

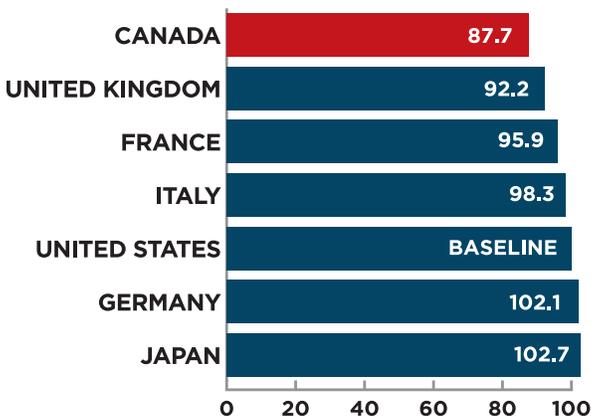
CANADA'S COST AND TAX ADVANTAGES – BIOMEDICAL R & D

Canada has a thriving industry in biomedical R & D, with Canadian companies spending close to \$900 million in 2012 on R & D activities in the biopharmaceutical sector alone. Other Canadian R & D specializations include agricultural biotech, immunology and microbiology. A competitive environment for business costs and business taxes in Canada helps to support this industry.

In its 2014 study of global business locations, *Competitive Alternatives*¹, KPMG found that Canada offers the lowest business cost structure and the lowest business tax burden among the G-7 countries for biomedical R & D firms. Details of these findings are presented below, reflecting business costs and taxes for a model biomedical research facility.



BIOMEDICAL R & D COST INDEX, G-7 RESULTS (U.S. = 100.0)



CANADA'S COST HIGHLIGHTS

- Biomedical R & D firms based in Canada benefit from total labour costs that are 11.3 percent lower than equivalent costs in the U.S. Competitive salary levels and lower healthcare costs in Canada generate these savings.
- Leasing costs for suburban office park space in Canada's major cities are low relative to most other G-7 countries, with savings of 17 percent compared to the G-7 average for this R & D facility.
- Electricity costs in Canada are 21 percent below the G-7 average for this biomedical research firm – a smaller cost component but still adding to the savings in Canada.
- Taxes represent the final component of Canada's cost advantage, as detailed on the next page.
- Combining all cost factors, Canada has the lowest business cost environment among all G-7 countries, with total business costs 12.3 percent below the U.S.

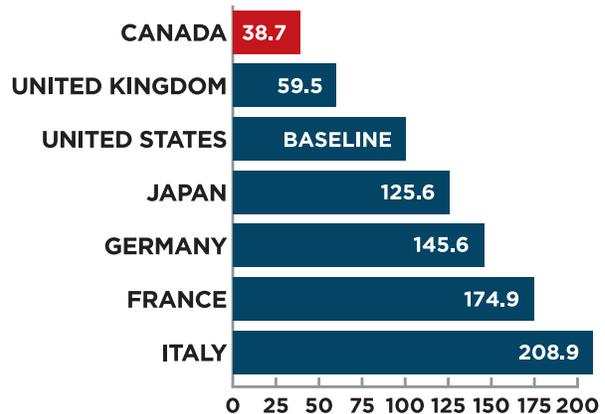
IMPACT OF EXCHANGE RATES

The 2014 edition of *Competitive Alternatives* was released in March 2014. The results from that study, including the results reported here, reflect exchange rates that were in effect in the fourth quarter of 2013. These results are sensitive to exchange rate changes.

During 2014, the U.S. dollar appreciated in value relative to most global currencies, including the Canadian dollar. For the model biotech firm, Canada's cost advantage relative to the United States **increases from 12.3 percent to 21.2 percent** at January 2015 exchange rates. The stronger U.S. dollar significantly increases Canada's cost advantage for international biotech firms.

¹ *Competitive Alternatives, KPMG's Guide to International Business Location Costs and Competitive Alternatives, Special Report: Focus on Tax.* Available for download from CompetitiveAlternatives.com.

BIOMEDICAL R & D TOTAL TAX INDEX³, G-7 RESULTS (U.S. = 100.0)



LOW-COST HOT SPOTS

Business cost index of select Canadian cities (U.S. = 100):

A	Winnipeg	80.3
B	City of Québec	80.7
C	St. John's	82.0
D	Montréal	85.1
E	Saskatoon	85.7
F	Edmonton	87.6

CANADA'S TAX HIGHLIGHTS²

- Canada's generous R & D tax credits include the possibility of refundable R & D credits for certain types of firms in some jurisdictions. For this model biomedical R & D firm, eligibility for a refundable R & D tax credit results in a negative effective rate of corporate income tax of -8.2 percent, the second lowest in the G-7.
- Canada's statutory labour costs are also the lowest in the G-7 and its costs for other corporate taxes are also low, ranking third among the G-7 countries.
- Overall, Canada's total tax index for this biomedical R & D firm is 38.7 – the lowest among the G-7 countries and reflecting total tax costs 61.3 percent lower than in the United States.

SUMMARY OF OPERATING PARAMETERS

BUSINESS OPERATION: BIOMEDICAL R & D	
Facilities requirements	
Class A office space leased (4,181 m ²)	45,000 ft ²
Workforce	
Management	6
Sales and administration	12
Dedicated product development	47
Other	1
Total employees	66
Energy requirements	
Electricity: monthly consumption	75,000 kWh
Other initial investment requirements	
Machinery and equipment – U.S. \$'000	\$500
Office equipment – U.S. \$'000	\$500
R & D equipment – U.S. \$'000	\$4,000
Inventory – U.S. \$'000	—
Equity financing – % of project costs	100%
Other annual operating characteristics	
Sales at full production – U.S. \$'000	**
Other operating costs – U.S. \$'000	\$2,000
Investment in tax-eligible R & D – % of sales	19%

** This operation represents a cost center. For taxation purposes, corporate revenue allocated to the operation is assumed to be cost-of-operation, plus 10% markup.

² Calculations by MMK Consulting Inc. based on detailed data from *Competitive Alternatives, Special Report: Focus on Tax* as that report only published sector-level tax results.

³ Calculations by MMK Consulting Inc. based on detailed data from *Competitive Alternatives, Special Report: Focus on Tax* as that report only published sector-level tax results.