VOLUNTARY CODE OF CONDUCT – TOOLKIT

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Introduction

The **Voluntary Code of Conduct** (VCC) toolkit for SMEs is part of the EcoSMEnergy project which aims to offer a holistic solution to address energy challenges in SMEs within NACE code sectors C20 to C22 and C25 to C29. With tangible impacts on energy efficiency and sustainability, the project activities are also aligned with EU directives focused on energy efficiency and promoting clean energy transitions.

The VCC toolkit is a simplified framework of practices designed to help businesses improve energy efficiency on a voluntary basis. It aims to encourage and support SMEs in reducing their energy consumption and associated costs while contributing to broader environmental goals. This toolkit provides a step-by-step guidance for SMEs to implement the principles outlined in the code.

A significant part of the content and structure of this toolkit is based on the principles and guidance of ISO 50001 and ISO 50005. These international standards have been adapted and simplified to develop a practical and easy-to-use approach, specifically tailored to the capacities and needs of SMEs. While is not a replacement for formal ISO implementation, the toolkit reflects their core methodologies in a more accessible format.

About EcoSMEnergy

The primary objective of the EcoSMEnergy project is to enhance energy efficiency and sustainability in SMEs across the targeted sectors by means of a broad range of activities that deal with challenges related to energy efficiency, lack of awareness, motivation, or access to financial solutions.

To overcome key barriers such as limited knowledge, financial constraints, and complex support systems, the EcoSMEnergy project provides a range of services including energy auditing, energy monitoring tools, and comprehensive training workshops.

These initiatives aim to equip SME staff with the skills necessary to manage energy use efficiently and support the implementation of EnMS.

The overall impact is twofold: improved energy efficiency for SMEs, and a positive contribution to the EU's climate goals.

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VCC set-up

The VCC is built around four main steps and four levels. Each step and level are supported by a specific fiche that helps guide the organization through awareness, planning, implementation, and continuous improvement.

The first step, **Establish the Energy Management Framework**, focuses on building awareness, defining roles, and creating a basic structure for energy management. The fiche helps assess progress from initial awareness (level 1) to full integration into the company culture (level 4). It ensures that leadership, communication, and staff involvement are gradually developed and strengthened.

The second element, **Set Energy Targets**, involves collecting energy data, identifying key areas of consumption, and setting clear objectives. The fiche supports the creation of baselines and Energy Performance Indicators (EnPIs), which are used to monitor performance and adjust targets over time. This process ensures that energy goals are measurable and aligned with the organization's strategy.

The third element, **Implement Action Plans**, turns strategy into action. The related fiche guides the development of energy-saving plans, operational procedures and procurement criteria. It also helps ensure that staff are trained and that implementation is tracked and evaluated regularly.

The fourth element, **Monitor and Improve Efficiency**, ensures long-term performance. This fiche supports regular data analysis, internal audits, and management reviews. It helps identify nonconformities and corrective actions, promoting continuous improvement.

To use the fiches effectively, start by identifying the current level (1 to 4) for each element. Use the fiche to plan next steps, assign responsibilities, track actions, and review progress regularly. The toolkit provides a simple and structured way to manage and improve energy performance across the organization.

