

November 28, 2007

Ms. Nancy Horsman and Mr. Peter C. Armstrong  
Joint Finance Canada-Canadian Revenue Agency  
SR&ED Tax Credit Consultations  
140 O'Connor St.  
L'Esplanade Laurier  
Ottawa, ON K1A 0G5

Dear Ms. Horsman and Mr. Armstrong:

re: Automotive Industry Input from CAPC-Innovation Working Group (IWG)

The Innovation Working Group of the Canadian Automotive Partnership Council is pleased to submit the attached brief on the scientific research and development tax credit program. The CAPC-IWG represents Canada's vehicle assemblers, automotive parts companies, and key innovation organizations working with the industry sector.

We view the SR&ED program as a useful enabler that in the past has encouraged innovation leading to productivity improvements in Canada's automotive manufacturing sector. However, we are concerned that the program has lost effectiveness in recent years and this has resulted in serious difficulties for Canadian firms and domestic operations of multi-nationals to build a business case for innovation activities in Canada.

Our concerns lie in two distinct areas:

1. policy issues in the realm of the applicability, eligibility and refundability for various types of innovation activities related to automotive manufacturing. Examples of work that is important in our sector includes innovations in materials and manufacturing processes and in the product development processes which, while risky, are integral to successful business activities in this sector.
2. issues related to the application of the present SR&ED program regulations as they pertain to the consistency, reliability, and administrative burden involved in the process. We are concerned that the program has become so difficult to use and so inconsistent that it is not possible for companies (especially smaller entities) to use it in building their business cases for innovation activities in Canada – and this is resulting in decreased productivity relative to our competitors.

Although we believe that the continuation of an updated SR&ED program is important, it alone will not be sufficient to sustain existing or attract additional Canadian auto sector innovation investments and activities in this new era of global automotive competition. In addition to an effective SR&ED program, the creation of support programs focused on enabling auto company based innovation activities is essential to Canada's new automotive action plan. This support is critical for Canada to effectively compete for automotive innovation investments and activities and is the top CAPC IWG recommendation in the CAPC process. . The attached brief has been endorsed by the CAPC-IWG members and it describes our concerns and recommendations in detail.

Sincerely,

Jan M. Chaplin  
Co-Chair  
President & CEO  
Canadian General-Tower Ltd.

Ross H. Paul  
Co-Chair and CAPC Academic Representative  
President & Vice Chancellor  
University of Windsor

cc: Federal Minister of Industry  
Federal Minister of Finance  
Premier of Ontario  
Ontario Minister of Economic Development and Trade  
Ontario Minister of Research and Innovation

**CAPC Innovation Working Group Response to the  
Federal Government Consultation:  
Improving the Scientific Research and Experimental Development Tax Incentive**

*a) How do the SR&ED tax incentives affect the performance of R and D in Canada and how can they contribute to increasing private sector investment in R&D?*

The SR&ED program has been beneficial in attracting some automotive industry research and engineering development activities in Canada. As a result of some of these activities, it has also helped to retain automotive related knowledge and talent in Canada. However, the industry has also argued that the tax rules for SR&ED are biased to organizations and activities that are focused on more fundamental research and development as opposed to equally important activities related to product commercialization and productivity improvement initiatives.

To help enhance the program's ability to accelerate Canadian businesses' ability to compete globally, the SR&ED tax rules need to be revised in order to include initiatives in these other important areas of work. This is particularly true for the automotive industry where intense global competition focuses the vehicle manufacturers and their suppliers on the commercialization of new products and parts as well as continually enhancing the productivity of manufacturing processes in order to be cost competitive against other lower cost jurisdictions. As a result, the current SR&ED tax incentives alone are not sufficient in attracting the necessary private sector investment in both research and development activities to the extent required in this new era of global competition.

Although B-index comparisons of R&D tax incentives and the marginal effective tax rate (METR) across OECD countries may place Canada in a favourable light, SR&ED tax incentives are not driving substantive private R&D investment (per CBoC Leaders Roundtable on Commercialization and the Rotman Report from Industry Canada). The CAPC Innovation Working Group (CAPC IWG) recommends that the SR&ED program be modified to include support for a broader commercialization agenda that includes Canadian engineering development activities or that a new government program is created to encourage and accelerate these critical activities. The SR&ED program should not continue to group these important prosperity building activities and initiatives into what the program currently defines as "routine engineering." Program eligibility needs to be more inclusive of engineering development – and not strictly limited to "experimental development". As a significant amount of engineering development effort within the automotive sector relates to plant floor manufacturing process-based improvements, the CAPC IWG strongly feels that the federal government should recognize process-based improvements – including the integration of systems and/or components – as eligible SR&ED activities.

