meet the conditions.\(^{34}\)

In **Germany**, distributors have recently invested in animal welfare. The German hard discounter Lidl and the companies Edeka, Rewe and Real have announced there will be financial support for farmers who adopt good animal welfare practices (no castration, increased surface per animal, etc.). Funding will range from €10M to €100M\(^{35}\) (CDN$14M and CDN$141M)\(^{36}\).

### 4.4 Australia

Like the European Union, Australia is one of the world leaders in animal welfare. The pork industry has its own strategy, the Australian Pork Industry Animal Welfare Strategy, which covers issues such as farming practices, transportation, supply chain through to consumers, quality assurance, research and development, and communications. The pork industry also has a national Model Code of Practice for the Welfare of Animals that was developed in collaboration with animal industries, welfare groups and relevant State and Australian Government authorities. This Code, revised in 2007, encourages efficient and considerate treatment and handling of pigs in all types of production systems. It includes, in particular, recommendations as to the use of sow stalls, training of staff and pen size. According to the Code, from 2017, the use of sow stalls will be limited to 6 weeks. It should be noted that the terms of use for sow stalls, especially the period of confinement, are yet to be determined. In spite of this, the two largest Australian retailers (Coles and Woolworths) have decided to comply with it and as a result, the whole of the pork industry is following suit.

As at April 2012, about one in three sows were spending their pregnant lives sow stall-free. The initial capital investment cost of moving to sow stall-free housing is estimated at AUS$78,300 for a medium-sized pig producer (100 stalls at $783/stall). For the industry, this would represent at least AUS$46M. Australia’s was the first pig industry in the world to make such a voluntary move, without regulations. No governmental financial compensation is offered to pork producers. However, retailers are offering an incentive (see Section 5.5). In Australia, pork production is mainly intended for domestic consumption, so this move toward animal welfare addresses first and foremost local consumption concerns.

Two other codes are relevant to the pork industry: the Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments and the Model Code of Practice for the Welfare of Animals: Animals at Saleyards. In Australia, the State and Territory governments have the principal responsibility for animal welfare and are responsible for

\(^{33}\) On November 15, 2013, 0.27 Euro = 0.38 Canadian Dollar, at an exchange rate of 1.4097 (using nominal rate).


implementing legislative provisions. Thus, each province and territory possesses its own regulations on animal welfare.

The Australian pork industry also has a voluntary quality assurance program, the Australian Pork Industry Quality Program (APIQ), which covers food safety, biosecurity, management, traceability and animal welfare. The APIQ, administered by Australian Pork Limited (APL) was initially launched “to enhance the reputation of the Australian pork industry as a reliable supplier of safe, healthy and wholesome pork.” The APIQ’s animal welfare component is based on the Model Code of Practice. The program includes annual independent audits. Producers in non-compliance with the Code are required to develop a timetable to resolve the issue. Currently, about 87% of the national herd is accredited by the program.\(^{37}\)

In addition to the general program, three other Australian Pork Industry Quality programs (APIQ) are available to Australian pork producers:\(^{38}\)

- APIQ Outdoor Bred
- APIQ Gestation Stall Free
- APIQ Free Range

In Australia, some retailers, including the two largest, Coles and Woolworths, which control 80% of the Australian market,\(^{39}\) have very strict policies regarding animal welfare. For example, Coles launched a sow stall policy in 2010 with standards higher than those included in the Australian Code but similar to those required on the British market. Although the deadline for its policy is 2015, Cole already sources fresh pork for its Coles brand from farms where sows are stall-free. As of 2014, the company will extend the ban to processed products (bacon and ham) in the Coles range and to imported pig meat.\(^{40}\) The import policy is intended to protect Australian producers, as 70% of pork sales come from imports.\(^{41}\) Like Coles, Woolworths also sources the vast majority (99%) of its fresh pork meat from farms that only use stalls for less than 10% of the sows’ gestation period.\(^{42}\)

### 4.5 Brazil

In Brazil, the Ministry of Agriculture, Livestock and Food Supply (MAPA) regulates animal welfare through the following legislation:

- Decree no. 30.691 of 1952: regulation on industrial and health inspection of animal products

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In 2008, the Ministry of Agriculture created the Permanent Technical Commission for Animal Welfare, which aims to coordinate and promote actions concerning animal welfare. In 2013, the Brazilian authorities announced the creation of an international certification, “Brasil Certificado,” for livestock farming. The Permanent Technical Commission for Animal Welfare is the organization in charge of issuing certification. Farmers will be audited in accordance with hygiene and environmental practices (nutrition, health, welfare and environment). The certification is intended to reassure importing countries about farming conditions in Brazil.44

4.6 Chile

In Chile, the inclusion of animal welfare in the Chile-EU bilateral Free Trade Agreement in 2003 was the element that led to the institutionalization of animal welfare in the country. Through the SAG (Agriculture and Livestock Service), Chile has developed regulations for the welfare of animals, mainly during transport and slaughter. At first, the rules were based on a voluntary approach: Chile did not have any regulations on animal welfare. Today, three new regulations, implemented in May 2013, oversee animal welfare.

