



ACCELERATING technology-based economic growth and entrepreneurship in Greater Moncton

Implementation Report 1
Applying the Benchmark

**MONCTON TECHNOLOGY
PLANNING GROUP**

JUNE 2007



Accelerating Technology-Based Economic Growth and Entrepreneurship in Greater Moncton

Implementation Report 1: Applying the Oulu Benchmark

Prepared by the Moncton Technology Planning Group

June 2007

Foreword

Implementation Report 1 constitutes the first report on the implementation of the strategy of the Moncton Technology Planning Group to foster accelerated Technology-Based Economic Growth and Entrepreneurship in Greater Moncton. The report documents the findings of the benchmarking mission to Oulu, Finland and illustrates the criteria for success identified by the benchmark mission team. It outlines a series of specific action recommendations addressing issues of capacity building, regional coordination and development of human capital.

The report also provides important underpinnings for implementation of the overall strategy including the next phase that will recommend and describe the model and structure necessary to establish the technology commercialization model.

Introduction

In December 2006, the Moncton Technology Planning Group (MTPG) released a strategy, developed in partnership with the IC2 Institute of the University of Texas at Austin, focused on accelerating technology-based economic growth in the Moncton area. The central emphasis in the strategy is on organic growth of Moncton's existing information and communications technologies (ICT) sector strengths and the existing and emergent research capacity in area institutions. The keys to success identified by IC2 and the MTPG are:

- a common vision and action plan to mobilize key local partnerships
- collaboration and cooperation among Greater Moncton's business, academic and government sectors

The five key objectives identified in the strategy include:

- accelerate technology-based business development in established and emerging industry clusters with the greatest growth potential
- develop Greater Moncton as an emerging centre of technology-based entrepreneurship
- foster academic and research excellence that is specifically linked to regional economic development generally and the key target sectors specifically

- foster and leverage regional, national and global value-added partnerships and alliances
- promote a common vision and coordinated action initiatives targeted to brand Greater Moncton as an important emerging centre of technology-based entrepreneurship and business development

Since the launch of the strategy, the MTPG has been focused on implementation of discrete action items contained in the strategy and viewed by the group as essential early stage initiatives. Key among these are (1) the development of the optimal model and approach for the “Moncton Technology Commercialization Centre, viewed by the authors of the strategy as a central element and key gap in Moncton’s current innovation system, and (2) understanding and applying lessons learned from our benchmark city – Oulu, Finland. The purpose of this report is to outline key lessons and observations from the MTPG’s April 2007 mission to Oulu and provide recommendations for actions to support implementation of the strategy. The members of the Oulu mission team included representatives from the MTPG, the City of Moncton, and Enterprise Greater Moncton.

Oulu Mission Team

Moncton Technology Planning Group

- Dr. Rodney Ouellette, Executive Director, Atlantic Cancer Research Institute
- Jon Manship, Chairman, Technology Ventures Corporation
- Graham Sheppard, Principal, New Brunswick Community College, Moncton
- Douglas Robertson, Chair, Economic Affairs Committee of Council, City of Moncton

City of Moncton Department of Economic Development

- Ben Champoux, Business Development Specialist

Enterprise Greater Moncton

- Eric Pelletier, Manager, Investment Attraction

Oulu and Moncton ...

The IC2 Institute was initially approached by the MTPG because of their unique expertise: in working with communities around the world to assist them in advancing their technology-based economies; their global perspectives in relation to the sharing of knowledge; in developing relationships and alliances; and their interest in establishing a sustainable working partnership with Moncton. IC2 Institute also has expressed a desire to collaborate with Moncton on future international partnerships. In our first full year of working closely with our colleagues in Austin, this relationship has already gained Moncton global exposure. Through this relationship Moncton has received an invitation

to present at a prestigious international innovation policy conference, established preliminary business connections in relation to implementation of our strategy in countries such as Poland and Portugal, and have had other opportunities brought to our attention which are still at a stage too early to report on.

In the strategy report (A) our partners recommended Oulu, Finland as Moncton's benchmark city and a model for success. IC2 noted that:

“Oulu has experienced exceptionally strong technological transformation over the past thirty years from large-scale industries that use natural resources to knowledge-based industries.”

They go on to suggest that Moncton could learn from Oulu's success and that many of the actions and initiatives taken by Oulu's network of government, university, and private sector are incorporated in the strategy developed for Moncton.

