

Green Municipal Fund

Five-Year Plan 2018-2023

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1 | How we got here

On March 31, 2000, the Green Municipal Fund (GMF) was established. Since then, it has grown to a \$500 million endowment under the Federation of Canadian Municipalities (FCM). The federal government created GMF as an important policy instrument for gaining experience in the development and execution of sustainability projects, establishing and sharing best practices and lessons learned, and improving the environmental performance of municipal installations. GMF was mandated to achieve this, in part, by helping municipalities access more funding from federal, provincial and territorial governments and other public and private sector partners for sustainability projects.

Today, GMF supports municipal projects that advance innovative solutions to tackle environmental challenges. The projects must have three attributes: significant environmental and social benefits and a strong businesses case. Through GMF, municipalities generate and share lessons learned and successful new models for advancing sustainability in municipalities of all sizes and types in all regions across Canada.

Additional funding

In *Budget 2016*, the Government of Canada provided an additional \$125 million to FCM, bringing the total GMF endowment to \$625 million. It provided this additional funding because of GMF's impressive governance track record. Since its inception, GMF has made compelling contributions to advancing sustainability in the Canadian municipal sector. The additional money ensures that GMF will continue as a sustainable source of funding for municipal governments and their partners.

With this new funding GMF's funding agreement was revised so it can better serve its target clients and fulfill its mandate. INFC also became one of GMF's oversight departments, joining Environment and Climate Change Canada (ECCC) and Natural Resources Canada (NRCan). GMF and key federal partners are now more closely linked.

Negotiations for the new funding agreement concluded in December, 2017, and the new funds are to be transferred to FCM at the start of the 2018-2019 fiscal year.

Program opportunities

While GMF renegotiated its funding agreement, FCM launched two complementary programs: the Municipal Asset Management Program (MAMP) and the Municipalities for Climate Innovation Program (MCIP). They resulted from FCM's advocacy and GMF's programming efforts between 2013 and 2017.

In the coming years, these programs will free up GMF resources, to help address the municipal sector's sustainable innovation and capacity building needs, and expand on the GMF's triple bottom-line results. This will also enable GMF to address the leveraging measures and objectives identified as an area to address by the Office of the Auditor General in its 2016 review of GMF.

In addition to the internal FCM opportunities, significant opportunities to lever the Fund have emerged from the 2016 and 2017 Federal budgets. Both budgets included major investments in green infrastructure, innovation, smart cities and clean growth. GMF is in an excellent position to help the federal government deliver on its sustainability and prosperity objectives.

A new strategic plan

Given this landscape, it was time to revisit GMF's strategic approach to the sector so it could take advantage of emerging market conditions. The GMF team worked with the broader FCM and the GMF Council on a strategic planning exercise in the 2017-2018 fiscal year.

This document is a synthesis of that work. It lays out GMF's revised, long-term vision and work packages, and articulates its objectives for the next five years. A complementary *Annual Statement of Plans and Objectives (ASPO)* document will detail annual activities that will support the delivery of these five-year objectives.

2 | Current context

GMF's mandate and place in the sector

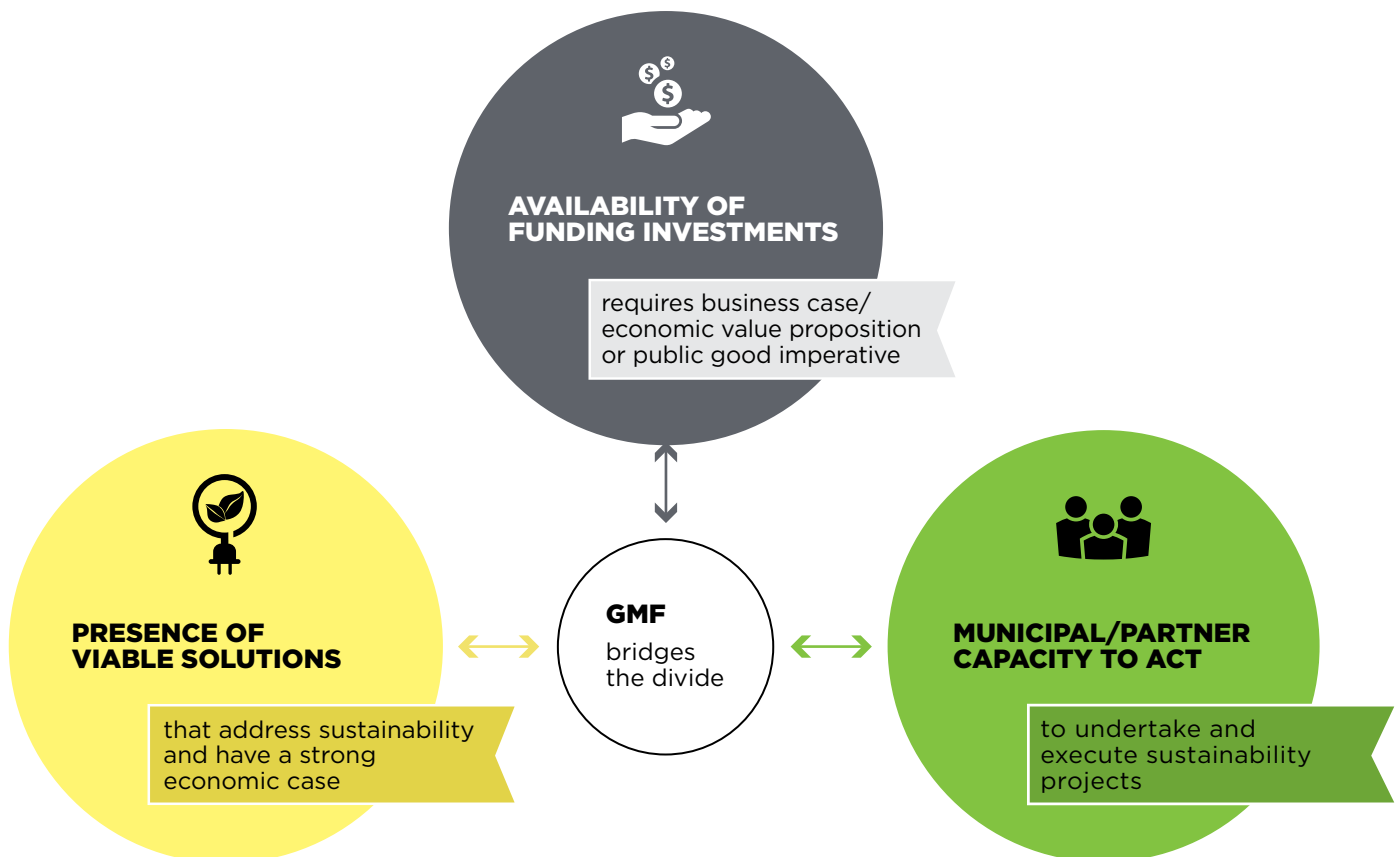
GMF's federal funding agreement states that its primary purpose is to help municipal governments leverage investments in municipal sustainability projects, and provide grants, loans and/or loan guarantees to eligible recipients for eligible projects.

The funding agreement provides guidance on how to achieve this, as summarized in the goals below:

- a. Support the advancement and validation of innovative solutions that address sustainability and have a strong business case. Do this work in GMF's five subsectors (i.e. energy, transportation, waste, water and land use and integrated planning) to give municipalities more ways to achieve their sustainability objectives.
- b. Develop the capacity of municipalities, local governments and their partners to undertake and successfully execute sustainability projects.
- c. Ensure that municipalities can access enough pools of capital to invest in sustainability projects.
- d. Ensure that GMF has a strong governance reputation and adequate resources to support the sector through sound management of the endowment.