As other global jurisdictions enhance R&D tax credits and establish funding for private sector technology development activities as a means to attract high value-added

investment and engineering activities, it is important that Canada moves quickly to retain its domestic knowledge and talent. In a highly competitive global environment, research jobs are increasingly being globalized. The unprecedented appreciation of the Canadian dollar relative to the U.S. dollar underscores the urgency of the challenge. The government must make every effort to ensure that Canada has an enhanced and effective ‘toolbox’ of incentives to maintain and ideally grow its domestic-based engineering, advanced engineering and R&D investments.

Many Canadian government programs support R&D activities but almost every program requires external collaboration with third parties including, for example, university-based researchers. While collaborations are particularly useful in the development of early stage technology and concept development, much of the subsequent R&D effort is performed within individual companies. As R&D work progresses towards a specific commercial application, the effort naturally becomes less suited to open collaboration owing to the competitive risks and the potential disclosure of intellectual property. Therefore, if Canada is to realize its objective to increase the Canadian development and commercialization of advanced technologies, the creation of support programs targeted at private company based research and development activities is essential.

To that end, the CAPC IWG believes that the continuation of an updated SR&ED program is necessary, but that it alone will not be sufficient to sustain existing or attract additional private sector investment in both R&D and commercialization activities in this new era of global automotive competition.

***b) Are there features of the SR&ED tax incentives that impede the growth of small and medium-sized innovative Canadian companies and how?***

The CAPC IWG recommends that the SR&ED tax credits are made refundable to all firms, irrespective of size. This would assist firms, especially small ones that may not be in a tax payable situation but could use the credit to sustain cash flow. This idea has been proposed by Canadian Advanced Technology Alliance as well as the Canadian Manufacturing Coalition.

Additional areas of concern with SR&ED credits for Canadian SMEs are the inconsistency of the system, the variability and of interpretations by Science Advisors and the associated increased administrative burdens faced by SMEs attempting to utilize an innovation support program that seems to be unpredictable. Many of the CAPC IWG recommendations focus on bringing revising the criteria and definitions of the program in order to alleviate these issues with the current program.

The focus of many innovative Canadian SMEs, including automotive parts makers, is on plant floor manufacturing process improvements. Continuous improvement and the creation of new efficiencies in their manufacturing processes are especially vital to an SME’s immediate and longer-term regional and global competitiveness. However, SR&ED definitions have tended to incorrectly class these activities as “routine

engineering” that do not qualify for support. The federal government’s 2007 report Mobilizing Science and Technology highlighted that productivity improvements at Canadian firms lags other leading economic jurisdictions. Yet, the current SR&ED program’s definitions do not support these activities of small to mid-sized auto parts companies attempting to address this very issue. Therefore, the CAPC IWG believes that the SR&ED criteria should be revised to accept manufacturing process improvement activities or the government should create a separate funding program to address this pressing need in Canada.

A key element of our submission is to differentiate between these plant floor manufacturing processes and the concept of engineering design methodology. The engineering community understands the engineering design methodology to be perfectly analogous to the scientific method as an approach to investigate ideas, propose concepts, test conceptual solutions, analyze test results, and refine solutions or propose new alternatives. There is a systemic bias with CRA’s science advisors to acknowledge the scientific method, and yet reject engineering design methodology as simply “routine engineering”. The fundamental error in this judgment is to confuse the engineering design methodology – and all of the associated work effort – with the end product or process, the outcome of the methodology

***c) How could more private sector R&D be leveraged?***

As mentioned in responses under question a), the program’s eligibility needs to be broadened to include product and manufacturing process engineering development.