The MTPG felt it important to have a thorough understanding of the Oulu story at an early stage in the implementation of our strategy. It was clear from the above that there were many interesting parallels between our two cities, both presently and at comparative points in time relative to implementing an innovation strategy. What emerged from our findings in Oulu is that our two cities have much more in common than even the IC2 might have envisioned when selecting the benchmark. Some very basic and profound messages from the Oulu experience both reinforce the directions recommended in our strategy and point to real present and future opportunities for collaboration.

Members of the MTPG, accompanied by economic development representatives of the City of Moncton and Enterprise Greater Moncton, visited Oulu during the week of April 16, 2007. The in-mission agenda was facilitated by the Oulu Regional Business Agency. A copy of the detailed itinerary is attached to this report. The mission team and the MTPG greatly appreciate the efforts of the ORBA in organizing a very comprehensive and senior level meeting agenda. Not only did the agenda comprehensively address our mission objectives, but everyone with whom the mission team met was familiar with our mission and the Moncton strategy. In this regard, the mission team is particularly appreciative of the generous support provided by Henry Koivukangas.

The Oulu Story ...

The modern city of Oulu is situated on the northeastern coast of the Gulf of Bothnia, barely 150 kilometers south of the Arctic Circle and central to both Sweden to the west and Russia to the east. At 129,000 and a regional population of 200,000, Oulu is very similar in size to Greater Moncton. Like Moncton, Oulu is a relatively remote community, a regional centre of growth, a community that has transitioned from a more traditional and resource-based economy to a more diverse economy based on technology. Oulu has a long history of international trade and relations, and as a small city, appreciates the value of local connectivity and partnerships. It is a university town. And it is an economy that,

despite its success, needs to look to larger centres such as Helsinki and other European cities for venture capital.

Oulu was heavily bombed during World War 2 and underwent a period of significant reconstruction after the war through 1959. The University of Oulu was founded in 1958, and had an early focus on arts and sciences, a technical faculty, and medicine. With the establishment of the university, students from northern Finland had the opportunity to stay and study in the north, instead of southern centres such as Helsinki or Turku. The establishment of the university, and in particular the technical faculty, was a key catalyst in Oulu's evolution toward a modern, technology-based economy. According to Heikki Pudas, Director of Innovations and City Marketing with the City of Oulu, without the determination and vision of local leaders to establish the university and other research and commercialization facilities, Nokia likely would not have emerged as the global concern it is today. At the time, the University had a focus on health and electronics, the latter based largely on the needs of the local pulp and paper industry. The existence of process industries, the focus on electronics, and technology demands from the military were all catalysts for a Nokia of 30 to 40 employees to become a global communications leader.

Oulu's historic dependence on international markets, starting with traditional resource industries, a history of having to live and compete in a global marketplace, have driven Ouluns to cooperate and collaborate locally. For the members of the MTPG mission team, this "spirit of Oulu" was evident with every group we met with and, as will be noted throughout this report, is perhaps the defining characteristic behind Oulu's success. There have always been visionaries in the city ... leaders from City government, the university, and business ... who have looked at and discussed world trends and helped shape and determine the directions and focus of Oulu's strategies over the years.

In the early 1980s, they saw the technological developments taking place in the world and decided to pursue a path of technology-based development. Based in a large part on their observations of developments in Silicon Valley, they established the "Technology Village", the first technology park of its kind in Europe. This concept eventually became known as Technopolis. Today Technopolis is one of the leading catalysts of the national Finnish innovation system, and Oulu, this small city in the most northerly corner of Europe, is viewed as one of the world's top cities in the new digital geography. Wired magazine named Oulu the third most successful "Silicon Valley" community in the world.

Oulu Innovation Strategy - "Oulu Inspires" ...

The Oulu innovation strategy is premised first and foremost on the needs of local business and is developed in close collaboration with the university, polytechnic and other local institutions. The "Oulu Growth Agreement" was established in 2002 under the leadership of the City of Oulu and supported by all the major stakeholders in the Oulu region, including the University of Oulu and the University of Applied Sciences (Polytechnic). It had the objective of making the Oulu region more versatile, competitive and a more positive environment for technology-based economic development. All nine

founding partners agreed on the substantial technology areas to be the primary focus during the Agreement's lifetime. It established specific targets in relation to new company creation, job creation and new turnover. The strategy focused on five key clusters: information technology; content and media; wellness; biotechnology; and environment. Each cluster is comprised of a network of operators, including private sector players and all related organizations and supporting programs.

