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RC's mandate is to be agent of economic development for Canada. In 2010, the National Research Council began a process to transform the organization to help bridge Canada's innovation gap. In late 2011, the Jenkins Expert Panel confirmed the need for "collaborative R&D and innovation projects that are large scale, industry facing, demand driven and outcome oriented. Such projects can result in breakthroughs and can build capacity in existing and emerging industry sectors."

Budget 2012 reinforced NRC's agenda by allocating \$67M in 2012-13 to "refocus the National Research

OPENING NATIONAL RESEARCH ORGANIZATIONS TO BUSINESS

Council on research that helps Canadian businesses develop innovative products and services."

Rebuilding NRC has three fundamental planks – focus, sustainability and strengthened communications. • Focus – fewer areas of work with more impact in areas important to Canada

- Avoiding duplication and overlap
- Sustainability living within our means, generating value
- More effective and efficient use of resources
- Communication Simple, easy to understand brand and image
- A collaborative value-adding partner

NRC will focus on technology development to facilitate industrial R&D and support Canadian industry. We will be more market-oriented and business-like and will focus on bridging the gap between universitybased discovery and industry. Five key values underpin the culture we need to drive such a business – making a difference for Canada, being accountable, maintaining a leadership position, integrity and transparency, and collaboration with industry, academia and others.

We are moving from an institute model built around individuals and bricks and mortar to a program model built on outcomes, multi-disciplinary teams, rigorous management and partnerships. Six critical priorities aligned with the federal S&T Strategy guide NRC's programmatic decisions:

- economic competitiveness;
- natural resources supply chains;
- mitigating environmental impacts;
- health care costs;
- complex security challenges; and
- sustainability of communities.

NRC's transformation will promote sustainable growth of Canada's business sectors, reduce early-stage technology development risk and strengthen the ability of Canadian firms to address areas of major public concern. NRC will also continue to deliver the NRC-Industrial Research Assistance Program (NRC-IRAP).

NRC programs will be designed around customer needs within a framework aligned with national innovation strategy. Some will be large multi-disciplinary, multi-year efforts with multiple partners and really big potential pay-offs for Canada while others will be smaller and target regional or industry specific agendas. All must pass through our new design, funding and decision process and receive financial commitments from partners. NRC programs will be market-oriented and collaborative, built around a sound understanding of industry

value chains; with clear technology deployment paths identified.

NRC programs will be managed through a series of stage-gates before and after launch. At each successive gate, activities will be assessed with increasing rigour on their value proposition, business case, benefit to Canada and return on investment. After being launched. progress against planned budgets, schedules, targets and milestones will be regularly assessed to ensure they contribute to moving Canada to a higher level of innovation performance and increased industry participation. With this new framework in place, NRC is well equipped to respond to the regularly changing needs of Canadian industry.

We also intend to link our IRAP capabilities much more intimately into our R&D business. IRAP has a rich understanding of industry across the country that will be used to help us in program design. They will also provide up-front linkages to markets for deployment and value chain development.

NRC intends to increase the share of costs carried by the private sector, especially in areas close to market such as testing, certification and problem solving. As we shift to more client-focused, demand-driven research, NRC also expects revenues from external sources to rise significantly. Some people have suggested that growing private sector revenues at NRC can only occur by winning industry contracts away from university labs. That may happen occasionally, but industry goes where they get what they need. Sometimes that is university labs, sometimes government labs like NRC and sometimes elsewhere.

An effective innovation business requires Effective and efficient business processes. So NRC has also been rebuilding finance and accounting, program management (investment oversight – capital and operating), project management, CTE performance management (providing the "tools" to manage) and client management systems.

To conclude – NRC has embarked on a major transformation that will set the stage for the next two or three decades. The transformation will see us move from an – academic, science push and largely government approach – to one that is much more business-like, focused on pull-based innovation outcomes and benefit to Canada. NRC is opening its doors to business on terms business can understand.