APPLICATION GUIDELINES:

Tips and suggestions on how to best fill out the GCCIR application form and important points to consider!

ALBERTA-EUROPE TECHNOLOGY COLLABOARTION FUND

APPLICATION GUIDELINES

The following guidelines are intended to help you fill out the GCCIR application form for the Alberta-Europe Technology Collaboration Fund. For each section you will be given a short explanation of the expected content, as well as a short example from a successful application. Please note that the following guidelines contain suggestions only, and do not guarantee an application's success. However, we certainly hope that it will make the application process easier and quicker!

All submissions received will be reviewed by external subject-matter experts and the GCCIR Steering Committee.

PROJECT INFORMATION

Brief Project Summary:

Please provide a brief summary of the proposed collaboration project. This summary does not need to exceed 100 words. Your summary should include/consider the following:

- What technology is being developed/what is the project intent and expected result?
- Who are the collaboration partners?
- Please highlight the innovative aspect of the project

Amount Requested from Alberta-Europe Technology Collaboration Fund:

The Alberta company may apply for up to $250,000 CAD from GCCIR through the Alberta-Europe Technology Collaboration Fund, **which would be distributed to the successful applicant in the form of reimbursements following the submission of pre-set milestone reports.** The Albertan company is required to match GCCIR funding through a combination of cash and in-kind contributions to the project.

Cash contributions are defined as new incremental costs. Eligible cash contributions include expenses for the direct costs of carrying out the project and achieving the objectives for which the grant was awarded (e.g. IP protection costs, incremental staff costs, equipment, tools, chemicals, software, consultants, etc.)

Salary and benefits of new hires count as cash contributions to the project (industry standards for benefits). Up to 50% of staff costs can be counted as in-kind contributions by the applicant for existing staff working on the project. The applicant can also utilize the monetary contributions from GCCIR to cover up to 50% of existing staff costs, or up to 100% of incremental staff costs. In neither case can the reimbursement for a given individual's salary exceed 50% of the funding awarded.

Eligible in-kind contributions include non-monetary resources that the applicant provides to support the project. In-kind contributions can be management time or tools that the company already owns, management overhead, specialized skills and advice, or access to special equipment, space, or data sets. **In-kind contributions will be recognized only at fair market value and need to be backed up by proper documentation** (e.g. paystubs, lease agreements, etc.).

Project Technology Scope:

Please indicate which of the sectors provided (i.e. Clean Energy and Environmental Technology, Advanced Materials, Industrial Biotechnology, Health, Information and Communication Technology, etc.) best describes your project. You may indicate more than one sector.

ORGANISATION CRITERIA

In this section, please provide the contact details for each collaboration partner involved in the project. Each project must include a minimum of one industry partner from each jurisdiction with an interest in commercializing the technology that is being developed. Project proposals may also include independent research organisations as additional partners.

PROJECT EXECUTIVE SUMMARY

In this section, we ask that you describe your project in detail (not more than three pages). Aspects to consider and include are:

- Project intent and expected result
- Collaboration partners and unique qualifications/expertise
- Technology description with a focus on the niche to be filled
- What is new/innovative about this technology?
- What benefits does the project bring (economic, social etc.)?
- Why is the development of this specific technology necessary?

Please keep in mind that your application will be reviewed by subject-matter experts! The more detailed your project and technology descriptions are, the easier it will be for reviewers to evaluate your application and its merits.

INTELLECTUAL PROPERTY (IP)

The GCCIR does not regulate IP, however all projects need to have an IP agreement in place, which stipulates how the project partners will deal with their current IP going into the project and any IP resulting from the project. Please briefly explain how IP will be handled (max 1 page). We will need answers to the following questions:

- Will new IP result from the project?
- How will the project partners deal with new, as well as existing IP?
- Mention any filed and/or existing patents connected to the project