- A regulation on industrial production, marketing, and buildings for looking after animals: the Service can require contingency plans (provable training, suitable premises, etc.)
- A regulation on transportation and livestock
- A regulation on benefits and slaughtering of livestock for human consumption and in cases of human or natural public health emergencies: proper handling and transportation of livestock, restraint and stunning methods, etc.45

The EU-Chile Association Agreement was the first bilateral trade agreement to take animal welfare into consideration. In Chile, respect for animal welfare has brought new economic opportunities for Chilean pork exporters, especially in the EU.46

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4.7  **China**

In China, farm animal welfare is a relatively new issue. In 2006, the Ministry of Agriculture of China implemented the Animal Husbandry Law (AHL), a law that specifically considers suitable conditions for breeding and life on a livestock and poultry farm (AHL article 42) and for transportation (space, fodders and water) (AHL article 53). In 2011, China published a book of Best Practices for the Welfare of Farm Animals, which is based on OIE animal welfare regulations.\(^{47}\) China’s membership in the World Organisation for Animal Health (OIE) was reinstated in 2007. China has also implemented a website that provides information on the welfare of farm animals (http://www.cfaw.net.cn). In addition, some large-scale Chinese export enterprises such as China Hao Yue have adopted the same practices as developed countries in terms of animal welfare (space requirements, farming, transportation and slaughter).\(^{48}\)

\(^{47}\) The OIE Guiding Principles on Animal Welfare were included in the Terrestrial Code in 2004.

4.8 SUMMARY

Table 4.4 summarizes the principal legislation and programs on animal welfare that provide a framework for production in the largest pork-producing countries.

- All countries have voluntary programs on general animal welfare, such as a code of practice or certifications.
- The use of gestation stalls is regulated by law in some jurisdictions: European Union and nine U.S. states.
- Canada and Australia have voluntary programs concerning the use of gestation stalls.
- In Brazil, Chile and China, there are currently no voluntary programs governing the use of gestation stalls.

Table 4.4
Legislation and programs on animal welfare that provide a framework for pork production in various countries

<table>
<thead>
<tr>
<th>Markets</th>
<th>Voluntary programs</th>
<th>Legislation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General</td>
<td>On gestation stalls</td>
</tr>
<tr>
<td>Canada</td>
<td>Yes (Code of practice for pigs)</td>
<td>Pending revisions to the industry Code of Practice</td>
</tr>
<tr>
<td>U.S.</td>
<td>Yes (American PQA Plus® Program and other certifications)</td>
<td>Yes (Animal welfare certifications)</td>
</tr>
<tr>
<td>EU</td>
<td>Yes (e.g., European Partnership on alternatives to surgical castration of pigs)</td>
<td>Yes (Certifications)</td>
</tr>
<tr>
<td>Australia</td>
<td>Yes (Code of practice)</td>
<td>Yes (Certifications and Code of practice)</td>
</tr>
<tr>
<td>Brazil</td>
<td>Yes (Certification since 2013)</td>
<td>No</td>
</tr>
<tr>
<td>Chile</td>
<td>Yes (Rules based on a voluntary approach)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Yes (Book of Best Practices)</td>
<td>No</td>
</tr>
</tbody>
</table>

5. EXPECTATIONS OF MARKETS SERVED BY CANADA

Consumer concern for the welfare of farm animals is growing amidst the modern systems of intensive farming that were developed in the 1960s. The trend was first observed in developed countries, particularly in English-speaking countries such as the United Kingdom. Today, these concerns have risen to a global scale because of the many stakeholders that have promoted animal welfare worldwide. Although the trend can be observed on a global scale, some countries and buyers are more demanding than others in terms of animal welfare. Indeed, consumer attitudes toward animal welfare are mainly influenced by individual beliefs and values, cultural influences and socio-economic development in society. At the retail level and for food chains, it is also about adopting a strategic position, within an overall social corporate responsibility policy or a responsible procurement policy, for instance. It should be noted that in the pork industry, requirements pertain mainly to the use of gestation crates and castration.

This section presents an overview of the main trends concerning animal welfare observed in markets served by Canadian pork. The information presented was obtained from documentation and interviews conducted with key stakeholders in the pork industry (retailers, producersprocessors, industry representatives on export markets, fast food chains, etc.). Eight individuals were interviewed in Canada, the United States, Australia and France.