FIGURE 1

GMF'S PLACE IN CREATING OPTIMAL MARKET CONDITIONS

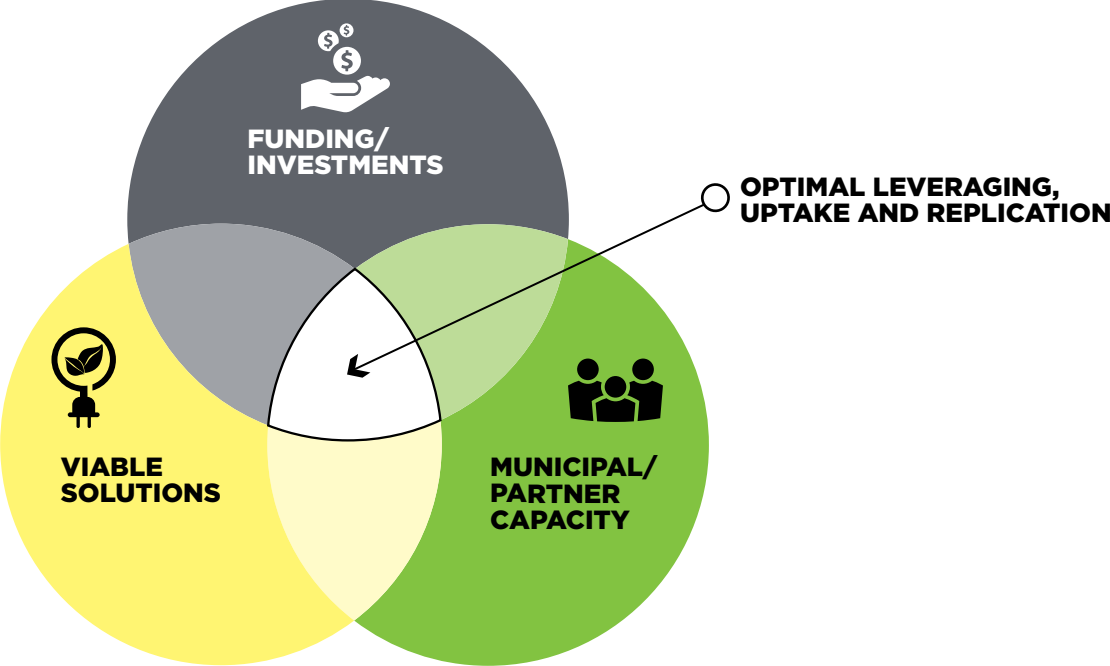


Figures 1 and 2 illustrate how GMF helps create the right market conditions when it addresses the first three goals mentioned above.

Figure 1 shows GMF bridging the divide between investment levels, municipal capacity, and the sustainability solutions available in the municipal sector.

If GMF achieves the three goals outlined in Figure 1, market conditions will improve and municipalities will find it easier to transition to sustainable practices. At that point, GMF will be better able to leverage its initial investments in these three areas (see Figure 2).

FIGURE 2
**TARGET CONDITIONS
FOR THE MUNICIPAL SECTOR**



GMF's approach

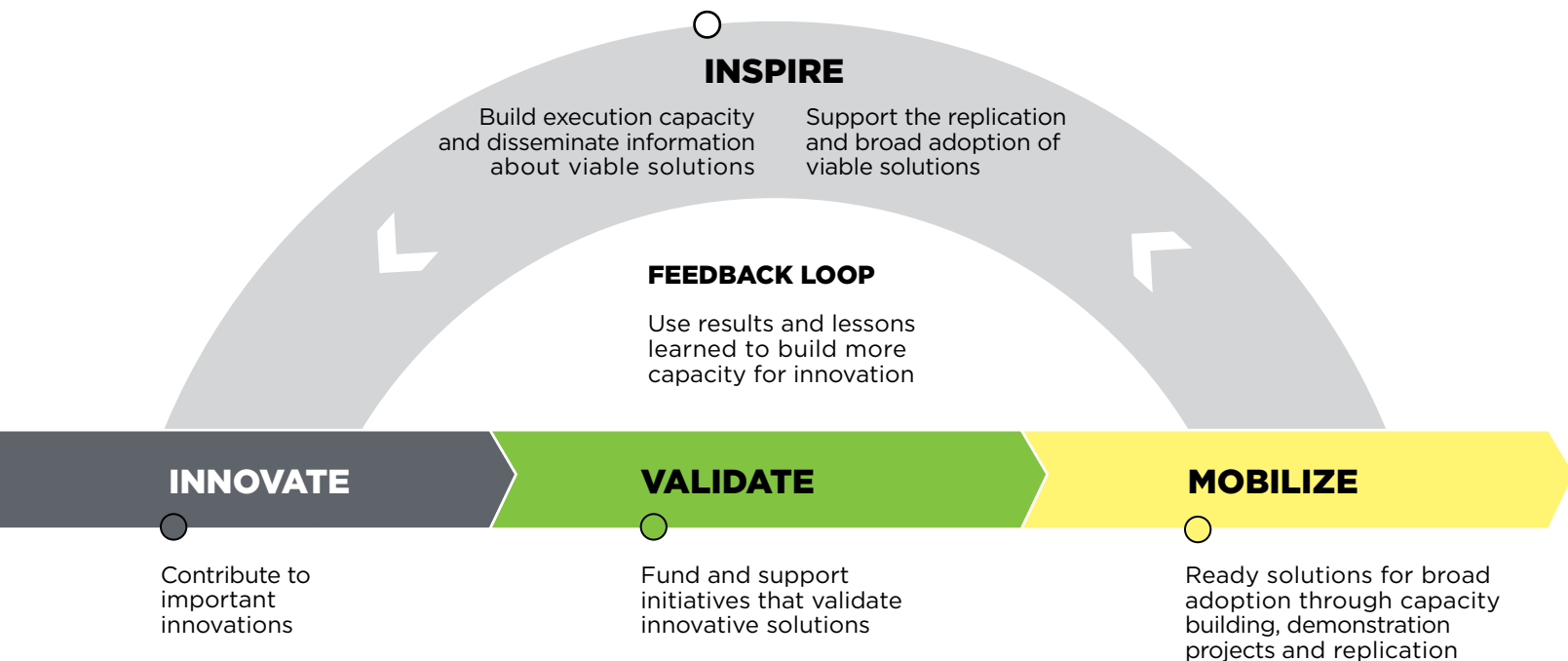
To date, GMF has addressed its objectives, in part, by providing loans and grants, as well as educational resources and training services to support municipal initiatives that improve air, water and land quality, and protect the climate. It has focused on innovation and advancing new solutions from the idea phase, through planning, feasibility assessment, piloting and validation, full-scale demonstration and ultimately broad adoption.

GMF's approach has historically focused on (see also, Figure 3):

- Fostering innovative solutions and promoting them over current practices
- Validating those solutions
- Mobilizing lessons learned and knowledge from GMF funded projects to support the replication of new solutions, better position future projects for success and inspire the next waves of innovation

FIGURE 3

GMF'S APPROACH TO ACHIEVING ITS PROGRAM OBJECTIVES



3 | GMF's renewed purpose, subsector visions and intermediate outcomes

GMF has set out its renewed purpose, subsector visions and intermediate outcomes based on guidance in its revised funding agreement and its experience over the past 17 years.

Purpose

Accelerate the transition to resilient Canadian municipalities that enhance the quality of the air, water and land, protect the climate, and ensure sustainable levels of service and community prosperity.

Subsector visions

Energy: *Energy production is clean and affordable, and energy is either conserved or used efficiently.*

Transportation: *Active and low-carbon modes of transportation are accessible, efficient, safe and convenient.*

Water: *Clean water is accessible and all water is protected, used and managed efficiently.*

Waste: *Waste is avoided, recovered and reused through responsible resource management.*

Land use and integrated planning: *Land is protected, restored, and used and managed responsibly.*

Intermediate outcomes

Goal A: *Municipalities have access to innovative, technically and economically viable sustainability solutions to their challenges.*

Goal B: *Municipalities and their partners have the capacity, knowledge and decision making tools and support to plan, undertake, manage the risk of and execute innovative sustainability projects and adopt sustainable solutions.*

Goal C: *Municipalities have access to adequate pools of capital to invest in or fund sustainable infrastructure and solutions.*

Goal D: *GMF has the means and resources to lead the transition to sustainable Canadian communities.*

4 | Emerging strategic opportunities

In 2017–2018, the GMF team and the GMF Council conducted an assessment which compared what GMF is trying to achieve with how its programs are performing and how it is perceived by stakeholders in its target market. Out of this assessment, which included a comprehensive stakeholder engagement campaign, the team synthesized the challenges and opportunities into five thematic areas. These represent opportunities to build on GMF’s strong, established foundation and provide added value to the municipal sustainability sector. They also help position the sector to achieve its sustainability goals faster in the medium and long term.

