

Controlling Emissions Protecting the Environment Continuous Improvement

A Voluntary Emissions Control Action Programme has been established by the brominated flame retardant (BFR) industry to manage, monitor and minimise industrial emissions of the HPV (high production volume) BFRs (Deca BDE, TBBPA and HBCD) into the environment through partnership with the supply chain including Small and Medium-sized Enterprises (SMEs). Through VECAP, the manufacturers and users of brominated flame retardants work together to establish and share best practices on their handling to reduce and prevent emissions to the environment.

VECAP, which was initiated in Europe, is being developed in other regions of the world (USA, Canada and Japan).

THE VECAP PRINCIPLES

VOLUNTARY INITIATIVE:

it demonstrates the commitment of the industries involved, to act in a voluntary manner which supports the interests of society and the environment.

CONTINUOUS IMPROVEMENT:

on-going efforts focused on what and how to ensure better results.

TRANSPARENCY:

publishing of reports and information via a VECAP competence centre.

BEST PRACTICE SHARING:

VECAP offers all companies - small, medium or large - equal access to industry expertise in process performance resulting in best practice.

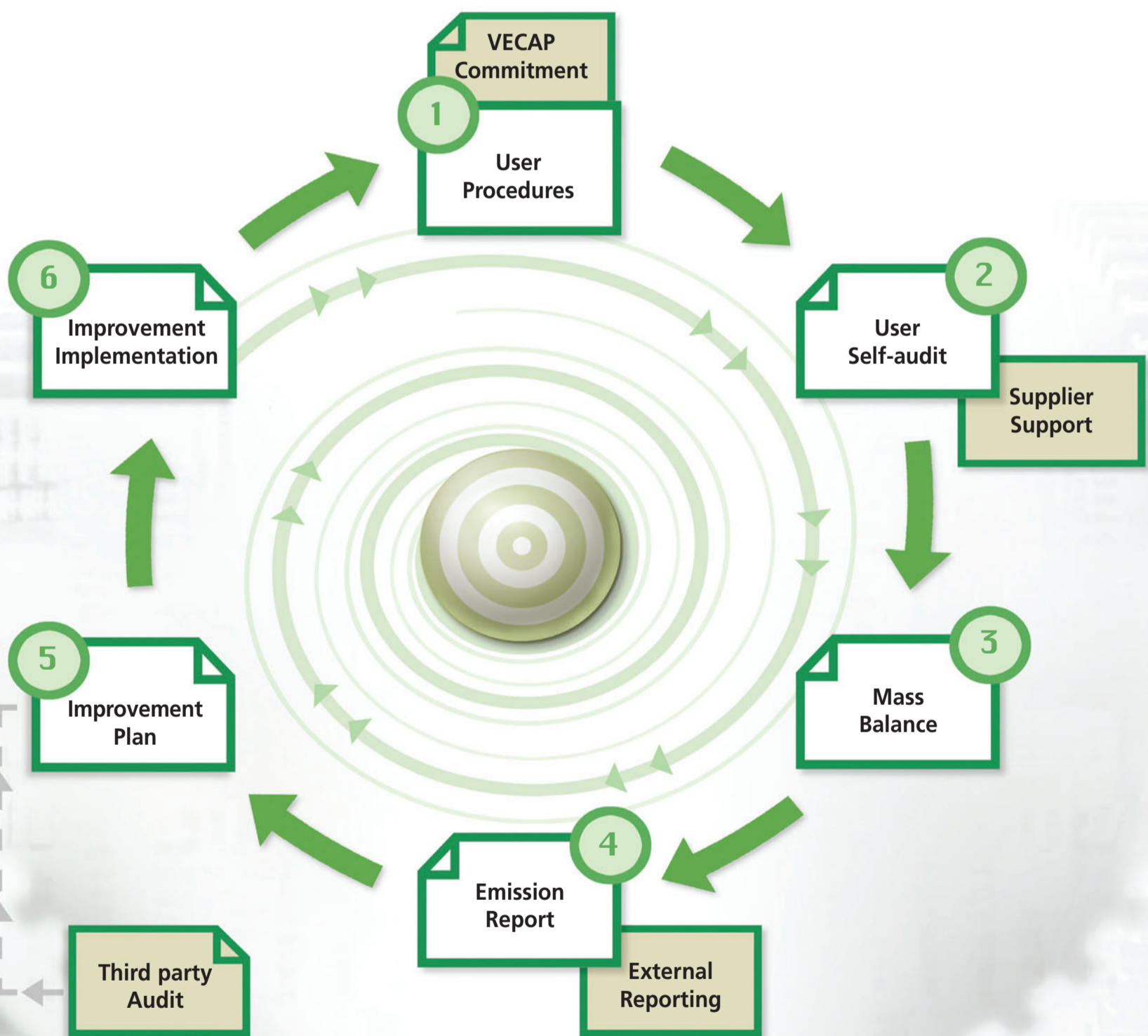
SUSTAINABLE USE:

ensuring safe and eco-efficient use of brominated flame retardants.

VECAP CERTIFICATION:

an independent third party VECAP audit procedure using ISO 9001/14001 principles.

CONTINUOUS IMPROVEMENT: THE SIX STEPS TO THE VECAP PROCESS



- 1 → **Commitment to the VECAP Code of Good Practice:** The VECAP system starts with the user's commitment to the program and implementing it in its daily operations.
- 2 → **Self-Audit:** With the self-audit, the company identifies the production flow sheet for its operations.
- 3 → **Mass Balance:** The company completes and closes the BFR mass balance (signaling the gap in the amount of BFRs entering and leaving the production process).
- 4 → **Baseline Emissions Survey:** The company uses the results obtained as a baseline to demonstrate actual performance and to detect future emission reduction priorities.
- 5 → **Emissions improvement plan:** An emission improvement plan is determined in accordance with the company's own objectives and policies.
- 6 → **Implementation and continuous improvement:** Once the plan is implemented, results are re-evaluated ensuring effective continuous improvement.

PROVIDING SUPPORT TO USERS: THE VECAP COMPETENCE CENTRE

CODE OF GOOD PRACTICE:

Working procedures and good housekeeping measures aimed at controlling and reducing emissions

SELF-CONTROL GUIDANCE DOCUMENT:

Supports users in defining where they stand in respect of the Code provisions

PROCESS FLOW CHART:

Assists the user to identify where the potential material losses can occur within the processes

MASS BALANCE SHEET:

Assists the user to complete and close the mass balance scheme

VECAP PRODUCT STEWARD:

Supports users in addressing their specific needs and questions.

CERTIFICATION:

External certification by an independent third party will become operational for interested users during 2007.