While the City has the responsibility for overall coordination of the Oulu Growth Agreement, "Oulu Innovation" was established by area stakeholder organizations to be responsible for its practical implementation. The Agreement expired at the end of 2006 and a final evaluation is due out shortly. The Agreement has now been superseded by "Oulu Inspires" an updated innovation strategy which incorporates a subtle but clear shift toward technology management skills and excellence, entrepreneurship and strengthening the understanding of broader international commercial processes.

The driving principles of Oulu Inspires include:

- *emphasis on the importance of human enthusiasm as a source of innovation ... enthusiasm springing from a work environment with inspired individuals creates a possibility for renewal and success in global competition*
- *the novel, inspired goal of the actors: by combining resources, it enables Oulu to strengthen its leading position in the next wave of development*
- *energy and commitment to get things going create an environment where things get done and guarantee a pleasant and efficient community to work in and reflects the unique, strong and positive Oulu attitude*

The Oulu Inspires strategy, which has a five year planning horizon through 2013, has as its primary goal the creation of a common vision on long-term, strategic development needs in the Oulu operating environment, encompassing business, research and education and the public sector, to target joint efforts on the selected focus areas. The players are all committed to investing and allocating resources in the choices that are made and to adjusting their current operating models and roles if necessary. The aim of the strategy is to make the Oulu innovation system one of the best in the world. The functionality of the system is monitored by using indicators measuring regional resources, innovation activities, and economic results.

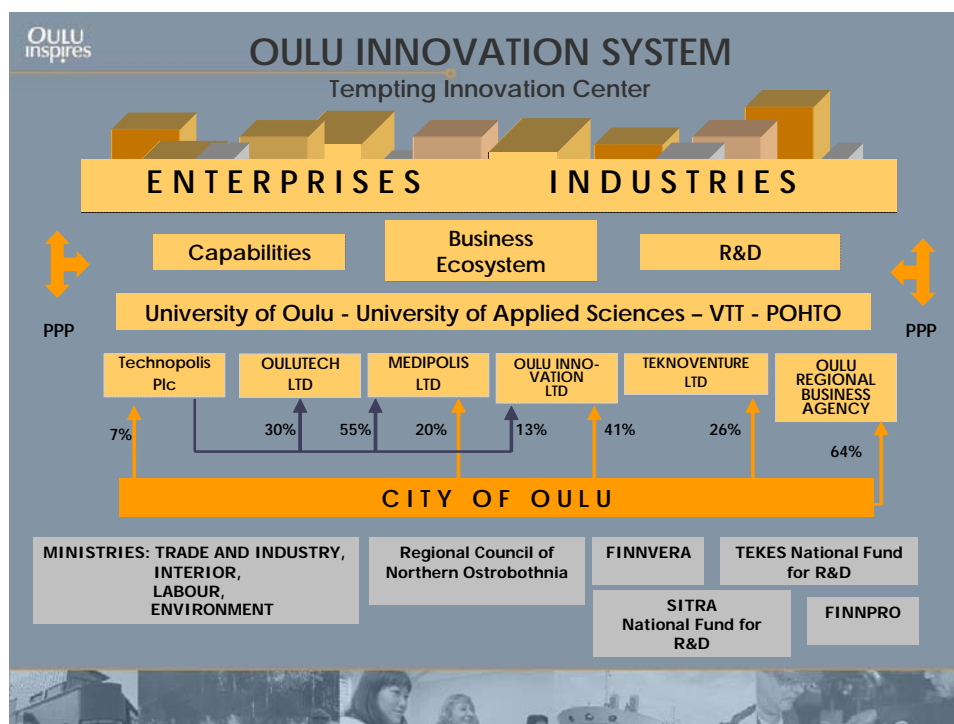
The innovation strategy is based on four main areas of focus:

- business and marketing competence and development of services supporting business
- strong internationalization
- well-functioning and effective innovation systems and processes
- an innovative and internationally competitive operating environment

The actions derived from these focus areas of the strategy are planned and targeted at three main business categories:

- existing growth companies (fastest impact)
- new business ideas and start-ups (longer-term impact)
- existing companies establishing themselves in the Oulu region (fast impact and expansion of operational networks)

The relationships among the various actors in Oulu innovation system are illustrated in the following graphic representation:



The development of Oulu Inspires was based on extensive input from local business, institutions and the public sector. The key strength behind Oulu's success, as was noted earlier, has been the remarkable degree of cooperation between the private and public sectors, including the education and research institutions. Oulu Inspires also aims to define the roles and cooperation between the different operators in the innovation system in a fashion that helps optimize the overall innovation environment.