Excerpt example:
"We [the Alberta company (partner A)] have drafted a cooperation agreement with [partner B] (France) for the ownership and sharing of IP generated through this project. In summary, the agreement specifies that the parties have project-specific access to the technologies of every partner for the purpose of project development. Each party is responsible for the protection of its intellectual property and the technologies of each partner will be made accessible to the others under reasonable commercial terms. This template of IP resource sharing during the project and a clear understanding of each proponent's expertise and existing property in the future protection and exploitation has been successful. [Partner A] has an IP management team that defines the company's overall IP strategy and manages its execution including quarterly reviews and annual reporting to senior management, shareholders and the board of directors. A brief overview of the IP landscape for technologies under development in the project is presented below: […]"

PROJECT SELF-EVALUATION

You need to be able to describe and self-evaluate your project in detail. Which activities will the project include, how does your project align with the strategic objectives of the GCCIR's program (as well as the objectives of the Albertan and European governments where possible), how will the project be managed, which social and economic benefits will the project entail, and what are your project budget plans, are essential questions that will require detailed answers. Each section of the project self-evaluation will include A/B/C/D statements. Please highlight only **one** statement that best describes the project and then use the following space to justify your selection.

Justifications for each section should provide a concise explanation of how the project addresses the criteria in question, but should not exceed a total of two pages. Comments in excess of two pages may not be reviewed. On the other hand, justifications of two to three sentences would be considered insufficient.

If you quote numbers, statistics, text/statements, etc. please always include the source that you are quoting from!

Following are a few more aspects to consider and short excerpts from previous successful applications for each section:

A1: Strategic fit

As stated in the application form, your project needs to demonstrate how it aligns with the GCCIR program's strategic objectives, addresses needs in both Alberta and Europe, and fulfills the collaboration mandate of the program.

Excerpt example:

"[The Alberta company] has invested a significant part of its resources in the development of emissions monitoring technology. […] There are primarily two strategic goals established by the Government of Alberta that the proposed project supports. […] the Province of Alberta has established a framework for the development and deployment of a world-class environmental monitoring system. […] Although the present emphasis is on greenhouse gas fugitive emissions, the government has a framework to improve the measurement of other emissions such as VOCs and BTEX. The proposed technology would extend the number of species [the Alberta company] could measure and assist with monitoring emissions from hydrocarbon resource development activities. […] France, and the EU at large, are similarly committed to combating climate change and the development of technology industry."

A2: Project Management

Project management is crucial. You need to have a viable plan of activities to achieve the project's outcomes and objectives. You should clearly identify desired outcomes, required resources, risks and risk mitigation strategies, and include a detailed project timeline that outlines the responsibility of each partner involved.

Excerpt examples for a few of these aspects:

"**Resource Requirements and Costing Estimates**

For this collaboration project our development, project management, business development and product marketing teams are the principal resources needed. [The Alberta company (partner A)] anticipates expanding its team by at least three new hires to accomplish this project. Both the new hires and project use of existing staff can be accomplished within the planned $500K budget for the [partner A] side of this project.

The Sustainability of the Project and Long-term Strategy
[Partner A] and [partner B] will develop a combined subscription price (likely with several levels and tiers) and the joint solution will be sold as a complete solution bundle by both [partner A] and [partner B] (and their respective distributors). [Partner A] sells almost exclusively through our channel partners (system integrators, distributors and OEM partners). Recently [our product] sales have grown to become our major revenue stream. We anticipate that this project, particularly the zero-client software, will greatly increase our OEM and re-seller revenue. Projected revenues and combined with existing cash on hand is sufficient to fund [partner A]'s portion of the project. The basis for the revenue is an upfront license fee combined with optional recurring support, maintenance and subscription fees.
[…]

Risk Management
[Partner A]'s developers and managers have many years of experience on similar projects involving international joint product collaboration. While the planned development work does present new technical challenges and opportunities, we believe that, even in the event of unforeseen difficulties, given [partner A]'s extensive experience in R&D collaboration, a pathway can be found to deliver a workable joint solution."

B1: The team
This section allows you to introduce the personnel involved in the project and demonstrate why this is the best combination of individuals to carry out this particular project. Please introduce team members briefly and elaborate on their expertise/experience and why they are needed to complete the proposed project. If possible, please also introduce the key team members from project partner organizations. You should outline how the joint team will be managed as well.

