

## **Canada's Top 100 Corporate R&D Spenders List 2011 Analysis**

### **R&D Spending Wavers**

Canada's Top 100 Corporate R&D Spenders cut back on their research and development spending in Fiscal 2010, with a decline of -9.4% over Fiscal 2009 despite a healthy 4.7% increase in combined revenues. R&D spending fell to \$9.42 billion in Fiscal 2010, from \$10.4 billion in Fiscal 2009. This continues the negative trend of R&D spending for the 5<sup>th</sup> consecutive year.

However, the steep decline in overall R&D spending was more a result of significant drops in R&D spending by two Top 100 companies – Nortel Networks Corporation (Nortel was still active in 2010) and TELUS Corporation. After adjusting for this by removing them from the calculation, overall R&D spending by the remaining 98 firms posted a respectable 3.5% increase in Fiscal 2010.

Research intensity – R&D spending as a share of revenue among the 92 companies that reported revenue was 2.8% in Fiscal 2010, down a significant -14.8% over Fiscal 2009. However, when we remove Nortel and TELUS, a more realistic picture emerges with the 90 companies, posting a more moderate decrease of -2.2% in research intensity in 2010.

Research In Motion remained Canada's top corporate R&D spender, devoting nearly \$1.4 billion to research in Fiscal 2010, an increase of 26.3% over Fiscal 2009. RIM's spending on research expanded slightly faster than its revenue (20.1%).

This year, 48 companies posted increases in their research spending compared with an equal number (48) where spending declined. (R&D spending was flat at 4 other firms.)

### **The \$100 Million Club**

Each year RESEARCH Infosource highlights the companies in its \$100 Million Club – an elite group of firms that spend \$100 million or more annually on research. This year 22 firms joined the Club. Fourteen members were Canadian companies and 8 were foreign subsidiaries. Total Club spending on research was \$6.67 billion, a decline of -13.1%. Omitting Nortel Networks and TELUS from the analysis revealed that the 20 remaining Club members managed a solid 4.5% increase in combined R&D spending. In contrast, the other 78 Top 100 firms managed only a 1.1% increase over the period.

The \$100 Million Club		
2010 Rank	Company	Industry
1	Research In Motion	Comm/Telecom Equipment
2	BCE	Telecommunications Services
3	IBM Canada (fs)	Software & Computer Services
4	Atomic Energy of Canada	Engineering Services
5	Magna International	Automotive
6	Pratt & Whitney Canada (fs)	Aerospace
7	Ericsson Canada (fs)	Comm/Telecom Equipment
8	AMD Canada (fs)	Electronic Systems & Parts
9	Alcatel-Lucent (fs)	Comm/Telecom Equipment
10	Bombardier	Aerospace
11	Apotex	Pharmaceuticals/Biotechnology
12	Sanofi (fs) <sup>(a)</sup>	Pharmaceuticals/Biotechnology
13	Pfizer Canada (fs)	Pharmaceuticals/Biotechnology
14	Open Text	Software & Computer Services
15	Ontario Power Generation	Electrical Power & Utilities
16	Rogers Communications	Telecommunications Services
16	TELUS	Telecommunications Services
18	GlaxoSmithKline Canada (fs)	Pharmaceuticals/Biotechnology
19	CAE	Aerospace
20	Nortel Networks	Comm/Telecom Equipment
21	Imperial Oil	Energy/Oil & Gas
22	Hydro-Québec	Electrical Power & Utilities

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

<sup>(a)</sup> Includes sanofi-aventis Canada Inc. and Sanofi Pasteur Limited

Joining the \$100 Million Club this year were AMD Canada, Rogers Communications and Imperial Oil. Dropping off were Novartis Pharmaceuticals Canada, Valeant Pharmaceuticals International (formerly Biovail) and Suncor Energy.

Reflecting the importance of larger R&D performers, the \$100 Million Club members accounted for 71% of total Top 100 spending in Fiscal 2010.

Among the 20 companies that were members of the \$100 Million Club in both 2010 and 2009, 9 companies increased their R&D spending, while 10 companies decreased spending between during this period. One company was flat.

Companies in the ICT (information and communications technology) sector dominated the \$100 Million Club. Ten of the 22 members were in the ICT sector, followed by 4 firms in Pharmaceuticals/Biotechnology. Three Aerospace firms were also members of the \$100 Million Club in 2010.

## Industry Performance

Twelve Top 100 performers in the Communications/Telecom Equipment sector spent a total of \$2.42 billion on research, and accounted for 26% of total Top 100 spending in Fiscal 2010. Next in combined R&D spending were 26 Pharmaceuticals/Biotechnology companies that devoted a total of \$1.47 billion to research, or 16% of the Top 100 total. Four firms in the Telecommunications Services sector spent \$1.1 billion, representing 12% of total R&D spent in Fiscal 2010.