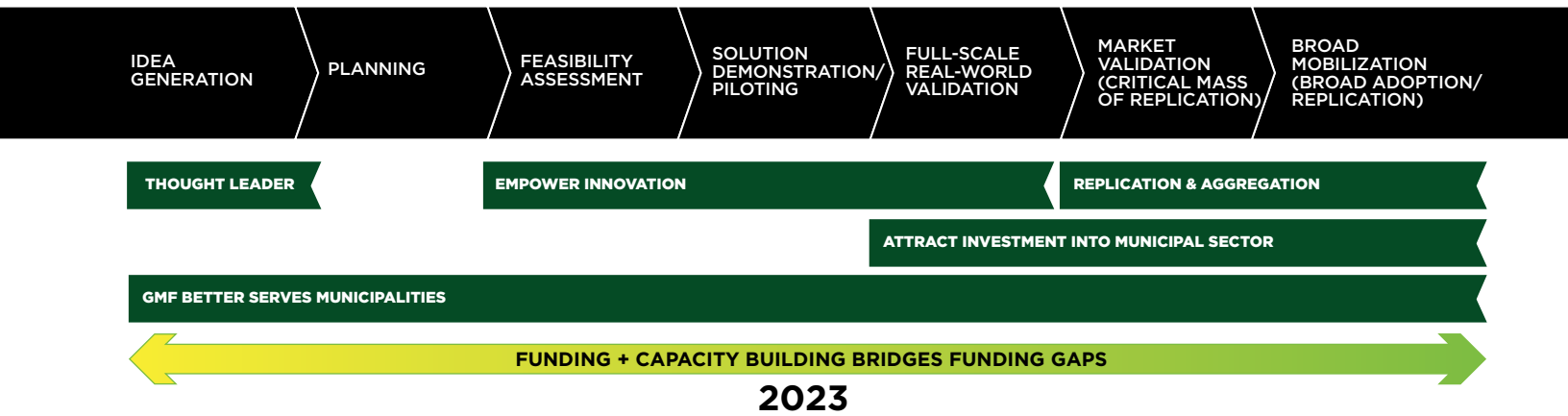
To bring an innovative sustainability solution through to broad market adoption, municipalities pass through a series of steps (see Figure 4):

- idea generation
- planning
- feasibility assessment
- solution demonstration/piloting
- full-scale validation in real world conditions
- market validation (at this state a sufficient number of municipalities have tested the solution to accurately assess its viability)
- broad mobilization and market adoption.

Within this sequence of steps, there is currently a perceived funding and resource gap for viable idea generation, particularly for medium sized to small communities. As a solution moves from feasibility assessment to piloting, full-scale validation and market validation, there is insufficient funding. This funding gap makes financial risk too high and limits municipalities' capacity to assess, test, scale and replicate promising sustainability solutions. This slows down the number and quality of sustainable solutions reaching broad mobilization.

FIGURE 4

THEMATIC AREAS APPLIED TO EACH STAGE OF SOLUTION DEVELOPMENT



By taking action on the five strategic opportunities outlined below GMF will target our funding, capacity building, and partnerships to bridge these gaps and support acceleration of promising sustainability solutions through the steps to broad mobilization (see Figure 4).

- ***Position GMF as a thought leader:***
 - Enhance data availability
 - Develop roadmaps for the sector to help identify the most viable, sustainable solutions and ideas to address its biggest challenges
 - Position other entities and partners so they can help solve sector-related challenges
- ***Empower innovation:***
 - Address risks (financial, decision-making and political) that municipalities and private sector partners face when they try to adopt new, innovative solutions
- ***Accelerate the replication and aggregation of opportunities:***
 - Build and incent multi-community partnering
 - Require replication pathways from the beginning of projects
 - Work to have the best sustainability options adopted more broadly
 - Foster knowledge, capacity building and funding support
- ***Enhance GMF's ability to attract investment in the municipal sector:***
 - Break down barriers to investment
 - Partner with other funding sources to draw new revenue into the municipal sustainability sector
 - Enhance the transactional readiness of municipalities
 - Determine the business case behind the most promising sustainability solutions and share them with the sector and potential investors
- ***Enable GMF to better serve the municipal sector and make its processes better serve municipalities:***
 - Implement the objectives identified in the other four thematic areas
 - Improve the client experience with the GMF funding offer and processes
 - Enhance GMF's internal capacity to respond to the sector's needs (e.g., technical knowledge, project planning, execution)
 - Eventually position GMF to deliver a help-desk-style function that can quickly and effectively support communities (particularly small and medium-sized ones) to identify and successfully implement appropriate solutions for their context

5 | Work packages (key result areas) 2018–2023

Within the sector, GMF is known for its ability to validate sustainability solutions, which helps it position new sustainability projects for success with councils and communities. It also has a very strong governance system and reputation; well-articulated and comprehensive funding processes; leading knowledge and capacity building approaches; and deep experience with over 1,400 funded projects. It has a great history of innovating, trying new initiatives and approaches for the sector's benefit, and shining a light on key issues and capacity gaps the sector must overcome to achieve its sustainability objectives. This gives GMF a very strong foundation to build on in the next five years.

GMF will address the thematic areas outlined above, continue to deliver on its core mandate, and position itself to achieve the highest possible results. It will focus on the following work packages, also known as key result areas (KRAs), over the next five years and possibly beyond. These work packages are intended to provide a complete set of tools to address the four GMF intermediate outcome goals. The connections between each work package and GMF's purpose, subsector visions and intermediate outcomes are illustrated in Figure 5. See Figure A-1 for full logic model.

FIGURE 5

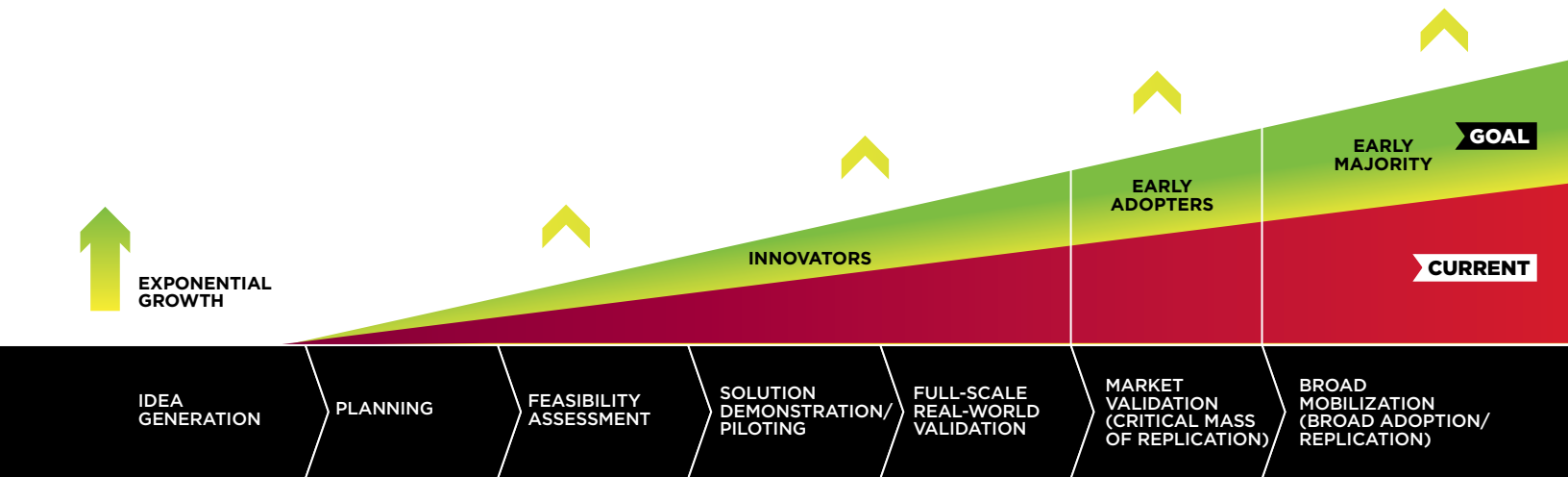
RELATIONSHIP OF GMF WORK PACKAGES TO ACHIEVING ITS PURPOSE, SUBSECTOR VISIONS AND INTERMEDIATE OUTCOMES



Through the delivery of this Five Year Plan, and the associated work packages, GMF will aim to increase the receptiveness of municipal processes to go beyond business as usual (Figure 6).

