



In partnership with



Value and connect data to create the first

METABOLISM MANUFACTURE MONTREAL

Eligible businesses

Manufacturing

SMEs

having

- ✓ Revenue over 1 M \$
- ✓ A Computer Aided Design system (CAD)
- ✓ A technical / Scientific Data Team

The M3 project will allow participating companies to gain a deep knowledge of their environmental impacts and master tools which aid them in reducing their carbon footprint

- **Diagnosis** containing the potential benefits the company could see by implementing sustainable actions;
- **Life cycle analysis** of a product of their choice and potential improvements that may result;
- **GHG balance sheet** including direct and indirect emissions, in order to establish all of their impacts and aid in developing quantified reduction strategies;

The project is **70% subsidized** by the **City of Montreal**, **Emploi Québec** and the **Ministry of the Economy and Innovation** and represents a \$ 3,600 investment by businesses for a project valued at \$ 12,000.

ADVANTAGES



PROFITABILITY

Eco designed products increase projected profit margins by an average of 12% ⁽¹⁾

COMPETITIVENESS

Adapting to new market requirements, efficient use of products, new product launches, increased sales and market share

OPERATIONAL FLUIDITY

Optimize workflows, reduce delivery times

REDUCE IMPACTS

Reduced waste and GHG emissions

PROSPECTIVE

Long-term vision based around sustainable development

(1) Pôle écoconception et Institut de développement de produits. (2014). La profitabilité de l'écoconception : une analyse économique. Repéré à http://www.idp-innovation.com/wp-content/uploads/pdf/IDP_Ecoconception_Rapport_2014_Profitabilite.pdf

Three targeted sectors

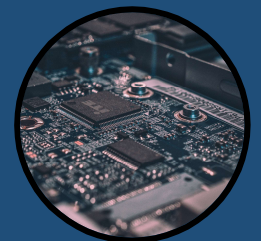
PLASTIC



METALLURGY



ELECTRONICS



Thank you to our financial partners



THE M3 PROJECT PROCESS

STEP 1 – DIAGNOSIS AND CALCULATION OF THE BENEFICIARY MARGIN

The project starts with a diagnostic test consisting of 2 meetings. This will help the entrepreneur evaluate the **current level of sustainability**, and **possible improvements** and their **profitability**.

SERVICES	OBJECTIVES	DELIVERABLES
Meeting 1	Evaluation of business location, documenting of needs	Diagnosis establishing the portrait of the company
Meeting 2	Presentation of actions allowing for capital gains and reducing impacts	Report proposing concrete actions to profit margins

STEP 2 – IMPLEMENTATION

This step is aimed at integrating the principles of circular economy, development of management skills and the acquisition of eco-design tools. Implementation consists of four workshops which are each three hours long. Each workshop also includes a set of meetings and exchanges for personalized follow-ups. CADET offers a complete support approach applied to the context of the company. This allows them to:

- Establish principles for sustainable development and put them into practice
- Use the ACV-BGES tool autonomously to:
 - Measure annual GHG emissions,
 - Measure the impact of manufacturing a specific product,
 - Envision different alternatives to reduce these impacts,

SERVICES	OBJECTIVES AND CONTENT	TOPICS COVERED
Workshop 1 LEAD	Understand how to integrate sustainable development and eco-design into the business. Assist management in the creation and development of new approaches and in the adoption of new managerial skills.	<ul style="list-style-type: none">• Work optimization• Work relations
Workshop 2 PLAN & ORGANIZE	Introduction to Life Cycle Thinking, Life Cycle Analysis (LCA), Greenhouse Gases (GHG) and, Balance Sheet and process planning.	<ul style="list-style-type: none">• Simplified LCA tools• Needs• Goal identification• Future actions to take
Workshop 3 CONTROL	Understand how to use the ACV-BGES software.	<ul style="list-style-type: none">• Calculate potential gains of eco-conception• Follow-up on progress of objectives
Workshop 4 COMMUNICATION	Understand how to explain sustainable development and the eco-design approach to your internal and external stakeholders.	<ul style="list-style-type: none">• Extraction and diffusion of data, business indicators and information

METABOLISM

Measure of all operations that transform raw materials to manufactured goods and residual materials



ECOCONCEPTION

Designing a product and considering its entire life cycle



LIFE CYCLE

From the extraction of raw materials to the end of a product's life including manufacturing, packaging, transportation and use