The applicability of the 35% credit that is currently only available to Canadian Controlled Private Corporations (CCPCs) should be available more broadly. This broadening could be done by adding a new qualifier for the higher rate based on industrial sector. (This is the case in India where companies carrying on scientific research and development are entitled to a 100% deduction of profits for 10 years and the auto industry is also entitled to a 150% deduction for expenditures on in-house R&D facilities.<sup>1</sup>)

The definition of eligible costs should be extended to include costs for patenting, prototyping, product testing and other pre-commercialization activities as suggested by the Canadian Manufacturing Coalition.

Allow the work done outside Canada by Canadians to be eligible for SR&ED credits if it supports SR&ED work in Canada

With respect to enhancing Canadian R&D collaborations, there are several options:

- Transferable tax credits in collaborations – allow parties to the collaboration to transfer credit for their portion of the collaboration to the other party

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<sup>1</sup> <http://www.investinamericasfuture.org/PDFs/021306incentives.pdf>

- Offer a higher tax credit rate if the work is involved with technology/knowledge transfer or commercialization with a Canadian supplier to encourage more involvement with the broader supply chain

As stated earlier, although the CAPC IWG believes that the continuation of an updated SR&ED program is necessary, this alone will not be sufficient to sustain existing or attract additional private sector research and development activities in this new era of global automotive competition. In addition to the suggested revisions to make the SR&ED program more effective, the creation of support programs targeted at private company based research and development activities is essential. Although Canada has significant support programs for collaborative university based research, such as NSERC, there are virtually no automotive industry support programs for private company based applied research, pre-commercialization and commercialization development activities. Given that other global jurisdictions provide significant supports in this area, it helps to explain why Canada continues to lag in the commercialization of new technologies in spite of the fact that Canada is a leader in early stage collaborative research activities. Without government program support for private company based research and technology development activities to commercialize these initial Canadian developed scientific concepts, this work and its associated economic benefits will likely continue to be performed outside of Canada.

***d) Given the improvements already implemented or under study, how could administration of the SR&ED tax incentives be further improved and their complexity reduced?***

The CAPC IWG re-emphasizes that the definition of SR&ED must be broadened to specifically include product and process engineering development activities, again, recognizing that the engineering design methodology is analogous to the scientific method in creating new knowledge, products and associated manufacturing processes

With respect to whether the CRA processes claims consistently, individual science advisors are currently able to make and sustain differing interpretations of the eligibility of the technical work from their predecessors with a given client or from other science advisors with other clients. This perceived inconsistency in the review and eligibility is a significant concern to industry participants. We would recommend improved definition that addresses our cited needs to broaden the eligibility of projects and reduces the sometimes arbitrary interpretation by Science Advisors. This improved definition of qualifying SR&ED tax credit activities will improve the predictability of successful applications, reduce the current variability and inconsistency of Science Advisor interpretation as well as reduce the administrative burden currently faced companies making submissions.

With regard to the program complexity, we believe that CRA should accept large projects with several inter-related minor elements not identified separately under an ‘umbrella format’. One example is that of “Manufacturing Capability” within vehicle

manufacturing. The launch of a new vehicle and associated new technologies into the production environment should be deemed an eligible SR&ED activity. The client should not be required to detail all the related minor elements separately.

CRA should consider significantly expanding opportunities for companies to apply for process review self-certification status. This would entail inviting CRA in to review the company's business processes, financial records and appropriate management oversight/guidance. Once self-certification status was granted by CRA, the company would provide required financial input to the income tax return to support the SR&ED claim. No new technical documentation would be required except for retaining pointers to normal business records from the financial parts of the claim. This has been shown to be a highly successful approach that leads to improved government efficiency and reduced program cost as well

CRA's public seminars in selected cities discussing the SR&ED program and coaching companies on specific details are useful. In addition to CRA's practice of attending technical conferences and conventions, industry associations could be leveraged by CRA to reach out to member companies and entities. Additionally, CRA might consider regular meetings with clients' technical staffs apart from official claim reviews that would be an important part of a deliberate relationship-building program.

Last but not least, it is clear that the underlying objective of the government's SR&ED tax credits is to provide an incentive to encourage and support Canadian SR&ED. However, delivery of this important program through CRA's corporate tax audit process often works in direct conflict with its basic incentive intention. Therefore, a complete review of the program's delivery with a view toward fixing the major problems as well as identifying and implementing a world leading delivery mechanism is both timely and appropriate.

Prepared by:  
Canadian Automotive Partnership Council  
Innovation Working Group

November 29<sup>th</sup>, 2007