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Energy Management Roadmap

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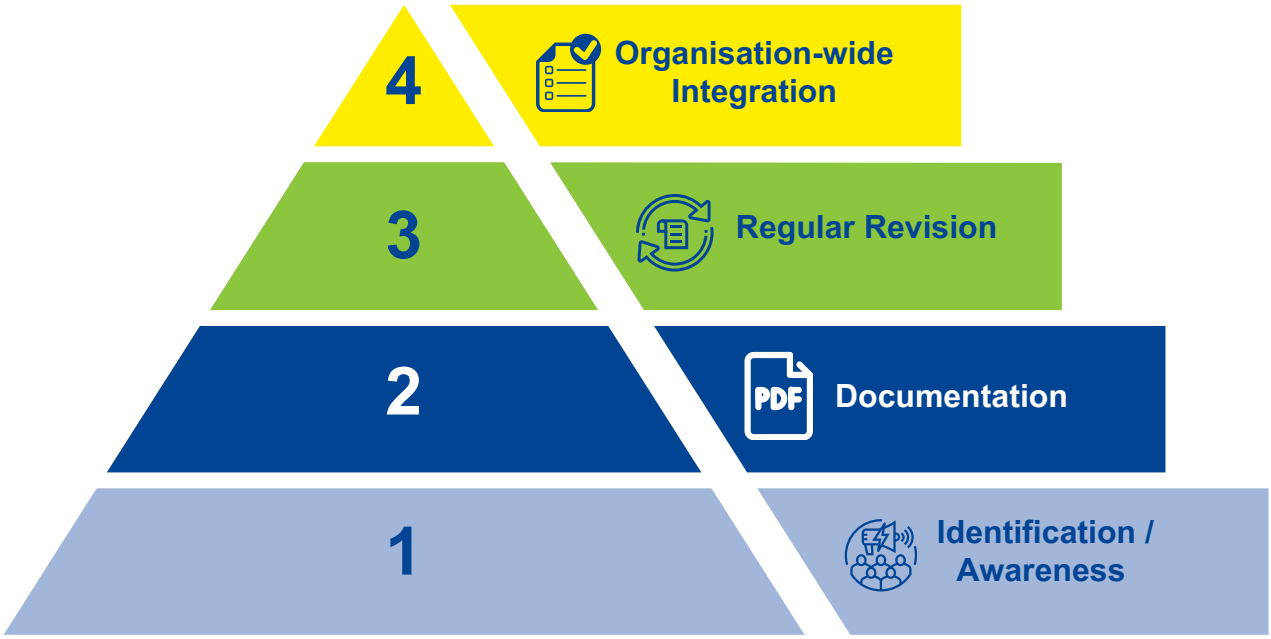
Progression Pyramid: 4 Levels of Maturity

The four levels range from identification/awareness over documentation and regular revision to integration in the organisation structure.



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Step 1: Establish Energy Policies

Level 1 – Identification / Awareness

Main Elements

- Staff are aware of the importance of energy efficiency
- Key energy users and processes have been identified
- Leadership is aware but not yet actively involved
- Basic list of potential energy-saving actions created
- No formal policy or roles have been established yet

Components in Detail

Components	Description	Checklist
Awareness Raising	Presenting energy efficiency concepts & advantages for company	
Understanding the organisation	Initial identification of energy related processes/departments in the organisation	
	Initial identification of energy uses and energy relevant data	
	Boundaries and scope (preliminary definition of EnMS boundaries)	
Initial Measures List	Analysis of data and preliminary set of recommendations	
Energy Policy	Simple energy policy established	
Leadership Commitment	Basic management awareness	
Roles and responsibilities	Basic roles defined	
Resources	Basic resources allocated	
Competence	Basic skills for core personnel	
Awareness	Initial awareness of policy	

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Components	Description	Checklist
Communication	Energy related communication	
Internal Communication	Basic energy information shared	
External Communication	Basic external reporting	
Documentation	Basic energy documentation	
Information Control	Basic document retention	

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Step 1: Establish Energy Policies

Level 2 – Documentation

Main Elements

- Energy policy is written and approved
- Roles and responsibilities are defined in writing
- Initial training programs developed
- Resources (budget, time, people) allocated to EnMS
- Internal and external communication protocols drafted
- All related information is documented and controlled

Components in Detail

Components	Description	Checklist
Awareness Raising		
Understanding the organisation	Documented understanding of key energy issues	
	Documented needs and expectations	
	Documented EnMS boundaries and scope	
Initial Measures List		
Energy Policy	Documented policy communicated	
Leadership Commitment	Management provides resources	
Roles and responsibilities	Key responsibilities documented	
Resources	Resources for improvements	
Competence	Competency requirements defined	
Awareness	Awareness of energy impact	

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Components	Description	Checklist
Communication		
Internal Communication	Documented communication process	
External Communication	Documented external communication	
Documentation	Documented information control	
Information Control	Documented information procedures	