FIGURE 6

RECEPTIVENESS OF MUNICIPAL PROCESSES TO GO BEYOND BUSINESS AS USUAL



1. Empower innovation (Inspiration>Demonstration>Validation)

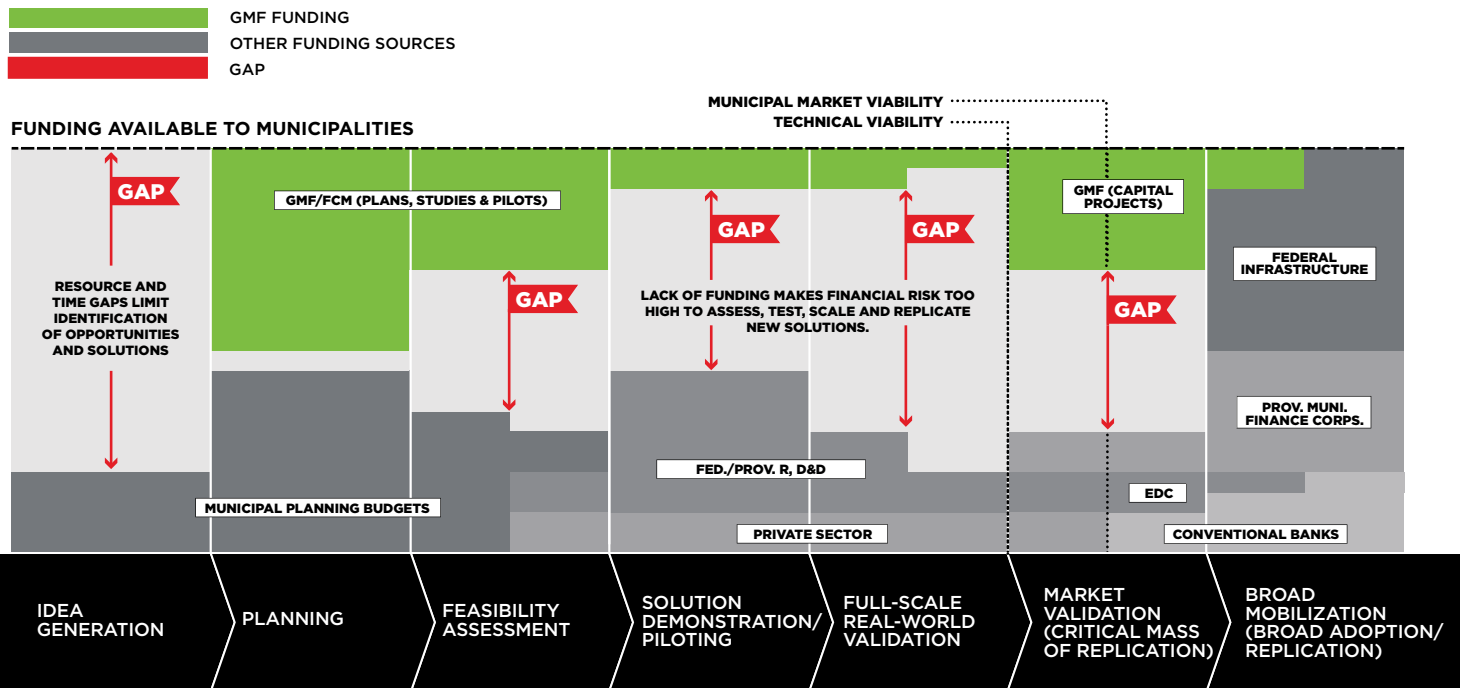
GMF has focused on innovation since its inception, but municipalities and their partners still face significant challenges when they try to advance innovative sustainability solutions.

If municipalities across Canada are to meet international commitments and domestic objectives, they must significantly reduce emissions, increase the number of climate resilience projects, achieve aggressive water discharge limits and water conservation targets, and hit ambitious waste diversion targets in the coming two decades.

Although some solutions to these issues exist today, not enough of them are complete solutions that will allow the long-term objectives to be reached across the sector. In the coming years, GMF will therefore focus on addressing the risks that municipalities and private sector partners face when they try to adopt new and innovative solutions.

Figure 7

FUNDING MAP: INNOVATIVE MUNICIPAL ENVIRONMENTAL SOLUTIONS



Financial risks

Municipalities and their partners need funding support to address their financial risks. Figure 7 maps out the funding available to the municipal sector and the sources of that funding at each step, from implementation to broad adoption. Still, the sector needs far more funding than it can access.

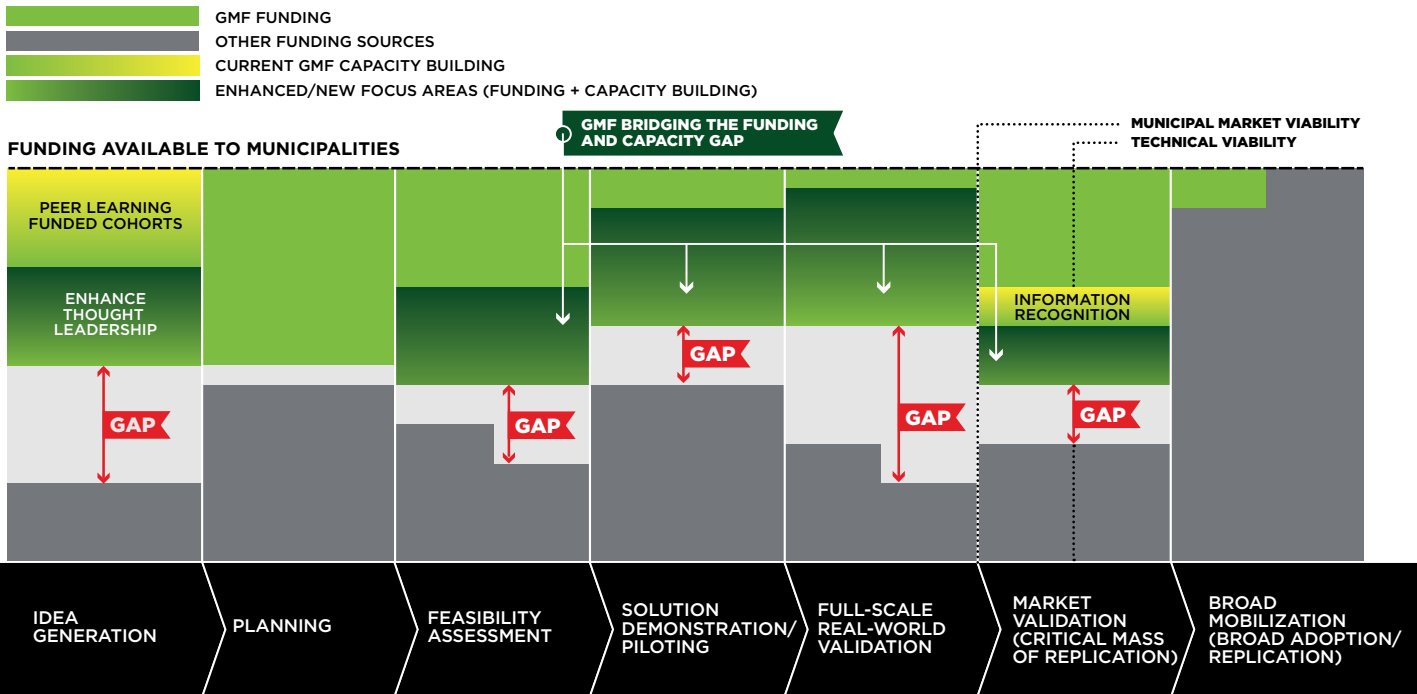
As shown in Figure 7, the amount GMF contributes to piloting and validating new solutions thins out relative to the sector’s funding needs. In the validation phase in particular, the financial risks increase. It is also the most challenging moment in mobilizing new solutions as it requires the largest investment but still has significant technical performance risk. That’s especially true in the case of high-risk, first-of-kind, transformative, full-scale demonstration projects.

In other sectors, this financial risk is shared between venture capital, banks, pension funds, industry and federal and provincial research, development and commercialization funding instruments. Unfortunately, this is no effective offer in the market today that buys down the financial risks municipalities face in the late stages of piloting, demonstrating and adopting new technologies and industry and private investors are not participating to anywhere near the same levels as in other sectors of the economy.

Through delivery of the 11 work packages, GMF will aim to bridge the funding and capacity gaps identified (Figure 8).

FIGURE 8

BUILDING FUNDING, CAPACITY & KNOWLEDGE TO BRIDGE FUNDING GAPS



Decision-making and political risks

Municipalities also face decision-making and political risks when they implement sustainability solutions. Small and medium-sized communities often lack the in-house expertise they need to address those risks. They do not usually have the technical and business case expertise to assess and manage the decision, approval, and execution risks inherent to new approaches.

GMF will therefore create tools in the coming years to address these risks and gaps through its five-year outcomes for this work package.

Expected five-year outcomes:

- a. Provide municipalities with a complete set of funding solutions, in conjunction with GMF’s partners. This reduces the financial risks municipalities face when they attempt to advance new, transformational, and innovative sustainability solutions. Municipalities can access adequate funding resources at every stage, from a solution’s creation through its technical and market validation.

- b. Provide the municipal sector with access to technical and financial due diligence expertise and a support network in each of GMF's focus subsectors (i.e., energy, transportation, water, waste, and land use and planning). This reduces the decision-making risks that municipal staff and elected officials face when they advance innovative environmental solutions in these areas.
- c. Provide the municipal sector with access to an extensive network of incubators and piloting partners. This gives municipalities a safe, pilot-oriented environment in which to test, demonstrate, refine and gain experience with new solutions in GMF's focus subsectors.
- d. Give the municipal sector access to a complete set of capacity building and support tools, knowledge products and platforms, risk-sharing partnership models, peer networks and sector champions. These support better policy development, decision making, governance, case building and project management. They also improve testing, validation and adoption/procurement processes related to new sustainability solutions. Finally, they increase the likelihood that innovative sustainability projects will succeed.
- e. Regularly review environmental performance targets in GMF's focus subsectors. The targets should foster continuous innovation and contribute to achieving the vision statement for each focus subsector.
- f. Ensure that municipalities implement more transformative and innovative environmental solutions, faster. Measure this as the number of new, GMF-supported, technically and economically viable sustainability solutions that achieve technical and market validation.