5.1 CANADA

In Canada, consumer concern about animal welfare is a growing issue. According to a recent survey carried out by the University of Guelph on animal welfare and its place in the value chain, “60% of Canadians rate animal welfare a 5 or higher on a scale of 1 to 7, and a similar number agree that government should take a strong role in ensuring animal welfare.” However, along with nutrition, animal welfare still ranks in the second tier of importance when purchasing food, after price, freshness, taste, and safety (top tier) but before environmental factors, the brand name and organic products. This survey also found that although Canadian consumers care about animal welfare, few are aware of the rearing conditions used in agriculture: less than 20% of respondents gave correct answers to questions on production (free range, free run, antibiotics, etc.). Nevertheless, “consumers want to know more information about how the food is produced and say it will influence their choices. They are unsure about how the food they buy is produced: about 50% of respondents are aware of the housing systems used for the pork they purchase.”

In connection to this lack of knowledge, 50% of respondents agree or strongly agree that some

49 VAV MASSOW, Michael. University of Guelph, Animal Welfare in the Value Chain, 2012. This survey was conducted by among 1000 Canadian consumers.

labels should provide a clearer indication of the conditions in which the animals were reared. In short, Canadian consumers have an emotional interest in animal welfare but they have little awareness of rearing conditions, how animal welfare is measured in practice and the certifications related to animal welfare. Furthermore, their concerns and values regarding production methods do not always influence their buying habits. Price still remains the number one factor.

Currently, although many Canadian consumers care about how the animals are raised, only a few actually buy products that take animal welfare into consideration. According to the retail industry, specific labels such as free range, free run, antibiotic-free, etc., still generate relatively poor sales on the market, even though their market share is slowly growing (less than 1%). Grocery stores demand these products because consumers want to see them on the shelves. This allows retailers to adopt a strategic position and make a commitment to overall corporate social responsibility. However, they often have to absorb losses and these products offer low profitability for grocery stores. Consequently, many stores decide to discontinue sales of these products. According to the retailers surveyed, **Canadian consumers are not willing to pay more for specific products such as free range, free run, antibiotic-free, etc.** These products are usually sold at a price that is between 40 and 60% higher than regular products. “Canadian consumers are looking for a product that is local, antibiotic-free, hormone-free, fat-free, delicious and not expensive. But this product does not exist on the market.” Managing supply and demand for specific and niche products is a big issue for retailers. One solution may be to sell frozen products. This could allow retailers to manage stock easily, thus reducing the extent of their losses. But on a mid-term horizon, statistics show that consumers are buying more and more from food discounters. According to a survey conducted in Quebec, in 2017, discounting will represent 50% of the food market, compared to the current market share of 35%.

Another issue with specific products such as those that respect animal welfare standards is the difficulty for buyers to maintain a constant inventory. Not many suppliers offer specific products, especially ones that meet animal welfare standards. Consequently, products are only available in limited quantities and supply frequently fluctuates throughout the year.

In Canada, only a few large retailers sell pork products that respect animal welfare standards. For example, since September 2013, Sobeys now offers meat, including pork, that meets Certified Humane® standards as a part of its “Better Food For All” initiative, which aims to make better food accessible to Canadians. The products are distributed all across Canada under its various banners (Sobeys, IGA, FreshCo, Farmland, Safeway, etc.). Sobeys sources its pork from DuBreton Pork, the largest producer and processor of organic and natural pork in North America. DuBreton produces a “Rustic Farm Pork” that meets Certified Humane® standards. Its Certified Organic Pork is “cage-free.” However, unlike its Organic Pork, its Rustic Farm

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51 NIELSEN GROCERYWATCH, Quebec, Projections according to various scenarios, based on percentages of growth observed in 2012.
Pork does not ensure that animals have outdoor access and pigs do not eat organic grains. Most of the pigs used by DuBreton to produce “rustic pork” are raised in Ontario. Currently, DuBreton markets its products all across Canada and in the North-East of the United-States.

As mentioned previously, many large retailers have made a voluntary commitment to only purchase fresh pork from alternative housing environments by 2022. For Loblaws, this commitment is in addition to the commitment it announced in 2011 to transition all its private label eggs to cage-free. According to Sonya Fiorini, senior director of corporate social responsibility for Loblaw Companies, Canadian consumers expect improvements in the handling and housing of animals raised for food. Loblaws has committed to only buy fresh pork from sows raised in alternative housing by 2022 because it is what consumers want. Loblaws decisions are based on what consumers want: “lower prices, healthier choices, great value, quality, and ethical and sustainable sourcing.” But the retailer remains unclear as to the price at which this pork from alternative housing environments is likely to be sold.

Like retailers, many food chains have committed to ban gestation stalls for sows. These commitments were mainly intended to respond to the demands of animal welfare groups, which have campaigned heavily against the use of sow stalls. Likely tied to an increase in consumer awareness about how animals are treated on industrial farms, farm animal protection campaigns have gained significant traction in recent years, both in Canada and around the world. As specified in Section 4.1, food chains are the first stakeholders in the industry to have taken such a decision concerning gestation stalls for sows. They are currently the stakeholders with the most clearly-defined expectations concerning animal welfare. It should be mentioned that food chains are leading the way for animal welfare in most countries, except in Australia and the United Kingdom, where retailers have also been highly proactive from the very beginning.