Oulu Innovation Ltd. ...

While the City of Oulu and the Oulu Regional Business Agency have been key catalysts, the glue in the current strategy is Oulu Innovation Ltd. Established in 2005, Oulu Innovation is in charge of managing, monitoring and maintaining the Oulu Inspires strategy. It is a development company owned by 34 of the key actors in the Oulu region, and promotes the development and competitiveness of growth companies in the area. Oulu Innovation President, Jukka Klemettila, describes the company as a major developer in its selected fields of business in the local innovation environment and a

preferred national and international partner. Oulu Innovation acts as a change agent and develops global operating opportunities for companies that utilise the region's special competencies. It also works to make the region a more attractive environment for R&D operations.

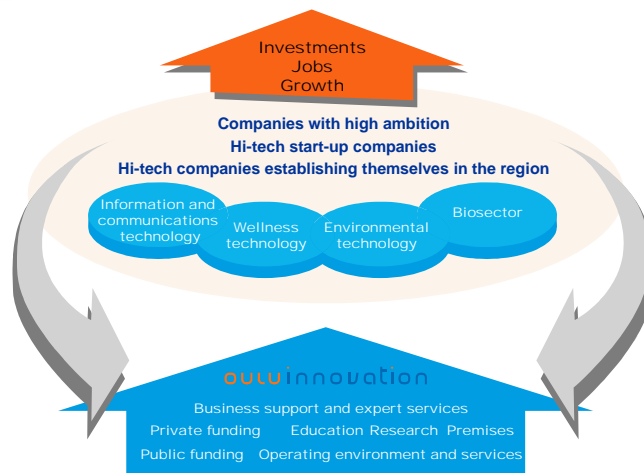
While Oulu has experienced success over the years as a technology-based economy, Klemettila explained that there are a number of important challenges facing the city, including: its narrow technology base within the ICT sector. The significant role and presence of Nokia in particular are very dominant in Oulu's economic mix. Some of the challenges he noted, which are being addressed through Oulu Inspires, include:

- limited pool of sales, marketing and management professionals – so much of Oulu's success has been driven by technology, this aspect has been underserved
- lack of local venture capital – the majority of Finland's VCs stay in the Helsinki area
- Oulu has lots of start-up activity but only a few large companies – they want to focus on growing more in the 200+ employee range (only 30 of their 800 ITC firms are 200 or more employees)
- Don't celebrate their success stories enough.

Oulu Innovation's role in supporting the strategy and the growth of technology-based enterprises is illustrated below:



Support to hi-tech growth companies



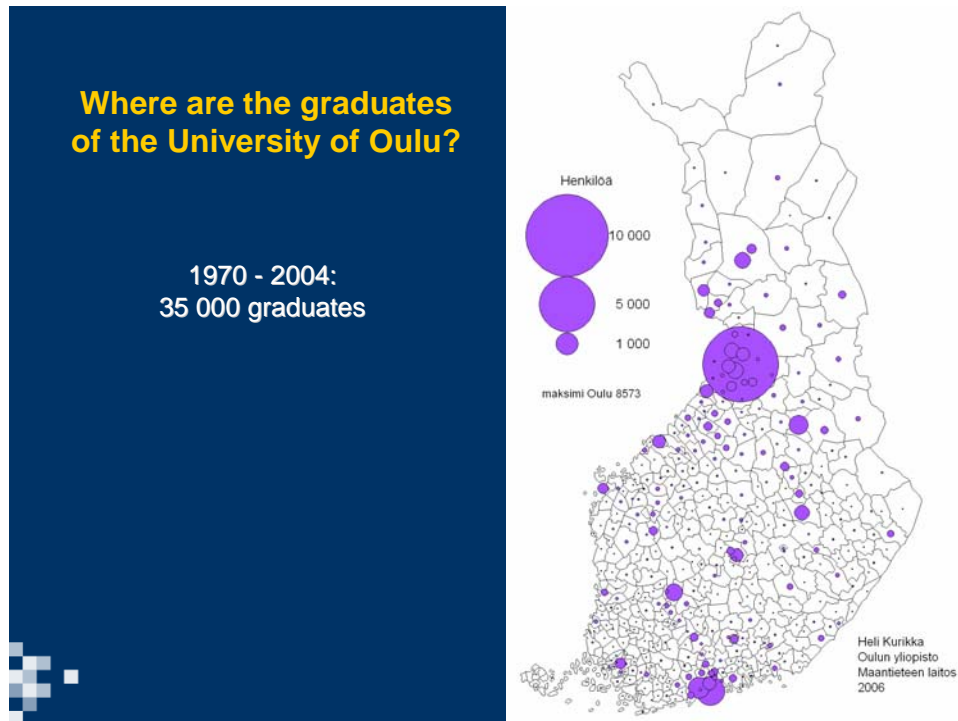
Oulu Innovation Ltd. Is still a very new entity in the Oulu innovation system, and while it continues to develop its relationships and to some degree acceptance within the system, it