2. Accelerate the replication of proven sustainable solutions

There are suitable funding offers available through GMF for the replication and early broad adoption of sustainability solutions (see Figure 7). These funding offers pair well with other funding opportunities in the sector.

GMF's approach to funding this space has helped increase the level of environmental performance built into the sector's assets and practices. Without GMF's support, these levels would probably not have been achieved.

Still, replication and the transition from new solutions to early adoption is not happening quickly enough to address the sector's sustainability needs within the required timelines.

GMF's history has shown that a single demonstration of a solution in one market context is not enough to lead to its broad uptake. Analyses suggest that three to five successful deployments of a new solution in a variety of market contexts are usually required before the broader market takes it up.

Although GMF is active in the initial replication of solutions, it does not provide targeted funding to replicate the most promising solutions it funds. The lessons learned from the first few deployments of new solutions are extremely valuable. They can validate the solution's performance and confirm its business case. Both of these are key to adoption by other municipalities. The lessons from initial replications can reduce the cost and risks for other municipalities (and their partners) if those lessons are properly tracked and communicated.

GMF believes that proactively building in and incenting multi-community partnering and replication pathways from the beginning of projects will help increase new solutions' adoption rates. It can also promote their adoption through targeted funding. Finally, if it understands where the greatest replication and project aggregation opportunities are in Canada, GMF can help mobilize capital from other sources to fund the broad uptake of solutions. This would help GMF improve its results and leverage its influence.

The five-year outcomes for this work package support a complete set of tools that will enhance the replication rate and mobilization of promising new solutions emerging from GMF.

Expected five-year outcomes:

- a. Offer funding solutions that encourage and enable the municipal sector to replicate proven, sustainable environmental solutions. This includes funding offers for multiple deployments in a single project. Municipalities can access enough funding resources through GMF and its partners to meet their market validation needs.
- b. Provide funding and knowledge products that encourage the early replication of promising, high-impact solutions. Select and fund projects with built-in replication potential and pathways. Support these solutions from their early development phase through to their broad adoption. This might include, for example, multi-community de-risking aspects and evaluating the potential for strong business cases.
- c. Establish a set of criteria to assess when opportunities, particularly those driven by common sector needs and market size, could be aggregated. Create a system to track and pool related projects that could benefit from funding from GMF's partners (e.g. Green Infrastructure funding, Infrastructure Bank, provincial carbon credit pools) for broad adoption.
- d. Achieve a net increase in the rate at which municipalities replicate proven, GMF-supported solutions. Measure and monitor this rate.

3. Create a roadmap of the municipal sector's challenges and solution pathways

Figure 7 includes a perceived funding and resource gap around viable idea generation, particularly for small-to-medium-sized communities. GMF will therefore develop roadmaps to show municipalities how to achieve their overall sustainability objectives in each GMF focus subsector (i.e. energy, transportation, water, waste and land use and planning).

The roadmaps will provide guidance on how to achieve these objectives in a way that optimizes economic, environmental and social considerations. They will take into account the differences in community size and location. They will also address a concern voiced by many municipalities that there is a lack or complete absence of resources on how to find the best solutions and achieve long-term sustainability goals.

GMF will work with a diverse group of stakeholders and its partners to develop and disseminate these roadmaps. The roadmaps will focus on effective solutions that are highly replicable across communities and move the sector toward more sustainable practices. The five-year outcomes related to this work package will focus on processes and tools that address this need.

Expected five-year outcomes:

- a.** Establish a municipal sector roadmap model and process for overcoming municipal sector sustainability challenges. Do so with an eye to maximum reach, utility and relevance for municipal staff, elected officials, policy makers, government instruments, NGOs and private sector solution providers.
- b.** Develop strategic roadmaps for each GMF focus subsector as well as a process for regularly renewing them.
- c.** Release targeted funding calls for solutions that can have the greatest impact, based on criteria in each focus subsector's roadmap.
- d.** Develop capacity and knowledge products that address opportunities in the focus subsector roadmaps, as well as the non-technical aspects (e.g. regulatory changes, data, decision-making tools) of solutions that can have the greatest impact.
- e.** Create, validate, fund and support solutions that can have the greatest impact. Do this through capacity building and mobilization, and track and report on this mobilization.

4. Establish the business case for and economic benefits of sustainable solutions

Analysis indicates that municipal staff and elected officials face significant challenges in understanding and validating the business case for potential sustainability solutions. This was one of the most commonly encountered barriers when they sought approval for new projects.

They also lack accessible, clear and complete data on the economic performance of sustainability solutions. Without that data, expertise or decision tools, it is difficult for them to make sound investments and stretch their municipal budgets as far as possible.

This work package aims to deliver appropriate analysis and knowledge tools to support municipalities in their decision making and due diligence around sustainable solutions. The five-year outcomes for this work package will help GMF understand the criteria municipalities use when making these decisions, and create tools to help them make assessments and decisions.

Expected five-year outcomes:

- a.** Understand the business case and economic viability criteria that key municipal decision makers use when they approve and prioritize new sustainability projects and initiatives.
- b.** Develop a set of decision tools (e.g. budgets and economic models) that help municipalities make sound financial decisions while promoting the most compelling GMF-supported solutions.
- c.** Identify and articulate the direct economic benefits of GMF-supported solutions in a way that is thorough and defensible.
- d.** Understand and assess the business case and economic resilience of projects at the application stage and once they are GMF-supported. Support the municipal sector in making these assessments.

5. Be responsive to clients' needs

Throughout the strategic analysis, municipal stakeholders — particularly those in small-to-medium-sized communities — expressed their need to access the following:

- Timely and complete information about a project's financial and technical viability
- Advice on how to prioritize their array of outdated and inefficient assets
- Advice on how their communities can address sustainability challenges in a way that is viable and affordable
- Funding processes that require little effort up front and still provide a timely assessment of whether the project can be funded, as well as meaningful information to optimize the project's success.
- Help in establishing peer learning opportunities with communities that have dealt with similar challenges

Small-to-medium-sized communities do not have the time, expertise or funding resources to take on the challenges they face in transitioning their communities to more sustainable practices. In some cases, they do not even meet the current compliance requirements. Having quick and reliable access to trusted and affordable expertise is a major need in these communities.

Given that similar communities face similar issues, GMF believes it could achieve significant economies of scale by establishing a central advisory service system.

Making it faster and easier to identify, fund and deploy solutions in these communities would speed the pace of sector transformation. The five-year outcomes for this work package optimize the benefits of GMF's funding offers and the related processes, and help it respond to its clients' needs.

Expected five-year outcomes:

- a. Ensure that the effort required to seek GMF funding is commensurate with the level of funding applicants seek, as well as the level of risk associated with their proposed solution. Take into consideration the support that small communities with limited capacity require.
- b. Understand municipalities' capacity and needs based on several factors, including the composition and number of their staff, their population, and geographic location.

- c. Have GMF staff members and a network of vetted partners who can help address the municipal sector’s planning and execution support needs.
- d. Ensure that grant amounts for capital projects are commensurate with the project’s level of risk and transformational potential; there is more grant money for higher risk and more transformational projects. For most capital projects with low-end technical and financial risks, GMF offers more value through its in-kind capacity and knowledge support contributions than through the grant support expectation (e.g., 15%).
- e. Understand the non-economic decision-making criteria that key municipal decision makers use when they approve and prioritize new sustainability projects and initiatives.
- f. Give clients access to advisory services that have the support, knowledge and tools they need to improve their sustainability projects.