Currently, the retail market and the restaurant industry account for between 85 and 90% of Canadian pork consumption.

5.2 United States

Like in most countries, concern about farm animal welfare is relatively low compared to food safety in the United States. However, like in other developed countries, American consumers are increasingly aware of how animals raised for food are treated. According to a survey conducted by Texas A&M University, 69% of American consumers said that animal welfare was important to them: 36% answered that it was somewhat important, 22% said it was very important, while 11% said it was extremely important. However, when asked how often they purchased free range/cage-free products, 63% indicated less than once every 2–3 months. Nevertheless, it should be noted that this percentage was higher than for natural/organic and grass-fed products, respectively 50% and 60%. According to the results of this survey,

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53 Excludes institutional market (prisons, hospitals, etc.).
54 No comparison available about the purchasing frequency of regular products.
“although American consumers are emotionally invested in animal welfare, those emotions did not necessarily reflect purchasing habits.”

One reason that could explain this conclusion is that very few Americans are willing to pay more for food that is “humanely raised.” In a recent survey commissioned by Whole Foods Market, only one in four respondents said they were willing to pay more for meats from animals raised under human animal husbandry standards. In the same survey, the majority of American consumers (64%) considered themselves as “value seekers,” i.e. people who are very aware of prices, bargains, coupons, and specials. Conscious shoppers, that is to say people who seek out organic, sustainable, fair trade, local foods and growers accounted for only 17%. It should be noted that this survey was conducted on behalf of Whole Foods Market, Inc. between August 3-7, 2012, among 2,274 adults aged 18 years and over.

Like in Canada, food chains in the United States are taking the lead in terms of animal welfare. In both countries, they have the same expectations about animal welfare standards. In the United States, the major food chains (McDonald’s, Wendy’s, Burger King, etc.) have put a lot of pressure on large pork producers to convert to free-stall housing. As mentioned previously, some large producers such as Smithfield have already begun to convert to a free-stall environment.

5.3 EUROPEAN UNION

As mentioned in Section 4.3, the EU is highly proactive in regard to animal welfare. European citizens are concerned about animal welfare, but it is not their primary concern. According to a survey conducted in June 2010 by the European Food Safety Authority about food-related risks, most European citizens are moderately concerned about animal welfare, that is to say that between 20% and 28% of Europeans are “highly concerned” about this issue. They are more concerned about pesticide residues, residues such as antibiotics and hormones in meat, pollutants such as mercury in fish and dioxins in pork, and cloning animals for food products. All of these attributes were qualified as high risks, meaning that at least 33% of respondents said that they are “highly concerned” about these issues. This sensitivity can be partly explained by the fact that the EU has been rocked by food crises linked to hormones and food safety.

58 The survey (Special Eurobarometer 354, Wave 73.5) was carried out on a representative sample of 26,691 individuals, age 15 or over and was conducted through face-to-face interviews with consumers from all 27 Member States.
Nevertheless, animal welfare is a growing preoccupation for EU citizens. Since 2005, when the previous survey on risk issues was conducted, the percentage of EU citizens concerned about farm animal welfare has risen from 60% to 64%. It should be noted that no country saw a decrease of concern regarding animal welfare. Some EU countries, however, showed higher levels of concern about animal welfare. These include Luxembourg, Portugal, Denmark, Sweden, and Italy. In the 2010 survey, these countries all had a percentage of consumers expressing concern about farm animal welfare higher than 68%. By contrast, Romania, Bulgaria, and Hungary were the countries where the level of concern was the lowest. It should also be pointed out that although concern for animal welfare was below 68% in the UK (67%) and Finland (66%), it was the top concern expressed by citizens from these countries. Figure 5.1 shows the percentage of consumers expressing some level of concern about animal welfare in EU countries in 2010.

![Map Legend](https://www.efsa.europa.eu/en/riskperception/docs/riskperceptionreport.pdf)

Figure 5.1
Percentage of consumers expressing some level of concern about farm animal welfare in EU countries, 2010


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Although the EU has high standards concerning animal welfare (ban of gestation crates, etc.), these standards are not currently mandatory for imports. However, most Canadian pork plants are not recognized by the EU in terms of equivalence of standards, i.e. the Pig Code. Therefore, most Canadian plants cannot export to the EU. The Trade Agreement discussed in October 2013 suggests that the EU may review its standards for Canadian plants. However, nothing can be taken for granted.

