

## **DEFINITIONS** *within the context of this Call for Proposals*

**Activity** – the CBIN R&D Program is organized into four areas of activity; these are: (1) Existing & New Biomass Supply; (2) Biomass Conversion and Utilization Technologies; (3) Integrated Bio Applications; and (4) Cross-Cutting Activities (including strategy, dissemination, assessment frameworks, market studies, policy support, etc.)

**Biorefinery** - A facility that integrates biomass conversion processes and equipment to produce fuels, power, and chemicals from biomass. The biorefinery concept is analogous to today's petroleum refineries, which produce multiple fuels and products from petroleum. (NREL website)

**Platform** – A biomass conversion route that leads to a particular set of products; e.g. NREL's biorefinery concept is built on two platforms: (1) the "sugar platform" based on biochemical conversion processes and focuses on the fermentation of sugars extracted from biomass feedstocks; and (2) the "syngas platform" based on thermochemical conversion processes and focuses on the gasification of biomass feedstocks and by-products from conversion processes.

**Project** – A T&I Biotechnology R&D project can be one of two types: (1) Stand-Alone Project; or (2) Thread Project. Each Project is managed by a Project Leader. All T&I Projects must have tasks, timeline and deliverables, and meet the four mandatory T&I Criteria.

**T&I Criteria** – Four mandatory criteria that the Program and T&I Projects must meet; They are: GHG reduction in 2025; partnerships (industry, government, academia); leveraging (cash and in-kind); and dissemination (transfer of knowledge and/or technology).

**Theme** – Each CBIN R&D Program Activity is divided into research themes. The current Program has 13 themes. Each theme is managed by one or more federal government experts working in the particular area. (See list of themes and theme leaders.)

**Thread** – Threads are 'feedstock to product' pathways. For example: Whitewood residue from softwood species that is converted through hydrolysis and fermentation into fuel ethanol and lignin that is further converted into power. A Thread proposal could take the form of a combination of R&D Projects from different Activities or Themes.

## ACRONYMS AND ABBREVIATIONS

AAFC	Agriculture and Agri-Food Canada
AD	Anaerobic digestion
APF	Agricultural Policy Framework
bdt	Bone dry metric tonne
BPI	Plant Biotechnology Institute (NRC)
CBIN	Canadian Biomass Innovation Network
CBS	Canadian Biotechnology Strategy
CEAA	Canadian Environmental Assessment Act
CETC	CANMET Energy Technology Centre
CFS	Canadian Forest Service (NRCan)
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide (a greenhouse gas)
CO <sub>2</sub> e	Carbon dioxide equivalent; greenhouse gases are expressed in CO <sub>2</sub> e units using the appropriate global warming potential of the gas
EAP	External Advisory Panel (unless otherwise specified refers to CBIN)
EC	Environment Canada
ExCo	Executive Committee (unless otherwise specified refers to CBIN)
FCM	Federation of Canadian Municipalities
FERIC	Forest Engineering Research Institute of Canada
GHG	Greenhouse gas
GIS	Geographic information system
HC	Health Canada
IBS	Institute for Biological Sciences (NRC)
IC	Industry Canada
KP	Kyoto Protocol
LCA	Lifecycle Assessment (product's expected environmental impacts on a life cycle basis)
MSW	Municipal solid waste
Mt	Mega tonnes (million metric tonnes)
NRC	National Research Council
NRCan	Natural Resources Canada
NREL	National Renewable Energy Laboratory (US DOE)
odt	Oven dry metric tonne
OEE	Office of Energy Efficiency (NRCan)
OERD	Office of Energy Research & Development (NRCan)
PERD	Program of Energy Research & Development (NRCan)
PM	Particulate matter
SDTC	Sustainable Development Technologies Canada
T&I	Technology & Innovation (related to climate change)
TEAM	Technology Early Action Measures
TIMS	T&I Management Secretariat
US DOE	US Department of Energy