proceeds from the strength of being both desired by and funded by the key stakeholders in the community.

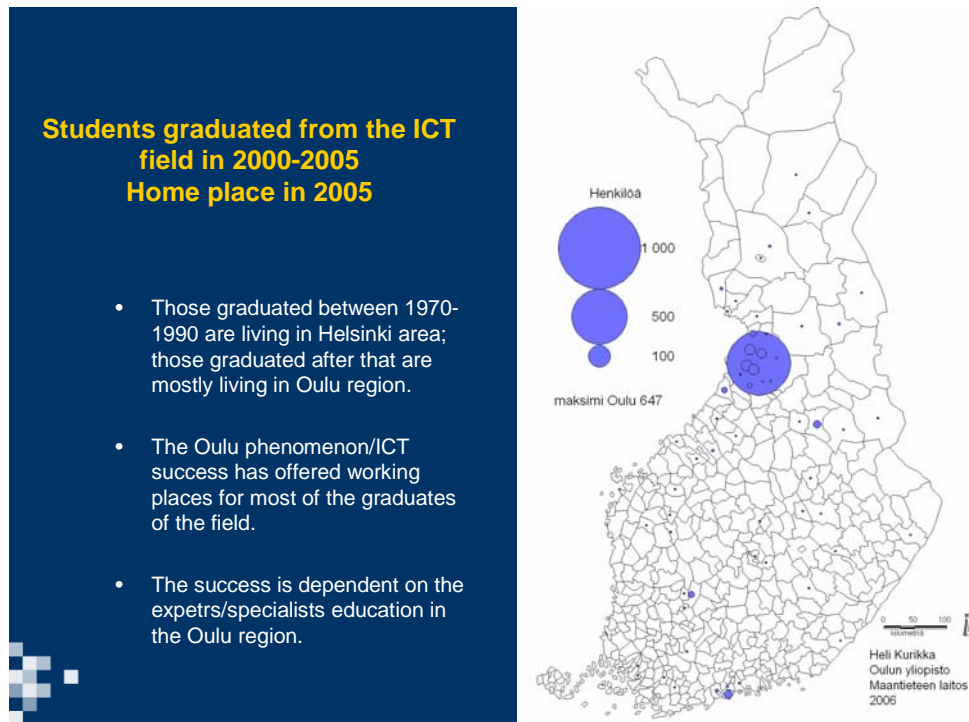
The University of Oulu ...

As noted earlier, one of the critical developments in the Oulu story was the establishment of the University of Oulu in 1958. The mission team met with several key figures within the University during our visit. The Vice-Rector, Dr. Riitta Keiski, provided an overview of the University and its role within the Oulu innovation system. She noted that because Finland is such a small country, they cannot do everything so focus is very important. Two key points of the university's vision include being a driving force in the regional economy through the provision of science-based knowledge and skills, and being a sought after partner for cooperation at all levels.