Excerpt example:
"[Employee] joined [the Alberta company] as sales director in 2000. He received a D. Phil in Atmospheric Physics from Oxford University in 1982 and joined Core Laboratories Houston as R&D manager from 1986 to 1991. […] He will lead the sales and marketing effort for [product] fugitive emissions monitoring."

B2: Infrastructure
You will need to show that there is an appropriate infrastructure in place (or accessible) to complete the proposed project. Identify the facilities/space, equipment, IT, services, etc. needed for execution and successful completion of the project.

Excerpt example:
"[The Alberta company's] R&D infrastructure boasts one of the world's most advanced Haptics, Engineering and Rapid Prototyping laboratory within [project] at the University of Calgary. Specifically, the Electrical Station includes a dedicated electrical workshop with function generator, oscilloscope, soldering station, and electronic components for circuitry design that was and is necessary for the ongoing design and development of the [product] System. The facility also houses two counterbalance surgical microscopes (Zeiss, and Leica systems) that are used for placement of the [element A] onto [element B]. For testing and validating thermal thresholds of [element A], the group has installed an oven (Thermo Scientific, Germany) in its experimental Operating Room space. The experimental operating room is also equipped with physiological monitoring, surgical microscopes with recording capability, microsurgical instruments and six microsurgical stations that endow the infrastructure for preclinical testing. The infrastructure includes a Connect500 3D printer (Objet, Israel) and a machine shop with CNC milling machinery and laser cutter/engraver that allow rapid prototyping of parts and tools. Available software packages such as Solidworks, MATLAB, Simulink allow the development of hardware models and user

experience interface/GUIs. An in-house Apple Cluster provides advanced processing power for the proposed [product] and for data storage and management."

B3: Collaboration

In order to fulfill the mandate of our Alberta-Europe Technology Collaboration Fund, you must have at least one collaboration partner in Europe. In this section, elaborate as clearly and in as much detail as possible on how your collaboration will be structured.

Important: "Collaboration" denotes a tangible commitment to achieve desirable synergy for all parties involved, including significant industry leadership, buy-in from stakeholders, synergistic leverage of existing resources in the respective jurisdictions, and partnerships valuable to Alberta and Europe. It is a cooperative research and development effort that leads to successful project completion. A simple procurement of parts, for example, from companies in different countries does not meet the GCCIR's collaboration requirements.

Excerpt example:

"This project is truly collaborative and cannot be undertaken without all partners participating. All parties bring existing knowledge and skills to this project, with the final outcome being a prototype for a new high-throughput, low-cost testing system for DNA markers applicable in a wide variety of specimens.
[…]
[Partner A] is a company specializing in the development of new DNA-based tests for chronic and infectious diseases in mammals, especially in production animals, pets and humans. [Partner A] will provide the marker sequences, evaluations of their specificity and selectivity, and also the establishment of the testing routine on the new prototype machine and the evaluation of the performance via a double-blinded study.
[Partner B] will provide the Chemistry and detection methods for the prototype device. [Partner B] will implement a hybridization-based procedure for the detection of BRD-specific markers using DNA probes labeled fluorescently. They are going to investigate the use of several classes of fluorophores initially […]
[Partner C] will synthesize the DNA probes necessary for the hybridization experiments with the CNA markers.
[…]
[Partner D] will be in charge of building the prototype machine for the detection of [substance] […]"

B4: Funding

In order to receive funding from the GCCIR, your company and project partner need to demonstrate the **financial capacity and commitment to match any funding requested from GCCIR**. Furthermore, any other sources of funding for a given project need to be disclosed to the GCCIR.

Project funding includes the extent to which the proposal is industry driven, sufficiently funded, has a **detailed and justified budget** and is adequately leveraged.

