



The Economic Impact of Oilseed Processing in Canada

Report for:

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The Economic Impact of Oilseed Processing in Canada

LMC International undertook research to quantify the benefit of canola and soybean processing to the Canadian economy, in terms of:

1. **Economic impact**
2. **Number of people dependent on the sector**
3. **Wages**

This paper summarises the results of that independent analysis.

The processing of canola and soybeans focuses on two steps in the value chain: 1. crushing of canola/soybean into meal and crude oil, and 2. refining of crude canola/soy oil.

The results capture:

1. The **direct** benefit from these stages
2. The **indirect** benefit from the associated economic and market activities and industries
3. The **induced** benefit from household spending of the income earned from the soy processing and bottling sector.

The data are presented for **Direct** benefits and **Total** benefits (the sum of the direct, indirect and induced benefits above) for each stage, for each province in Canada (although some provinces do not have processing facilities) and for Canada in aggregate.

Oilseed processing in Canada

This section presents the total impact of canola and soybean processing on the Canadian economy. The processing total aggregates the impact from crushing and refining sectors: the economic impact of each of these is presented separately in the sections that follow.

- The total direct economic impact of oilseed processing on the Canadian economy is over \$1.1 billion. The total economic impact, including indirect and induced impacts, is close to \$6.5 billion because of the capital-intensive nature of this sector.
- Almost 900 individuals are directly employed in processing. However, the sector relies heavily on contracted workers, and total employment is far higher, almost 8,900 jobs.
- Over \$54 million in wages are paid to individuals directly employed in processing. Like employment, the total wage impact is much higher, approaching \$330 million.

Table 1: Impact of total processing for canola and soybeans, average 2016/17–2018/19

	Maritimes	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
Direct economic impact (C\$ million)	0.0	61.4	190.1	162.4	436.3	289.5	0.0	1,139.8
Total economic impact (C\$ million)	0.0	349.1	1,080.4	922.6	2,479.2	1,645.2	0.0	6,476.4
Direct employment (FTE jobs)	0	52	169	156	264	258	0	898
Total employment (FTE jobs)	0	511	1,668	1,537	2,603	2,548	0	8,868
Direct wages (C\$ million)	0.0	3.1	10.2	9.4	15.9	15.6	0.0	54.3
Total wages (C\$ million)	0.0	18.9	61.7	56.7	96.1	94.0	0.0	327.5

Crushing

Canada's crushing sector adds value to around nine million tonnes of canola and two million tonnes of soybeans crushed annually.

The economic impact of the crushing sector is determined based on the value it adds from processing seed/beans into its crude oil and meal by-products. This is done on a provincial level by estimating the crush at each processing facility in Canada, taking into account that the multi-seed Ontario and Quebec facilities crush both canola and soybeans.

- The direct economic impact of canola/soybean crushing on the Canadian economy is just under \$800 million. The total economic impact, including indirect and induced impacts is over \$4.5 billion because of the capital-intensive nature of this sector.
- Over 570 individuals are directly employed in crushing. However, as a capital intensive sector that relies heavily on contracted workers, the total employment impact of crushing is estimated to be much higher, supporting almost 5,700 jobs.
- Nearly \$35 million in wages are paid out to individuals directly employed in crushing. Like the employment impact, however, the total wage impact of crushing is much higher, at \$210 million.

Table 2: Impact of canola and soybean crushing, average 2016/17–2018/19

	Maritimes	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
Direct economic impact (C\$ million)	0.0	45.5	145.9	110.8	273.6	221.5	0.0	797.3
Total economic impact (C\$ million)	0.0	258.8	829.0	629.3	1,554.7	1,258.6	0.0	4,530.4
Direct employment (FTE jobs)	0	35	120	109	116	196	0	576
Total employment (FTE jobs)	0	349	1,183	1,074	1,144	1,938	0	5,687
Direct wages (C\$ million)	0.0	2.1	7.2	6.6	7.0	11.8	0.0	34.8
Total wages (C\$ million)	0.0	12.9	43.7	39.7	42.2	71.5	0.0	210.0

Refining

Almost all soy and canola crushing facilities in Canada refine a portion of the crude oil they produce on-site. The percentage of crude soybean oil refined domestically is close to 60% in 2018/19, while 60-70% of Canada's crude canola oil is usually refined in Canada.

Impact

- The direct economic impact on the Canadian economy from refining crude canola and soybean oil averaged over \$340 million annually between 2016/17 and 2018/19. The total economic impact, meanwhile, is estimated at \$1.95 billion annually because the refining sector, like crushing, enjoys high economic multipliers.
- Over 320 full-time equivalent jobs are created directly by canola/soy oil refining in Canada. However, with the substantial multiplier effect, the total employment impact estimated at approaching 3,200 jobs.
- Almost \$20 million in wages are directly attributable to refining while the total wage impact is just less than \$120 million.

Table 3: Impact of canola and soybean oil refining, average 2016/17–2018/19

	Maritimes	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Canada
Direct economic impact (C\$ million)	0.0	15.9	44.2	51.6	162.7	68.0	0.0	342.5
Total economic impact (C\$ million)	0.0	90.3	251.4	293.3	924.4	386.6	0.0	1,946.0
Direct employment (FTE jobs)	0	16	49	47	148	62	0	322
Total employment (FTE jobs)	0	163	486	463	1,459	610	0	3,181
Direct wages (C\$ million)	0.0	1.0	3.0	2.8	8.9	3.7	0.0	19.5
Total wages (C\$ million)	0.0	6.1	18.0	17.1	53.8	22.5	0.0	117.5