Dr Keiski explained that the university places strong emphasis on linking their programs and course offerings with the priorities of the local economy, and noted that industry-university collaboration has to be a strong feature of this relationship. The university has an enrollment of 16,729, with the predominant faculties being the sciences (4,522) and technology (4,818). The smallest faculty at present is economics and business administration (1,023), but it was noted that this is now the fastest growing faculty, and that this is in direct response to the new emphasis in the Oulu Inspires strategy to strengthen business marketing and entrepreneurial skills in the region. Another critical aspect of the university's role in the innovation system is in local retention. Fully 80% of the university's PhDs move out of the university and into area business, and the vast majority of university graduates, as illustrated below, stay in the Oulu region.



Dr. Keiski offered a couple of additional observations that further drove home the extent of the relationship the university has with Oulu business and the regional economy. First, she noted that there is considerable two-way traffic between industry and the university around research, with programs in place to facilitate industry researchers coming into the university, and university researchers going out into industry for a period of up to two years. Second, in addition to the high rate of local student retention, she also described the exceptionally high rate of local placement of students in the information and communications technology field. Graduate placement is illustrated below:



Finally, Dr. Keiski provided her own visual representation of the Oulu innovation system from the perspective of the university, again reinforcing for the MTPG mission team the remarkable degree of coordination and collaboration that pervades the Oulu phenomenon:

Further to this, Leila Ristelli, Director of Research and Innovation Services at the University of Oulu explained that long-term cooperation and interaction with companies is a major objective within the university's strategic view of innovation. Ristelli noted that the university plays a critical role in the local and regional innovation system, and is constantly seeking to enhance the level of commercial exploitation of research results. Pekka Rasanen, Innovation Manager from the same office explained that the approximate 400 annual research projects at the university lead to an average 25 patent applications, 10 to 15 technology transfer agreements and 3 to 4 license agreements. Since 2000, there have been 29 start-ups from product-oriented research at the university. In 2006, 4 new start-ups were established and there were 6 in the pre-incubation phase at the time of our visit. Discussions with Martti Elsila, the C.E.O. of Technopolis Ventures, the technology-based incubator, confirmed that 35% of the deal flow into their pre-incubation and

incubation process emanated from university and VTT research. (The role of Technopolis and Technopolis Ventures will be covered in greater detail in a separate report focusing on the Moncton Technology Commercialization Centre initiative.)

One area of particular interest for the mission team was the international dimension of the university's role. Oulu is well-known for having a very strong, proactive international outlook, with international relations, market development and preparation of local firms to compete globally a key aspect of Oulu Inspires. Kimmo Kuortti, the university's Director of International Relations, also Chairs the Internationalization Committee under Oulu Inspires. He explained that the university has some 52 bilateral university partnerships around the world, including four at present in Canada (Lakehead, Montreal, Waterloo, Manitoba) which facilitate exchanges primarily at the Undergraduate and Masters levels. Most of these exchanges are in the 3 month to one year range, but currently not set up as degree programs. The University of Oulu is seeking to expand these partnerships and is also actively working to increase the number of international students. With this objective in mind, the university is dramatically expanding its suite of English language programs.

It should be noted here that Oulu Polytechnic, now re-chartered with degree granting status as the University of Applied Science, has been a constant contributor throughout the evolution of Oulu's prosperity. In addition to providing the skilled human capital to support the technology based growth, the Polytechnic facilitated applied research. More recently, this enhanced role in applied research has opened opportunities for program integration between the University of Oulu and the University of Applied Science, enabling both institutions to achieve greater strength through collaboration.

Conclusions and Recommendations ...

The list of individuals the MTPG mission team met with is considerably broader than the organizations referred to in this report. The complete list is covered in the Oulu agenda appended to this report. The team came away with the overwhelming impression that the power in the Oulu success story is attributable to the high degree of coordination and collaboration among the many players in the Oulu innovation system. This cannot be overstated. And while we did come across the occasional voice of dissent or digression from this pervading spirit of unity, such sentiments were very much the exception and in no way a detriment or deterrent to the collective will and focus evident in the community. The power derived from focus, coordination and collaboration is the overarching objective in the Moncton strategy as stated in the IC2 Institute report:

“...the importance of collaboration and cooperation among Greater Moncton business, academic and government sectors. The effectiveness of these partnering activities will largely determine the region's ability to create high-value jobs, educate, attract, and retain talent, and to accelerate economic growth while sustaining a high quality of life for all citizens.”