Excerpt example:

"For the proposed work, [partner A], the Alberta based company, will provide $250k […] to match the funding provided by GCCIR for this project. This matching fund consists of two parts: cash contribution of $100k and in-kind contribution of $150k. The cash contribution asked from GCCIR is $250k for two years. All budget estimation amounts are in Canadian dollars unless specified otherwise. A detailed budget allocation for each activity required towards successful completion of the proposed project is as follows:
First phase:
[…] The required hardware supplies will be provided partially by [partner A] as cash contribution of $70k and GCCIR cash contribution of $30k. […] The machine services and finite element analysis of [product] will be provided by [partner A] as cash contribution of $5k and in-kind contribution of $20k […] Required infrastructure needed […] will be provided by [partner A] as in-kind contribution of $25k […] The required office supplies during this period will be provided by [partner A] as a cash contribution of $1k and GCCIR cash contribution of $2k.

[…]

Second Phase:

[…] The software developers will be funded by the German counterpart [partner B]. Salary support for the clinical data collector is requested at $60k (GCCIR contribution). The office supplies during this period will be provided by [partner A] as cash contribution of $2k and GCCIR cash contribution of $3k. […] The equipment needed for this phase including the computer hardware and software platforms are provided by [partner A] as a cash contribution of $20k and in-kind contribution of $25k, and cash contribution of $10k by GCCIR. Adequate supervision of the data collector will be provided by [research team] as in-kind contribution of $20k each.

Third Phase:

[…] A $15k cash contribution for salary and $5k travel cost between medical centres is asked from GCCIR for this period. Supervision will be provided by [employees] from [partner A] as in-kind contribution of $5k each.

Final Phase:

[…] A cash contribution of $15k for salary is asked from GCCIR. Supervision will be provided by [employees] from [partner A] as in-kind contribution each. Office supplies and other overhead costs will be provided by [partner A] as a cash contribution of $2k."

Sample funding table:

FUNDING PARTNERS				
Organization(s)	**Cash**	**In-kind**	**Total**	**Confirmed (Y/N)**
Canadian Dollars				
GCCIR	**250,000**		**250,000**	**N**
[Albertan Company]	**100,000**	**150,000**	**250,000**	**Y**
[add rows as required]				
Subtotal	**350,000**	**150,000**	**500,000**	
Euros				
European Funding	**338,615**		**338,615**	**N**
[European Company]	**113,429**		**113,429**	**Y**
[add rows as required]				
Subtotal	**452,034**		**452,034**	

C1: Commercial potential and economic benefits

For a project to be eligible for funding, you must clearly articulate its economic benefits (qualitative and quantitative) for both Alberta and Europe in the context of this program by:

1. Clearly identifying commercialization goals and strategies;
2. Demonstrating commercial potential driven by a validated customer need
   - engaging a potential first customer/user of the technology helps to validate the need
3. Identifying target market, segments and approximate size for each region;
4. Including business / technological competitive assessment

Economic benefits have a broad impact on regional prosperity. Please describe how your project will contribute to industry diversification in priority sectors, assist in the development of globally competitive industry activity, support and enhance clusters, where applicable, and create high tech employment opportunities.

Excerpt example:

"[The Alberta company]'s goal is to become the leading server software provider for centrally powered interactive display infrastructure (IDI). This is a disruptive technology that addresses a rapidly growing and

unmet market need. The first step in this process is to win recognition as the premier international supplier of video walls and video over IP technology. Our flagship product [product name] is already recognized as the international leader in software for video walls based on its functionality, ease of use and low price.
The key element of this [project and] our revolutionary approach and dedication [is] to resolving [IDI] software issues at the most fundamental levels which [will put] us far ahead of the competition."

C2: Societal benefits

In this section, you should elaborate on how the collaboration project and its outcome will improve quality of life - including enhanced wellness - enhance entrepreneurial culture, provide additional innovation capacity, and result in positive social impacts (e.g. cleaner environment, better medical care for a given demographic, new jobs, etc.).

Excerpt example:

"Creating a smart, connected analytical Appliance based on [technology] represents a very significant innovation that has potential not only for the proposed platform but for all [technology]-based analytical technologies. The software components of this project has the potential to revolutionize the manner in which [technology] analytical services are rendered. It is very significant to enable users to control a powerful appliance without the requirement for extensive knowledge of the principles of operation, system management and programming and experiment design and execution.