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Step 1: Establish Energy Policies

Level 3 – Regular Revision

Main Elements

- Energy policy is reviewed and updated periodically
- Leadership is actively engaged and provides feedback
- Training and competence are reviewed regularly
- Awareness campaigns occur routinely
- Communication efforts are consistent and evaluated

Components in Detail

Components	Description	Checklist
Awareness Raising		
Understanding the organisation	Comprehensive analysis of internal / external issues	
	Regular review of needs and compliance	
	Regular review and update	
Initial Measures List		
Energy Policy	Policy regularly reviewed	
Leadership Commitment	Management actively promotes EnMS	
Roles and responsibilities	Comprehensive assignment	
Resources	Comprehensive resource planning	
Competence	Training programme established	
Awareness	Wide organisational awareness	

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Components	Description	Checklist
Communication		
Internal Communication	Comprehensive communication plan	
External Communication	Proactive stakeholder engagement	
Documentation	Comprehensive documentation system	
Information Control	Controlled document management	

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Step 1: Establish Energy Policies

Level 4 – Organization-wide Integration

Main Elements

- Energy efficiency is embedded into the company culture
- All staff understand their role in energy saving
- Communication is proactive, engaging both internal and external stakeholders
- Energy policy and documentation guide everyday operations
- Leadership models energy-conscious behaviour

Components in Detail

Components	Description	Checklist
Awareness Raising		
Understanding the organisation	Systematic process integrated with business	
	Comprehensive stakeholder engagement	
	Full integration with business processes	
Initial Measures List		
Energy Policy	Policy drives strategic decisions	
Leadership Commitment	EnMS fully integrated into business	
Roles and responsibilities	Integrated into job descriptions	
Resources	Resources optimised for performance	
Competence	Advanced capability development	
Awareness	Energy efficiency in culture	

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Components	Description	Checklist
Communication		
Internal Communication	Strategic communication integrated with business	
External Communication	Strategic external partnerships	
Documentation	Integrated knowledge management system	
Information Control	Advanced information lifecycle management	

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Step 2: Set Energy Performance Targets
Level 1 – Identification / Awareness

Main Elements

- Collect basic energy usage data for the organization
- Identify key areas of energy consumption
- Start identifying the targets

Components in Detail

Components	Description	Checklist
Data Collection	Basic energy data collected	
Analyses of Energy Uses	Simple analysis of main energy uses	
Identification of Significant Energy Uses (SEUs)	Basic identification of SEUs	
Baseline Establishment	Simple baseline established	
EnPI Development	Basic baseline data stored	
Baseline Maintenance	Basic EnPIs defined	
Improvement Opportunities	Initial identification of opportunities	
Baseline Adjustment	Simple conditions for adjustment	
EnPI Monitoring	Simple tracking of EnPIs	
EnPI Review	Basic review of EnPI values	
Objectives Setting	Simple energy objectives	
Target Establishment	Basic energy targets	

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Step 2: Set Energy Performance Targets

Level 2 – Documentation

Main Elements

- Document baseline energy usage
- Establish EnPIs and begin tracking energy performance
- Define specific energy performance objectives
- Set initial targets based on energy use data
- Improvement opportunities are identified and documented

Components in Detail

Components	Description	Checklist
Data Collection	Structured data collection process	
Analyses of Energy Uses	Documented analysis methodology	
Identification of Significant Energy Uses (SEUs)	Documented criteria for SEUs	
Baseline Establishment	Documented baseline with variables	
EnPI Development	Documented baseline adjustment criteria	
Baseline Maintenance	Documented EnPIs for SEUs	
Improvement Opportunities		
Baseline Adjustment	Documented process for adjustments	
EnPI Monitoring	Regular monitoring with records	
EnPI Review	Documented review process	
Objectives Setting	Documented objectives with criteria	
Target Establishment	Measurable targets with timelines	

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Step 2: Set Energy Performance Targets
Level 3 – Regular Revision