6. Leverage and mobilize GMF’s knowledge, decision tools and capacity-building support for planning and executing sustainable projects

This five-year strategic plan outlines a holistic approach to capacity building that enables GMF to address gaps and create the following:

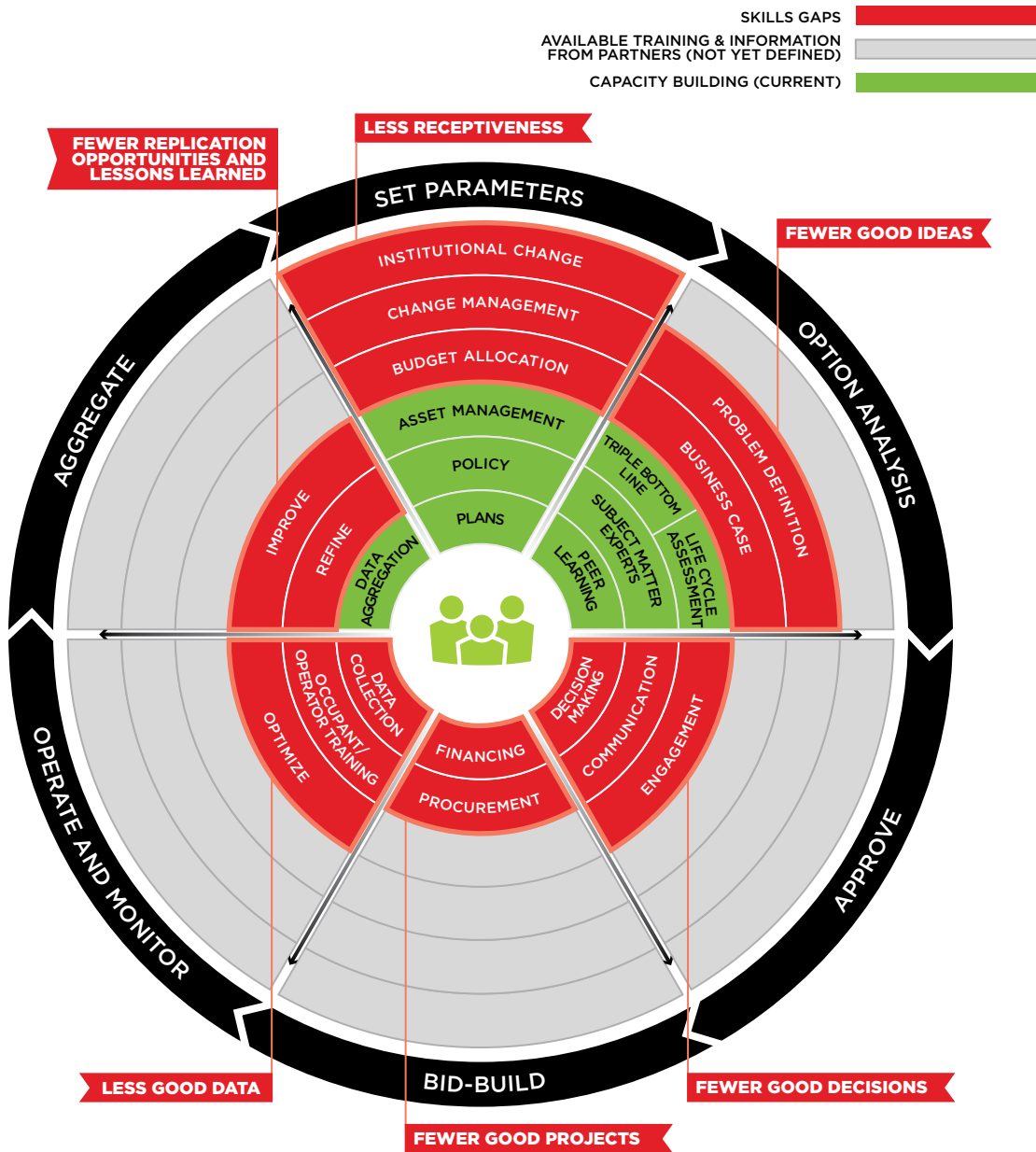
1. Long-term, systemic changes so municipalities are more prepared to implement sustainability solutions
2. Short- and medium-term improvements in project planning and delivery that will hone practitioners’ skills and improve their knowledge

This should result in more frequent and successful projects, which will encourage other investors to enter the sector.

Critical knowledge and skills gaps

GMF has identified some critical knowledge and skills required to deliver high-quality results at all stages of a program’s implementation (see Figure 9). These represent recurrent challenges for municipalities.

FIGURE 9
**KNOWLEDGE
 CAPACITY GAPS**

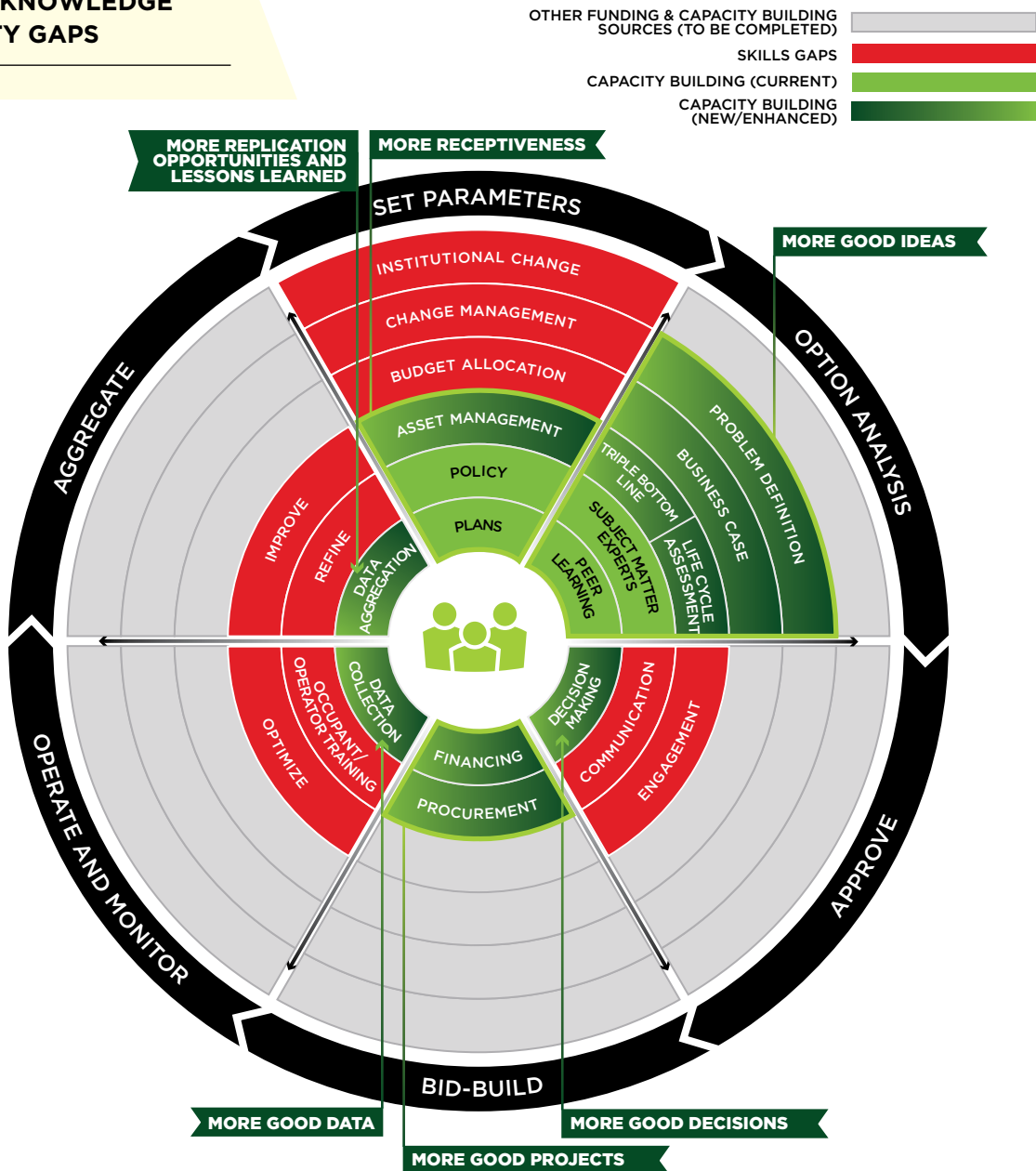


If the necessary knowledge and skills are not in place, that diminishes the quality of the project as it moves through each step. That also reduces the solution’s replication potential, degrades assessment of its market viability, and reduces the predictability of its timeline, budget costs and performance (Figure 9). That diminishes decision makers’ confidence in the solution and results in lost opportunities and less uptake of the solution across the sector.

GMF will seek to improve municipal knowledge and capacity to deliver sustainability projects (Figure 10). Based on insights from GMF’s current capacity building programming and analysis of funded projects, GMF has identified critical skill gaps to fill in the next five years: building the business case, problem definition, improved decision-making, financing, procurement, and data collection. To bridge these skill gaps GMF will first aim to connect the municipal sector with quality information and capacity development from partners and external sources; when no such information exists, GMF will develop new content. Targeting improvements at each step in project delivery will more accurately test sustainability solutions. This will increase the efficiency of project delivery and allow municipal budgets to go further; it will also support quality project delivery and data collection, the foundation for replication and broad scale adoption of viable solutions.