We found that our communities, Moncton and Oulu, had a great deal in common, including perhaps most notably a common spirit of achieving the possible. Simply stated

both regions share a “can-do” and “why not?” attitude. We believe the Oulu benchmark is quite valid for Moncton and the implementation of our strategy, and that the experience in Oulu in many ways validates the approach we have adopted therein.

Based on our findings in Oulu, and also in recognition of the emerging economic and post-secondary agenda being advanced by our provincial government, the MTPG proposes the following measures to address issues of capacity and knowledge building, regional coordination and post-secondary / institutional alignment with our strategic objectives:

Capacity / Knowledge Building

Recommendation 1 The City of Moncton undertake a research project to understand the development and evolution of the contribution played by the City of Oulu and the Oulu Regional Business Agency in the implementation of the Oulu innovation strategy to help the City Economic Development Office be better prepared to play its supporting role in the implementation of our strategy. This initiative could be complemented by having similar discussions with our counterparts in the City of Austin.

Recommendation 2 The City and the MTPG, in partnership with the Oulu Regional Business Agency and the IC2 Institute, organize an international workshop focusing on best practices in community-based innovation strategies.

Recommendation 3 A delegation from Oulu be invited to visit the Moncton area in September 2007 to meet with business and institutional leaders here, to explore further possibilities for exchange and partnerships, and to expand on ideas and opportunities discussed during our mission to Oulu.

Recommendation 4 A conceptual framework for the establishment of the Moncton technology commercialization centre be developed. In this regard, a feasibility study is ongoing and a separate report and implementation strategy will be advanced in the near future.

Regional Coordination

Recommendation 5 A working group be established to develop for early implementation the model for “Innovation Moncton”, a small local entity mandated to oversee of the Moncton technology strategy. Drawing on approaches such as the Austin Technology Council and Oulu Innovation, this organization should be tasked with coordination of the strategy and the players within our innovation system. In addition, it should: have a networking role; be tasked with developing local, national and international partnerships, relations and exchanges; and have a research and information dissemination role. Co-location with the new incubator should be considered. The entity should be owned and funded by business, academia, and government.

Recommendation 6 The Moncton area should emulate the approach taken in the implementation of the Oulu innovation strategy by having area stakeholders formally sign on and commit to supporting its objectives and goals.

Development of Human Capital

Recommendation 7 A task force be appointed to develop and advance recommendations to government for the establishment of a new post-secondary collaboration initiative in Moncton. Report A of the MTPG strategy clearly identified the need for enhanced technology-oriented post-secondary capacity aligned with the key industry sectors. The intent of this recommendation is to capitalize on and leverage:

- the vital role played by l'Université de Moncton in the community, its commitment to scientific and technology research and development and its willingness to play a key role in all post-secondary education initiatives;
- the expressed interest of Mount Allison University to enhance its presence in Moncton;
- the expressed interest of the province to enhance technology based educational capacity through the community college system and the key role for our NBCC/CCNB in both training and applied research; and
- the established role of UNB in research and technology transfer support in the province.

Specifically, it is recommended that a new technology-oriented educational partnership be launched in Moncton as a focused, strategic collaboration among the above-mentioned institutions. This initiative could be a combination of real and virtual capacity, but must have the express goal of becoming a centre of excellence in technology management, international business, and science and technology development linked to the key domains identified in the MTPG strategy. This centre of excellence will have close ties to all relevant university research in New Brunswick, our technology transfer offices and Springboard. The centre will become a catalyst for applied research and commercialization supported by the latent strength of our colleges and work closely with the planned technology commercialization facility (Recommendation 4 above). Finally, the centre should contribute to Moncton becoming a focal point for international student exchange in targeted fields of study and excellence.

Recommendation 8 Building on the international training model of the MBA Program at l'Université de Moncton, efforts should be made to establish Masters and PhD level software / electronics and business degrees that can directly support the growth of the Moncton area's ITC sector and, in time, bio-sciences sector.

Recommendation 9 Moncton area universities should explore establishment of student exchange programs, faculty exchange opportunities, program articulation agreements, joint research initiatives and other institutional partnerships that may be of mutual interest

with University of Oulu and University of Applied Sciences (formerly Oulu Polytechnic). This would complement existing and future exchange agreements with other international institutions and strive to capitalize on the Moncton area's unique bilingual characteristics and institutional capabilities.