5.4 **ASIAN COUNTRIES**

In most Asian countries, animal welfare is not a concern for the majority of the population. In countries where there is an increase of interest, the focus is mainly on stray animals and pets, animals used for entertainment and on issues associated with transportation and slaughter. Until now, farm animals (farm practices) have received little attention.\(^6^0\)

According to Canada Pork International (CPI), Asian consumers mainly pay interest to health and hygiene standards when buying food products, even in developed countries and fussy markets such as Japan. They want to buy products with strict hygiene standards in order to avoid food contamination and poisoning. They are even willing to pay a premium for foods that meet high hygiene standards. So far, CPI does not use animal welfare standards in its branding to market pork in Asian countries. To reassure Asian consumers, especially Japanese buyers, CPI focusses on:

- Compliance with the Canadian Pork Council’s Canadian Quality Assurance Program (CQA)
- Traceability: will be mandatory from January 2014
- HACCP (Hazard Analysis and Critical Control Points) certification for production plants

Currently therefore, animal welfare is not a purchase standard on the Asian market. But like we said earlier, if a specific retailer or food chain were to demand it, the story may change, at least for a niche market within those countries.

5.5 **AUSTRALIA**

In Australia, animal welfare is the third-highest priority for consumers when buying food. **Australian consumers expect pigs to be raised in good conditions: animal welfare is seen as a standard that the industry must meet and not a niche market.** For this reason, many Australian retailers have enhanced their animal welfare standards over the last few years, particularly with regard to the use of sow stalls. As mentioned in Section 4.4, the two largest retailers, Coles and Woolworths, which represent 80% of the retail market, have implemented their own policies on animal welfare in response to demand from customers who want more responsibly-sourced products.\(^6^1\) These policies, more demanding than the

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standards adopted by the pork industry, have obliged many pork producers to adopt new animal welfare practices. Most producers have decided to make the transition because they did not want to lose opportunities for their products. Many Australian producers have concluded that animal welfare is a trend on the market and that they have to comply with the standards.

The new policies implemented by Australian retailers have already cut opportunities for pork imports from many countries, including Canadian and U.S. imports. According to Coles, the Canadian and U.S. industries have not enhanced their standards on animal welfare to comply with Coles’ requirements. Consequently, Coles stopped buying fresh pork from Canada and the United States about a year ago. According to Smithfield, the largest pork producer in the United States, pork exports to Australia were too small in terms of volume to justify the upgrading process. Coles now sources its fresh pork imports from European suppliers, including pork suppliers that meet British standards and Danish Crown (a supplier from Denmark). Notably, Coles buys around 10,000 pigs per week from 100 local pork producers. It should be noted that until now, Australia and the United Kingdom are the only countries where retailers have formulated clear expectations about animal welfare and precise procurement standards, especially regarding the use of pig stalls, to their suppliers.

Although Canada no longer supplies the two largest retailers (previously Canadian pork was used in the manufacture of private-label products for Coles and Woolworths), it continues to supply Australian processors. These use Canadian pork to make products sold under their name (not stall-free products), under private labels (other than Coles and Woolworths) or sold to the food service industry. Currently, hygiene standards continue to be the most important required standards for pork imports since Australia is free of Porcine Reproductive and Respiratory Syndrome (PRRS). Nonetheless, from 2017, the situation could change since the Australian industry code will limit the use of sow stalls from five days after mating and until one week before they are ready to give birth, and more and more retailers are adopting very high standards regarding animal welfare.62 To keep its market share in Australia, the Canadian industry may therefore be forced to comply with the Australian standards, at least, the standards included in the Australian Code. The Canadian Pig Code may not be sufficient. According to one retailer, “Australia is a patriotic country which would certainly boycott a supplier for any country that would not respect the animal welfare standards set in the country, and this, without State interference.”63

It should be noted that despite the fact that Australian consumers seem to be very concerned about animal welfare, they are no more willing to pay a higher price for products that respect animal welfare standards than consumers in other countries. In the case of Coles, it is the retailer that has absorbed the cost of the transition to stall-free farms. Specifically, the retailer has offered a subsidy to cover the extra cost of production resulting from the new standards.

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63 Jackie Healing, Coles, Australia, November 2013.
5.6 Russia

Russia does not have any animal welfare standards when buying pork products. Its primary areas of concern revolve around hygiene standards. In December 2012, Russia said it would no longer buy pork from pigs fed with ractopamine, an additive licensed by Health Canada mainly used to increase carcass leanness and weight gain. It should be noted that the use of ractopamine is forbidden by the EU, China and Taiwan. In response to the ban, the Canadian pork industry has developed a ractopamine-free certification program to reassure its export markets. Many companies have also modified their plants to become 100% ractopamine-free and thus comply with the new Russian requirement.

This shows how quickly the Canadian industry, or some of its major players, can respond when there is a market access issue. One can assume that a similar reaction may be seen for the adoption of animal welfare standards, if the loss of a significant market were to be an issue.
6. **ECONOMIC VALUE OF ANIMAL WELFARE STANDARDS**

This section shows the potential economic impacts of adopting or failing to adopt the new Canadian Pig Code, on both a short-term and a long-term horizon. The impacts are calculated by estimating the potential gains or the potential losses on the Canadian market and on export markets served by Canada. “Potential gains” infers access to new markets while “potential losses” infers a loss of access to certain markets. It should be noted that potential losses would put pressure on the price of pork and could therefore affect industry revenues.