FIGURE 10

BRIDGING KNOWLEDGE & CAPACITY GAPS



Knowledge Tools

Through the development and sharing of our roadmapping results, GMF will aim to become the point of first resort and a recognized thought leader for municipalities as they implement innovative and proven sustainability solutions. It's essential that these new resources and the extensive knowledge resources available in the GMF portfolio of projects and historical capacity building programming be effectively mobilized and as accessible as possible. GMF will continue to share this new information through our proven toolbox (including: research papers and guidebooks, workshops, webinars, training, peer learning, recognition, milestone frameworks, etc.) and will continue to innovate in our capacity building and knowledge sharing as part of its 5-year strategic plan.

The five-year outcomes for this work package mobilize knowledge and capacity building in a way that responds to the sector's need for project exploration and execution.

Expected five-year outcomes:

- a. Work with a network of partners in Canada to lever each other's:
 - Data sets
 - Knowledge and knowledge products
 - Decision tools
 - Lessons learned
 - Capacity building support and training
 - Peer and expert networks
- b. Establish a modern, accessible, navigable, versatile, and easily updated online platform. Use that platform to promote GMF's assets as well as those available through its partner network (see point 6a).
- c. Host a series of innovative, targeted and influential events in conjunction with other FCM programs and partners. Focus on capacity building and knowledge mobilization around solutions that can have the most impact in GMF's focus subsectors. The events also support other GMF work package objectives.
- d. Collaborate with other FCM and sector partners to develop peer learning groups. Focus on solutions that can have the most impact on GMF's focus subsectors.
- e. Measurably increase the ability of municipal staff and elected officials to select, plan, approve and deliver locally appropriate, high-impact solutions in GMF's focus subsectors.

7. Collect and develop data to help direct the efforts of the municipal sector and its partners

FCM will collect data and make it available so that municipalities, GMF and its partners have the information they need to identify sustainability areas that are easily addressed and have significant environmental and economic impacts. This addresses concerns raised by municipal staff, NGOs, private sector stakeholders and other groups about a lack of data. They want to know the biggest sources of emissions, pollution and waste in municipalities across Canada as well as the best market opportunities for solutions.

This data will be detailed and comprehensive enough to help them understand the scale of issues and opportunities. It will be sortable by community size or as aggregate data (e.g. by communities, provinces and territories or country). It will support data-driven decision making by GMF, FCM and external stakeholders so they can help municipalities become sustainable more quickly. The five-year outcomes for this work package advance the collection, development and mobilization of data for the Canadian municipal sector.

Expected five-year outcomes:

- a. Fill a data gap by developing and maintaining granular information and data sets that quantify emission rates and the broader environmental and economic impacts of municipal assets and processes across all GMF focus subsectors. Include local, regional, and national-level data.
- b. Gather and distribute useful open-source data that can be easily accessed by the municipal sector and its partners.
- c. Develop strategic insights that can inform GMF projects as well as other FCM programs, policy and advocacy. Base these insights on comprehensive, high-quality, research and data.
- d. Create or gather data sets about non-municipal assets and processes at the community level to identify the following:
 - The highest environmental and economic impact opportunities
 - Impacts on service levels and service delivery
 - Sustainability challenges that are the most easily influenced

8. Attract capital and investments to the municipal sustainability sector (lever investments) and help municipalities access funds and identify new revenue streams

One of GMF's core objectives, as stated in its funding agreement, is to encourage more investment in municipal sustainability projects. GMF's own activities should catalyze further investments in the sector from other sources. This implies that GMF has a role to play in buying down the financial and market risk municipalities and their partners face. It can also help eliminate barriers to investment from other funding sources such as federal, provincial and municipal governments; private sector companies; pension funds and other private investors; impact investors; and other non-government instruments such as endowments.

GMF can play a key role in enhancing municipalities' transaction readiness and making those types of investments more feasible. That will make the investment cycle for the public and private sector quicker, more nimble, and better aligned with the returns that funders are likely to require.

It is important to note that municipalities' needs far outstrip the funding resources available through public funds alone. That is why it is imperative that GMF enable other funding sources to move into the sector.

The *2016 Office of the Auditor General's review of the GMF program* found that although there appeared to be some investments being leveraged by GMF, GMF had not clearly defined its objectives or established a framework to measure its progress. It noted this as an area for improvement if GMF is to meet the objectives set out in its funding agreement.

GMF will break down barriers to investments in the municipal sector; partner with other funding sources to draw them into the municipal sustainability sector; and enhance the transaction readiness of municipalities. The five-year outcomes for this work package better position the municipal sector to receive additional investments and stretch their budgets further.

Expected five-year outcomes:

- a.** Maintain an inventory that clarifies the sustainability investment needs of the municipal sector and aligns them with the qualification criteria from key funders (e.g. INFC, IBank, trusts, pension funds, major project developers).
- b.** Provide the municipal sector with knowledge, capacity and funding tools that facilitate transactions with funders and investors.
- c.** Establish a network of partners who can fund sustainability projects and follow-on replication. Have a clear process to engage these partners in funding and investment opportunities.

- d. Become a recognized expert in project and fund management and effectively leverage partners' capacities in these areas.
- e. Transact with new investors to enable high-impact opportunities that address sustainability in the municipal sector (applies to GMF *and* its applicants).
- f. Proactively track, raise awareness of, and support the development and mobilization of new financing and revenue models that help municipalities accomplish more without increasing their budgets.

9. Ensure GMF's sustainability and maximize its influence

GMF operates because of its endowment. The more effectively that endowment is managed, the more influence GMF can have in moving the municipal sector toward more sustainable practices. The receipt of \$125M from *Budget 2016* addressed, in part, the financial sustainability challenges caused by persistent low interest rates and lower returns on the endowment's investments. However, the discretionary resources the endowment generates continue to be limited by the returns it can generate from investments and the yields it generates through its capital projects loan portfolio.

Given this context, the endowment must be managed in a way that maximizes its revenue generation while ensuring its ongoing security and capacity to operate. The five-year outcomes for this work package ensure the endowment's sound management in the long term while ensuring that it has the financial resources required to fulfill its mandate.

Expected five-year outcomes:

- a. Possess strong internal expertise and advisory support to manage the GMF endowment, including a deep understanding of Canadian and global best practices and innovative approaches in endowment use and management.
- b. Use an investment framework that allows GMF to optimally contribute to FCM's sustainability and corporate social responsibility objectives while also maximizing achievable returns within the parameters of GMF's funding agreement.
- c. Hold the endowment whole through to 2042–2043 while optimizing the availability of near-term resources to address the municipal sector's needs. Maximize the reach and impact of GMF without compromising future program funding and operational resources.
- d. Identify and quantify financial resource gaps in the municipal sector. Collaborate with existing funders and potential donors to fill these gaps.

10. Inspire municipalities and their partners by defining, recognizing and communicating the successes, lessons learned and triple bottom line benefits of sustainable solutions

GMF has supported over 1,400 projects since its inception. During its strategic analysis, feedback often noted that despite this high number, GMF did not effectively communicate critical information from the projects. Nor did it differentiate the level of success for various projects or distill the sector's most promising solutions.

Understanding which factors contribute to optimal results and promoting the best solutions is essential to GMF's long-term success. This can be done through external stakeholder reporting and establishing clear project selection practices.

Furthermore, the large number of projects GMF has supported over the years has generated valuable lessons learned that could be used to help future projects succeed. The strategic analysis indicated that there was room to use lessons learned to benefit the broader sector. The five-year outcomes for this work package better position GMF to communicate the key ingredients in successes as well as lessons learned.

Expected five-year outcomes:

- a. Articulate criteria that define program success (e.g. optimal results, impact potential) in each GMF focus subsector.
- b. Develop a system to identify, recognize and promote projects that meet these criteria, particularly their triple bottom line benefits.
- c. Have modern, efficient and effective sustainability recognition programs that serve the Canadian municipal sector.
- d. Have a clear process to distill, communicate and mobilize high-value lessons learned for the most common processes and types of projects in GMF's focus subsectors. Draw these lessons from failed *and* successful projects funded by GMF as well as broader sector projects.

11. Maintain excellence in governance, due diligence, project funding and oversight while balancing risks with returns

Programs like GMF need a strong performance management framework. It keeps them focused and makes them easier to manage. Strategic analysis and evaluations of GMF's activities over the years has shown that GMF has strong financial controls, project funding systems and environmental performance reporting.

It has also revealed gaps in GMF's economic results performance framework. That is particularly true of its ability to bring other investments into the sector and the way in which other key focus areas (e.g. replication) are not optimized in GMF's funding process or capacity building efforts. Further, it identified GMF's struggles to balance the risk and level of effort in initiatives with their potential rewards and results.