Moncton Benchmarking visit in Oulu, 18-20 April, 2007

Jon Manship	Chairman, Technology Ventures Corporation
Dr. Rodney Ouellette	Executive Director, Atlantic Cancer Research Institute
Graham Sheppard	Principal, New Brunswick Community College (Moncton)
Ben Champoux	Business Development Specialist, City of Moncton
Eric Pelletier	Senior Project Officer, Enterprise Greater Moncton
Doug Robertson	Chair, Economic Affairs Committee of Council, City of Moncton
David Foord	University of New Brunswick (Friday only)

Tuesday, 17th April

Arrival from Vaasa to Oulu, Accommodation in Sokos Hotel Arina
Pakkahuoneenkatu 16

Wednesday, 18th April

- 08:40 Transportation from Sokos Hotel Arina to Oulu Regional Business Agency
Elektroniikkatie 3
- 09:00 Presentation of Moncton**
The growth of technology –based economy
Entrepreneurship in Moncton
Main industry segments – now and future
- 09:30 Presentation of Oulu**
Mr. Heikki Pudas, Director, Innovations and marketing, City of Oulu
Dr. Mikko Karvo, Director of economical development, City of Oulu
- 10:30 Presentation of Oulu Regional Business Agency**
Mr. Henry Koivukangas, International business contact, Oulu Regional Business Agency
- 11:20 Short walk to Smarthouse
Elektroniikkatie 8
- 11:30 Lunch in Restaurant Smarthouse**
- 13:00 Presentation of Oulu Innovation**
Mr. Jukka Klemettilä, CEO
Ms. Pauliina Pikkujäämsä, Director, Investment and Partnering
Elektroniikkatie 6
- 14:30 Presentation of Technopolis, Smarthouse**
Mr. Heikki Aalto
Elektroniikkatie 8
- 15:30 Transportation to City Hall of Oulu
Kirkkokatu 2a
- 16:00 Meeting with Mayor Matti Pennanen**
City Hall, City Board's meeting room
- 16:30 Short walk to Sokos Hotel Arina
Pakkahuoneenkatu 16
- 18:45 Market Square
Oulun Kärpät Finnish Hockey Champions 2007 celebration

22.5.2007

Thursday, 19th April

07:40 Transportation from Sokos Hotel Arina to Technopolis Ventures
Elektroniikkatie 6

08:00 Presentation of Technopolis Ventures
Mr. Martti Elsilä, CEO

09:25 Group 1 stays at Technopolis Ventures

Group 2, transportation to Biocenter Oulu
Aapistie 5 A

GROUP 1

09:25 Technopolis Ventures, IRC Finland
Ms. Irja Ruokamo

10:15 Transportation to University of Oulu

10:30 Infotech Oulu, University of Oulu
Mr. Tapio Repo

11:00 ELVI project, University of Oulu
Ms. Suvi Latva

12:00 LudoCraft, University of Oulu
Mr. Tomi Kujanpaa

12:45 Lunch at the University of Oulu
Restaurant Discus

13:45 Short walk to VTT Technical Research Centre of Finland
Kaitoväylä 1

GROUP 2

09:45 Biocenter
Ms. Sinikka Eskelinen and Mr. Pekka Kilpeläinen

10.30 Medipolis GMP
Excursion in the clean facilities
Ashesh Kumar Presentation

11:45 Lunch in Medipolis Restaurant

12:45 Transportation to University of Oulu, Linnanmaa campus area

13:00 Visit to Linnanmaa Campus
Mr. Peter Neubauer
Mr. André Juffer

13:45 Short walk to VTT Technical Research Centre of Finland
Kaitoväylä 1

14:00 VTT Technical Research Centre of Finland
Mr. Eero Timonen

22.5.2007

- 15:30 Transportation to Sokos Hotel Arina
Pakkahuoneenkatu 16
- 18:00 Transportation to Hannuksen Piilopirtti in Tyrnävä
Dinner
Transportation back to Oulu

Friday, 20th April

- 08:40 Transportation to the University of Oulu
Pentti Kaiteran katu 1
- 09:00 Introduction to the University of Oulu**
President Lajunen and/or Director Kimmo Kuortti
- 10:00 Research and Innovation Services**
Director Leila Risteli et al
- 11:00 Technology Transfer, Innovations**
Pekka Räsänen et al
- 12:00** Lunch
- 14:00** Wrap-up, questions
- 17:00 Transportation to...hotel/airport