The data used to calculate market opportunities are pork exports by quantity and value for the year 2012 (cf. Table 6.1).

**Table 6.1**

<table>
<thead>
<tr>
<th>Markets</th>
<th>Quantity (tons)</th>
<th>Value ($CDN '000)</th>
<th>$/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia¹</td>
<td>471,401</td>
<td>1,337,532</td>
<td>2.84</td>
</tr>
<tr>
<td>United States</td>
<td>320,407</td>
<td>981,113</td>
<td>3.06</td>
</tr>
<tr>
<td>Russia</td>
<td>207,046</td>
<td>491,887</td>
<td>2.38</td>
</tr>
<tr>
<td>Mexico</td>
<td>60,941</td>
<td>82,433</td>
<td>1.35</td>
</tr>
<tr>
<td>Philippines</td>
<td>40,545</td>
<td>54,592</td>
<td>1.35</td>
</tr>
<tr>
<td>Australia</td>
<td>29,150</td>
<td>99,260</td>
<td>3.41</td>
</tr>
<tr>
<td>EU</td>
<td>3,668</td>
<td>8,746</td>
<td>2.38</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,189,260</strong></td>
<td><strong>3,199,858</strong></td>
<td><strong>2.69</strong></td>
</tr>
</tbody>
</table>

¹ Japan, South Korea, China, Hong Kong, Philippines and Taiwan.

Source: CANADA PORK INTERNATIONAL, 2013.

### 6.1 SCENARIO 1: ADOPTION OF THE CODE, SHORT TERM – 3- TO 5-YEAR HORIZON

In the short term, adopting a mandatory phase-out of the use of gestation crates in the revised Code of Practice will likely enhance opportunities in the European Union if CETA is completed and the Canadian pork industry seeks to carve out a share of the European market. Currently, buyers that have high standards concerning the use of sow stalls are few and far between on both the domestic and international markets. It should be noted that Australia was not considered to be a market that could bring new opportunities, particularly at the retail level, because the two largest retailers have very strict standards concerning the use of sow stalls. These standards could not be met by the Canadian Pig Code of Practice, even in the expected revised version.

- **EU**: The adoption of the Code could bring some market opportunities in the EU, especially with the new agreement for 80,000 tons, assuming the agreement is
ratified within the next 3 years. However, Canadian pork plants will have to be recognized by the EU in terms of equivalence of standards. In addition, the standards concerning the use of sow stalls included in the Canadian Code will have to be similar to the ones required in the EU. Considering that exports to the EU earned $2,385/ton in 2012\(^4\) and that Canada Pork International evaluated that the agreement could lead to exports valued at $400M annually (cf. 3.2.2), this could generate additional income of $190M to $400M.\(^5\) This additional income may seem low, but small markets allow an industry to optimize its revenues: the more markets an industry has, the greater its diversification and the more it can optimize its returns. As we said earlier, the price on the European market is much more attractive than the prices obtained in Russia or China, for example.

Potential gains = $190M-$400M

6.2 SCENARIO 2: FAILURE TO PHASE OUT GESTATION CRATE HOUSING SYSTEM, SHORT-TERM – 3- TO 5-YEAR HORIZON

In the short term, a failure to address the issue of gestation crate housing with a mandatory phase-out of these housing systems in the new Code of Practice could impact Canada’s ability to develop new markets for itself in the European Union following the finalization of CETA.

- **Canada**: The commitment of most retailers and food chains to stop sourcing from farms that use sow stalls will not take effect before 2022. Thus, there will be no impact on the Canadian market in the short term.

- **United States**: Like in Canada, most food chains and retailers have given pork producers until 2022 to convert to free-stall housing. This means there will be no impact on the U.S. market.

- **Australia**: Failure to adopt the Code will result in potential losses on the retail market, especially for the largest retailers Coles and Woolworths. However, Australian processors will continue to buy Canadian pork to supply food services, retailers’ private labels and company brands that have no commitment concerning the use of sow stalls. Taking the overall situation into consideration, the Canadian pork industry will not lose market share in Australia in the short term; there will simply be a shift of buyers, from retailers to processors. Indeed, this is already the case since Coles and Woolworths announced their expectations about animal welfare; Canadian exporters did not lose the Australian market, rather a portion of the retailer segment. We should remember that the new recommendations concerning the use of stalls (pregnant sows will be kept in loose housing from five days after mating, until one week before they are ready to give birth) will take effect in 2017.

- **Asia**: Failure to adopt the Code will not have any impact on the Asian market as animal welfare is not currently an issue in Asia.