GMF needs to clearly articulate which risks are *worth taking* and the parameters for risks it *can take*. That will enable it to be focused, effective and disciplined in its efforts to advance more transformative innovation opportunities. The five-year outcomes for this work package enable the development of a performance measurement system. This system articulates GMF's sector contributions and the progress it makes toward delivering on its mandate and ensuring optimal results from its operations.

Expected five-year outcomes:

- a. Establish a performance framework and monitoring system to track and transparently report on GMF's economic, environmental and social contributions across its focus subsectors. Use this to help assess the effectiveness of GMF's operations.
- b. Carry out research to track the following:
 - The impact and influence of GMF funding
 - The economic, social and environmental impacts of GMF-supported projects
 - The long-term environmental performance of GMF capital projects
- c. Optimize GMF's due diligence, funding and oversight processes to ensure the achievement of key performance indicators *and* enable staff to prioritize projects and programming that will provide the highest results.
- d. Set clear, FCM-approved risk thresholds and operating boundaries. These include risk management criteria that help staff innovate and generate maximum results for GMF and the broader municipal sector.
- e. Demonstrate a measurable increase in:
 - The municipal sector's transformation rate (e.g. positive economic and environmental impact, replication rates)
 - The value GMF provides to clients, particularly through the breadth of resources and solutions clients can access through GMF
 - The effectiveness of GMF's operations
- f. Achieve exceptional results consistent with a high-performing, well-managed and value-adding policy instrument in any third-party or Government of Canada evaluation of GMF.



Appendix A: GMF logic model

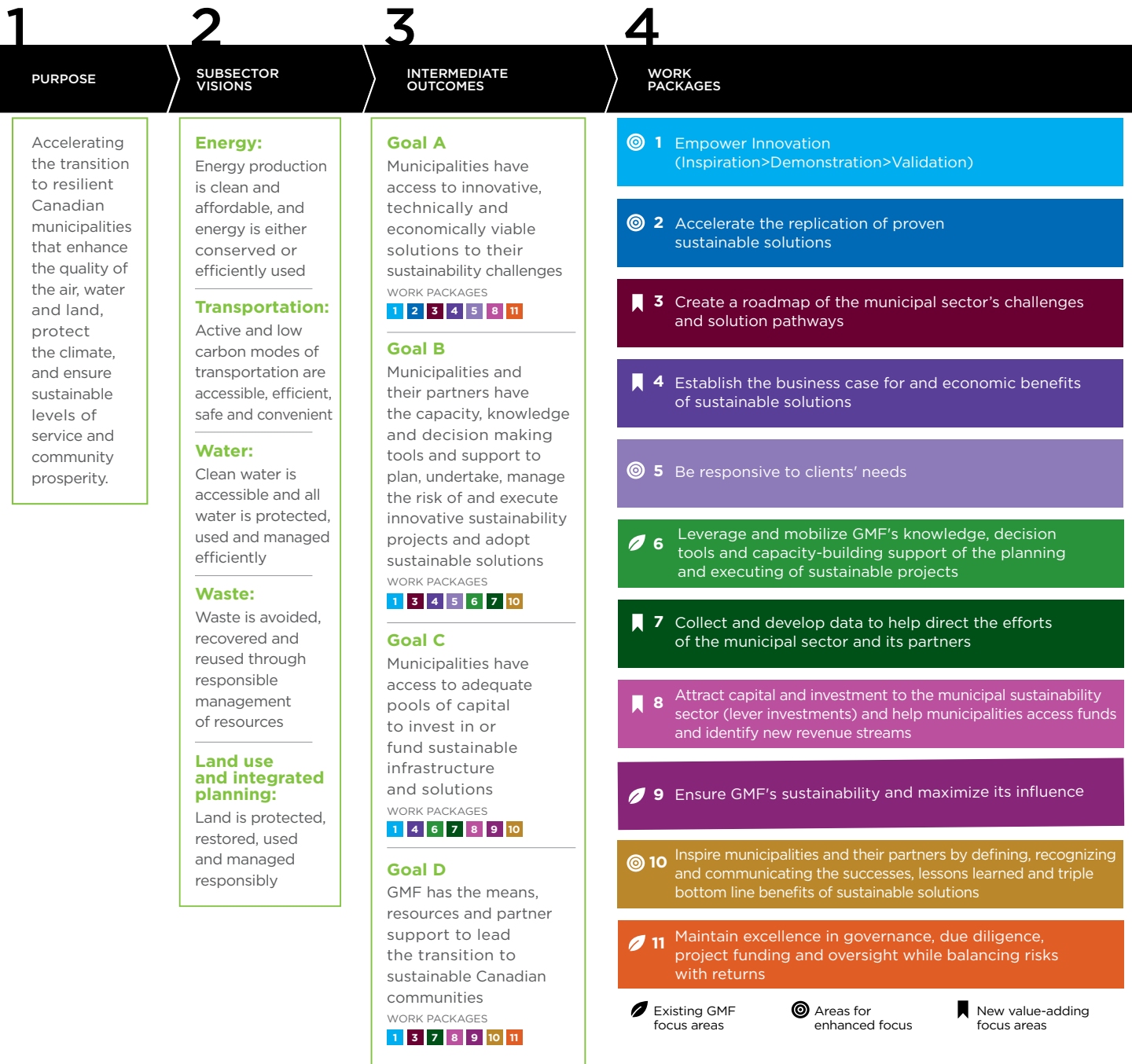
Figure A-1 is GMF’s logic model (on the following page), which articulates its purpose, subsector visions and intermediate outcomes. The top level is fairly consistent with the logic model in GMF’s previous three-year plan, though there is a new emphasis on hastening the transition to sustainability. The logic model also lists the work packages GMF needs to undertake in order to have a complete set of tools that address the municipal sector’s sustainability needs. Work packages are split into three categories:

- Existing GMF areas of focus (few changes are proposed as they are working well)
- Traditional GMF areas of focus in which there are promising opportunities for enhancement or realignment
- Net new GMF work packages

The numbering below each intermediate outcome goal refers to the relevant work package listed on its right.

FIGURE A-1

GMF LOGIC MODEL



5

OUTPUTS

<p>Aggregation of replication opportunities WORK PACKAGES 1 2 7</p>
<p>Municipal sector roadmaps WORK PACKAGES 2 3 7</p>
<p>Innovative and accessible project funding instruments WORK PACKAGES 1 2 3 5 6 8 9 11</p>
<p>Effective and impactful partnerships and networks to mobilize solutions in the municipal sector WORK PACKAGES 3 7 8 10</p>
<p>Knowledge products, training platforms, decision tools and advisory services WORK PACKAGES 4 5 6 10</p>
<p>Impactful and accessible data WORK PACKAGES 4 7 10</p>
<p>Increased peer learning opportunities for municipal staff and elected officials WORK PACKAGES 5 6 10</p>
<p>Increased readiness (knowledge, experience and financial) and willingness to take on innovative sustainable projects and overall receptivity WORK PACKAGES 2 4 5 6 7 10</p>
<p>Projects generate/demonstrate valuable lessons WORK PACKAGES 6 10</p>
<p>Strategic Insights inform policy and practice that enables sustainable cities and communities WORK PACKAGES 2 6 7 10 11</p>
<p>GMF promotional products WORK PACKAGES 6 7 10</p>
<p>Successful program evaluations and audits WORK PACKAGES 5 7 9 11</p>

6

MEASURABLES

<p>GMF Funded Solutions mobilized to address municipal sustainability needs</p>
<p>National profile established of sustainable and innovative Canadian cities and communities</p>
<p>Cost savings and broader economic benefits to municipal operations and citizens</p>
<p>Levered Private and Public Sector Investments in GMF projects and in replicated projects</p>
<p>Increased municipal capacity to plan, study, test and build innovative initiatives</p>
<p>Environmental Benefits (Clean Air, Clean Water, Clean Land and climate protection through GHG reductions)</p>
<p>Technically and Economically Viable Environmental Solutions to identified challenges</p>
<p>Social benefits of sustainable solutions</p>
<p>Level of effort required from applicants and timelines for approval, contracting and receipt of funds</p>
<p>GMF endowment sustainability beyond 2042</p>
<p>Percentage of fund disbursed compared to approvals</p>



The Government of Canada endowed the Federation of Canadian Municipalities (FCM) with \$500 million to establish the Green Municipal Fund™. An additional \$125 million top-up to this endowment was also announced in Budget 2016 and will be added to the Fund in 2017–2018. The Fund supports partnerships and leveraging of both public and private-sector funding to reach higher standards of air, water and soil quality, and climate protection.