Top 100 – Leading Industries	
Industry	R&D Spending (% of Total)
Communications/Telecom Equipment (12)	26
Pharmaceuticals/Biotechnology (26)	16
Telecommunications Services (4)	12
Software & Computer Services (11)	11
Aerospace (5)	8
Energy/Oil & Gas/Electric Power (10)	6
Transportation (4)	6

The Communication/Telecom Equipment sector without Nortel Networks included, increased its R&D spending by a significant 23.3% (with Nortel included this sector had an overall -11.6% decrease). Both Aerospace (5.8%) and Software & Computer Services (3.3%) sectors each increased their R&D spending in Fiscal 2010. However, Transportation (-11.6%) and Energy/Oil & Gas/Electric Power sectors (-5.3%) posted negative R&D spending during the period.

## The Top 10 R&D Intensive Firms

In Fiscal 2010, 7 of the 10 most research-intensive firms – companies that spent a high proportion of revenues on research - were in the Pharmaceutical/Biotechnology sector. This is typical since large up-front investments are required for success in this sector. These firms tend to spend more on research than they gain in revenue because they are early-stage companies whose products have yet to enter the market.

Top 10 Research Intensive Companies*			
2010 Rank		Company	R&D as % of Revenue
Research Intensity	Overall		
1	96	Transition Therapeutics	293.3
2	94	ProMetic Life Sciences	117.8
3	62	Azure Dynamics	113.4
4	69	Tekmira Pharmaceuticals	105.5
5	4	Atomic Energy of Canada	103.4
6	54	QLT	74.9
7	70	AEterna Zentaris	74.2
8	26	PMC Sierra (fs)	55.6
9	87	Theratechnologies	47.1
10	78	Bioniche Life Sciences	39.0

\*Based on companies with \$1 million or more of revenue only

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

## Gainers and Losers

The top ten firms in growth stand out because of their substantial gains in R&D spending of 40% or more between Fiscal 2009 and Fiscal 2010. Leading the group was Hydro One, which posted a 124.0% gain in R&D spending. Ericsson Canada recorded a strong 79.2% increase in spending, followed by EnCana (69.4%), Medicago (68.8%) and Azure Dynamics (59.6%).

Top 10 Companies by Growth			
2010 Rank		Company	% Change 2009-2010
R&D Growth	Overall		
1	83	Hydro One	124.0
2	7	Ericsson Canada (fs)	79.2
3	40	EnCana	69.4
4	95	Medicago	68.8
5	62	Azure Dynamics	59.6
6	86	Vecima Networks	56.2
7	16	Rogers Communications	53.1
8	75	Trican Well Service	50.3
9	50	Linamar	48.2
10	71	Teck Resources	40.0

fs = Foreign subsidiary (includes R&D spending for Canadian operations only)

A number of well-known companies led the list of firms where R&D spending dropped substantially in Fiscal 2010. This group included Nortel Networks (-87.3%), TELUS (-81.0%) and Suncor Energy (-58.3%)

Bottom 10 Companies by Growth			
2010 Rank		Company	% Change 2009-2010
R&D Growth	Overall		
1	20	Nortel Networks	-87.3
2	16	TELUS	-81.0
3	32	Suncor Energy	-58.3
4	70	AEterna Zentaris	-58.1
5	33	Valeant Pharmaceuticals International	-49.0
6	84	Cardiome Pharma	-48.2
7	64	Nexen	-46.7
8	45	Cangene	-33.9
9	79	Tembec	-33.7
10	87	Theratechnologies	-32.5

## Looking Ahead

In the wake of the 2009 financial crisis it is not surprising that Fiscal 2010 corporate R&D spending results should disappoint: down -9.4% for all Top 100 firms and up a modest 3.5% with two large outliers removed from the calculation. However, 2010 is not unique; in the past 10 years RESEARCH Infosource has documented spending drops in 7 years. Yet, during that period company revenues have increased in all but 2 years. So, there does not appear to be a strong relationship between R&D spending and corporate revenues. Clearly, other factors are at play in the anaemic performance.

Certainly, government incentive programs play a role. So too do global trends; for example, the migration of manufacturing activity to the Far East. Also contributing is the changing nature of corporate R&D itself. In decades past most R&D was performed by in-house corporate research labs, whereas today those labs have largely disappeared. Current public sector innovation support programs are still largely a remnant of this by-gone era.

Today research is more diffuse; often it is offloaded to suppliers and to universities, hospitals and colleges. Another factor is the increasing impact of the service sector. The service sector accounted for about 72% of GDP in 2010, yet government programs in support of innovation are mostly oriented toward the goods-producing elements of the economy.

One bright spot is that according to Statistics Canada, the number of companies performing research jumped from 9,649 companies in 1997 to 22,314 in 2007. At least, more firms are playing the game.

The economy is facing new headwinds in the form of a global slowdown. It remains to be seen how deep this will be and what its effect will be on the corporate R&D scene. RESEARCH Infosource has its fingers crossed.