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\(^4\) 3,668 tons were exported for a total value of $8,760,000 in 2012 (source: Canada Pork International).
\(^5\) 80,000 tons x $2,385/ton.
• **EU**: Failure to adopt the Code could put the Canadian pork industry at risk of losing the market opportunities that will come with the new agreement between Canada and EU, again on the assumption that the agreement is ratified within the next 3 years. In terms of revenues, these could reach $190M to $400M.\(^66\) As mentioned, since legislation regulates the use of sow stalls in the EU, the EU is likely to require its standards to be met for imports in the near future, especially when establishing a new agreement with a country.

Potential losses = $190M-$400M

### 6.3 Scenario 3: Adoption of the Code, Long-term – 10-15-Year Horizon

In the long term, the adoption of the Code could allow the Canadian pork industry to maintain its market opportunities in countries where the use of sow stalls is regulated or banned by buyers.

- **Canada**: Since many stakeholders (retailers, food chains and meat processors) have committed to only source pork from suppliers that do not use gestation stalls by 2022, the adoption of the Code will allow the Canadian pork industry to continue supplying these buyers. In the event that all Canadian retailers and food chains were to commit to only purchase pork from free-stall farms, the Canadian pork industry could continue to supply the equivalent of 85 to 90% of Canadian pork consumption.\(^67\)

- **United States**: Like in Canada, many retailers and food chains have committed to stop sourcing from farms using gestation crates by 2022 or earlier. In the near future, we can assume that these numbers will increase because large retailers such as Walmart will adopt these policies sooner or later. As well as conserving opportunities on the retail and food chain markets, the Canadian pork industry will also be able to keep supplying buyers in states where the use of gestation stalls is regulated, particularly in Ohio and in California (cf. Figure 3.1).

- **Australia**: The adoption of the Code may not be sufficient to allow the Canadian pork industry to supply the largest retailers (Coles and Woolworths) in Australia. It will depend on the standards they require. As mentioned, some have very strict policies concerning animal welfare. However, it should be enough for Canada to continue to supply the pork processors. In the short term therefore, a shift from retailers to pork processors is more likely to be observed than a market loss.

- **Asia**: Despite the fact that animal welfare is not currently an issue in Asia, the trend could change in the distant future. We should remember that international food chains, such as McDonald’s and Burger King, are present in the Asian market. These chains may decide to extend their policies on animal welfare to these countries.

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\(^66\) 80,000 tons x $2,385/ton.

\(^67\) As mentioned previously, retailers and food chains account for some 85 to 90% of total pork consumption in Canada.
However, it would be very surprising to observe this change on a 10-year horizon. Asia is the market which offers the best opportunities for Canadian pork.

- **EU:** From a short-term perspective, the adoption of the Code could bring some market opportunities in the EU, especially with the agreement for 80,000 tons. On a long-term horizon, there is no doubt that the agreement would be ratified by then. Assuming that the quota will remain the same in the future, that is to say 80,000 tons, Canadian pork plants will still have to be recognized by the EU in terms of equivalence of standards. Considering that exports to the EU earned $2,385/ton in 2012, this could generate revenues of $190M to $400M.

Potential gains = $190M-$400M

### 6.4 Scenario 4: Failure to phase out gestation crate housing system, long-term — 10-15-year horizon

In the long term, failure to adopt the Code could result in potential losses on domestic export markets, and ultimately in a loss of market share. If the Canadian pork industry loses a number of markets on which to sell its pork, it may not be able to find other buyers or markets for its entire production, certainly not in high-value markets such as Australia and the United States. In addition, now that its competitors have adopted free-stall housing, the Canadian pork industry may become uncompetitive on the market.

- **Canada:** Given the position on sow stalls taken by retailers, food chains, and large foreign producers such as Smithfield and Danish Crown, the Canadian pork industry could lose opportunities on the Canadian market because there will be some competitors able to comply with retailer and food chain expectations. Assuming that 25 to 50% of retailers and food chains would adopt standards concerning the use of sow stalls, which represents between 22.5 and 40.5% of the total value of the Canadian pork industry on the domestic market ($1.9B in 2011), the Canadian pork industry could lose sales opportunities of $427M to $855M.

- **United States:** Just like it could in Canada, the Canadian pork industry could also lose market opportunities and eventually market share in the United States on the retail and food chain markets. Let’s recall that the pork industry is fairly integrated on a North American scale and that the industry’s development in the U.S. and Canada is closely linked. Therefore, if the Canadian pork industry does not adopt the new Code, it would be surprising to see the U.S. industry press ahead alone. This may be the case, however, for some specific processors, such as Cargill, which could individually adopt strict standards for animal welfare. Individual Canadian producers could also do the same (such as Olymel or Maple Leaf). However, for the purposes of this exercise, let us assume that no Canadian producers would do so. Assuming that, like in Canada,

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68 3668 tons were exported for a total value of $8 760 000 in 2012 (source Canada Pork International).
69 80 000 tons x 2385$/ton.
70 As mentioned, about 90% of the pork sold in Canada goes to the retail and the food chain markets. It is possible to assume that discounters could agree to source from supplier using sow stalls, if the price is better.
the retail and food chain markets account for 90% of total Canadian pork exports in the U.S. and that between 25 and 50% of all retailers and food chains were to adopt new standards, failure to adopt the new Code could result in a loss of $220M to $440M\textsuperscript{71} for the Canadian industry.