All partners in this project are continuing to demonstrate their entrepreneurial spirit by investing in a new way to cost-effectively embed [technology] in a chemical production process. Each partner is leveraging the strength of the others to produce a product that could not be produced alone. The transfer of knowledge between project partners will be significant, driving an increase in innovative capacity in both the participating individuals and their associated companies.

The proposed project will result in a platform that will have been requested by global chemical companies whose products and services are used in a number of industrial segments including health, environmental and industrial biotechnology. Marketing the system to global markets will be a well-understood process at the end of the project as each participant organization will derive a deeper understanding of the opportunity from its partners. It is anticipated that the market will be large and lucrative – driving growth in both the R&D and manufacturing departments of the project partners. The overall market effort of this technology will contribute to enhanced research and manufacturing capability across several industrial segments in both jurisdictions. For Alberta specifically, this will contribute towards diversification of the workforce and the province's skill sets. There is great potential for long-term innovation based on this smart, connected platform and it will continue to grow as the [partner A]'s product portfolio improves in performance and flexibility."

C3: Innovation

Last but not least, for a project to be eligible for funding, you must clearly demonstrate its development of long-term innovation as an outcome.

Innovation includes: processes, services, infrastructure, intellectual property, highly qualified personnel, access to capital, access to internationally recognized expertise, networks, and other elements that enhance the ability of European and Albertan companies to innovate towards technology excellence.

Excerpt example:

"The [technology developed in this project] has attracted attention of researchers and stakeholders in many industries taking a close look at the novel polymer structures that can be generated. The applications are far reaching, ranging from functional food, nutraceuticals, pharma, technical applications and even energy storage

solutions. The sectors we anticipate to influence are advanced materials, micro-nanotechnology, green technologies, new drug delivery vehicles, nano-composite plastics based on biodegradable polymers and aerogels. The polymers we currently evaluate come from companies in Canada, USA, Europe (Germany) and Israel.
[…]
[The technology developed in this project] will be the first industrial scale process utilizing green solvents that can generate aerogels using biopolymers on an industrial scale, as well as large amounts of highly porous polymers for areas far reaching from food to pharma to technical fields and advanced materials. The novel membranes will boost the competitiveness of [this technology] and will allow new pathways of processing by being able to separate components from supercritical fluid mixtures and gas expanded liquids."

PROJECT EXPENSES

Please provide all eligible expenses and funding sources relevant to the project, using the format provided in the application form. Under the "Type" heading, please indicate whether the expense/funding is "cash" or "in-kind." If a partner is contributing both types of funding, please list them twice, once for each type. Please insert additional rows as required.

Please keep in mind that the Albertan company needs to match GCCIR funding in **both cash and in-kind** contributions to the project. Cash contributions by the Alberta company need to be at least 20% of the Alberta budget.

Please also note that your European partner(s) contributions, as well as the contributions from any European funding institution, if applicable, must be listed in the "Funding Partners" and "Project Expenses" tables as well. Also, Euro amounts should be listed in equivalent Canadian dollar amounts.

Example:

YEAR ONE						
Source	**Type**	**Personnel**	**Overhead**	**Operations**	**Equipment**	**Year**
GCCIR	Cash	93,935		27,000		120,935
[Alberta Company]	Cash	67,960		13,000	3,000	83,960
[Alberta Company]	In-kind		75,429			75,429
[European Company]	Cash	50,200		30,021	20,000	100,221
[add rows as required]						
					TOTAL YEAR ONE	380,545

YEAR TWO						
Source	**Type**	**Personnel**	**Overhead**	**Operations**	**Equipment**	**Year**
GCCIR	Cash	112,942		15,700		128,642
[Alberta Company]	Cash	221,173		5,000	35,000	261,173
[Alberta Company]	In-kind		144,506			144,506
[European Company]	Cash	112,000		135,000	5,956	252,956
[add rows as required]						
					TOTAL YEAR TWO	787,277

IMPORTANT: Do not forget to sign and date your application and include all necessary supporting documentation!