- **Australia:** Australia is very forward-thinking in terms of animal welfare. As mentioned, animal welfare in Australia is not seen as a niche market but rather as a standard required for the industry. In the long term, we can assume that free-stall housing for sows will be required by all Australian stakeholders, since many Australian producers have already made the transition to a free-stall environment. Assuming that between 50 and 75% of stakeholders would require their suppliers to comply with high animal welfare standards, this would result in a loss of $50M to $75M\textsuperscript{72} for the Canadian industry.

- **Asia:** As cited, despite the fact that animal welfare could ultimately become an issue in Asia, especially for the international food chains, this is likely to be on a more distant horizon than 10 years from now. In addition, we can assume that, like in other countries, the transition will be implemented over a number of several years. Canada will therefore conserve its opportunities on the Asian market.

- **EU:** Failure to adopt the Code will prevent the Canadian industry from taking advantage of the new agreement. The Canadian pork industry could therefore lose a market opportunity estimated at between $190M and $400M.\textsuperscript{73}

Potential losses = $0.89B to $1.77B

The next table summarizes the forecast in the four scenarios, holding all other factors constant:

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\textsuperscript{71} 23\% to 45\% of total exports in the U.S. ($981,113M).  
\textsuperscript{72} 50\% to 75\% \times \text{total exports in Australia} ($99,260M).  
\textsuperscript{73} 80,000 \text{tons} \times $2,385/\text{ton}. 
### Table 6.2
Estimation of economic value of animal welfare standards, according to 4 scenarios  
(potential annual gain or losses)

<table>
<thead>
<tr>
<th>Scenarios</th>
<th>Potential gain</th>
<th>Potential losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adoption of the code, short term horizon (3-5 years)</td>
<td>EU: $190 M - $400 M</td>
<td></td>
</tr>
<tr>
<td>Failure to phase out gestation crate housing system, short term horizon</td>
<td></td>
<td>EU: $190 M - $400 M</td>
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<tr>
<td>(3-5 years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adoption of the code, long term horizon (10-15 years)</td>
<td>EU: $190 M - $400 M</td>
<td></td>
</tr>
<tr>
<td>Failure to phase out gestation crate housing system, long term horizon</td>
<td></td>
<td>EU: $0.89 B - $1.77 B</td>
</tr>
<tr>
<td>(10-15 years)</td>
<td></td>
<td>Australia: $50 M - $75 M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>USA: $220 M - $440 M</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Canada: $427 M - $855 M</td>
</tr>
</tbody>
</table>
7. Conclusion

In the short term, failure to adopt the Code of Practice is unlikely to result in a loss of market share for the Canadian pork industry, but rather in a loss of market opportunities. Indeed, the industry may turn to other markets or other buyers to sell its products. However, potential losses will limit access to certain markets, which will put pressure on the price of pork and therefore on pork industry revenues.

In the long term, however, failure to adopt the Code could result in a loss of market share on both domestic and international markets. In order to retain its market share, the Canadian pork industry may have no choice but to comply with the new standards for sow housing. The Canadian pork industry has to remain competitive to stay one step ahead of its competitors. If it does not make the transition to a free-stall environment while its competitors do, the industry could lose many options to sell its pork on high-value markets or markets with a higher value per ton, and might ultimately be unable to sell its entire production, since competition is more fierce on lower-priced markets. It should be remembered that Canada is highly reliant on export markets to sell its products (exports account for more than 60% of the total value of the Canadian pork industry).

Given this context, the new Pig Code appears to be a minimum that the Canadian pork industry should implement in order to remain competitive. Some other countries such as Australia and the U.K. have already adopted higher standards concerning the use of sow stalls. As an increasing number of countries adopt stricter standards for sow housing, there may even be pressure to improve the Code further.

As the giants of the fast food sector, which are large consumers of meat, converge toward free-stall housing, sooner or later, retailers will have to become more proactive in terms of animal welfare. This is already becoming the case, as illustrated by the commitment some retailers have made either individually or at the national association level (Retail Council of Canada). Nevertheless, it should be remembered that so far, in North America, the orders seem to be coming from the large food chains and it appears they will be the ones to decide whether or not the shift in terms of animal welfare will happen. Other than in Australia, where retailers have taken the lead, the food chains are the purveyors of the trend all over the world. Still, the Canadian pork industry is clearly at a cross-road, but given the growing international trend towards ending the use of gestation crates, it is our finding that the industry should move in this direction in the near term to maximize market access, increase profits and remain competitive as a leading global exporter of pork products.
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