Main Elements

- Regularly update baseline data and performance targets
- Monitor Energy Performance Indicators (EnPI) continuously and adjust as needed
- Review energy performance targets against actual performance
- Evaluate improvement opportunities on an ongoing basis

Components in Detail

Components	Description	Checklist
Data Collection	Comprehensive data from all SEUs	
Analysis of Energy Use	Detailed analysis with variables	
Identification of Significant Energy Uses (SEUs)	Regular review of SEUs	
Baseline Establishment	Multiple baselines for different areas	
EnPI Development	Regular baseline reviews	
Baseline Maintenance	Comprehensive EnPIs with rationale	
Improvement Opportunities		
Baseline Adjustment	Verified adjustments with records	
EnPI Monitoring	Comprehensive analysis of trends	
EnPI Review	Regular reviews with improvements	
Objectives Setting	Comprehensive objectives for all SEUs	
Target Establishment	Targets with detailed rationale	

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Step 2: Set Energy Performance Targets

Level 4 – Organization-wide Integration

Main Elements

- Energy performance targets are integrated into the organization's overall strategy
- All departments are aligned with energy performance targets
- Energy Performance Indicators (EnPI) are regularly reviewed, updated, and used to drive continuous improvements
- Targets and performance are communicated across the organization

Components in Detail

Components	Description	Checklist
Data Collection	Advanced automatic data collection	
Analysis of Energy Use	Advanced analytics with modeling	
Identification of Significant Energy Uses (SEUs)	Comprehensive modeling of all SEUs	
Baseline Establishment	Dynamic baselines with normalization	
EnPI Development	Statistical validation of baselines	
Baseline Maintenance	Advanced EnPIs with statistical analysis	
Improvement Opportunities		
Baseline Adjustment	Advanced statistical adjustment methods	
EnPI Monitoring	Real-time monitoring with analytics	
EnPI Review	Strategic reviews linked to business	
Objectives Setting	Strategic objectives integrated with business	
Target Establishment	Multi-level cascading targets	

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Step 3: Implement Action Plans
Level 1 – Identification / Awareness

Main Elements

- Identify and document key actions for energy-saving
- Raise initial awareness among staff about energy-saving opportunities

Components in Detail

Components	Description	Checklist
Action Planning	Simple action plans	
Operating Criteria	Basic operating criteria	
Maintenance Planning	Basic maintenance of key equipment	
Operational Procedures	Simple operating instructions	
Operational Controls	Basic controls for energy use	
Implementation Tracking	Basic tracking of actions	
Procurement and Design	Energy linked procurement and design	
Procurement Criteria	Basic energy criteria for purchases	
Supplier Engagement	Basic supplier requirements	
Design Considerations	Energy considered in new designs	
Energy Performance Evaluation	Simple evaluation of energy options	

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Components	Description	Checklist
Competence Requirements	Basic competency needs identifed	
Training Programmes	Basic energy awareness training	
Awareness	Basic energy awareness of energy policy	
Skills Assessment	Basic skills inventory	

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Step 3: Implement Action Plans
Level 2 – Documentation

Main Elements

- Create a formal energy action plan, including roles and responsibilities
- Define operating criteria and energy-saving measures
- Start implementing energy-saving actions with clear tracking
- Establish procurement criteria for energy-efficient equipment

Components in Detail

Components	Description	Checklist
Action Planning	Documented plans with responsibilities	
Operating Criteria	Documented operational parameters	
Maintenance Planning	Planned maintenance program	
Operational Procedures	Documented energy-efficient procedures	
Operational Controls	Documented control methods	
Implementation Tracking	Regular progress monitoring	
Procurement and Design		
Procurement Criteria	Documented specifications for energy	
Supplier Engagement	Documented supplier energy criteria	
Design Considerations	Documented energy criteria for design	
Energy Performance Evaluation	Documented evaluation methodology	

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Components	Description	Checklist
Competence Requirements	Documented competency requirements	
Training Programmes	Structured training for key personnel	
Awareness	Awareness of individual impact	
Skills Assessment	Documented skills evaluation	

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Step 3: Implement Action Plans
Level 3 – Regular Revision

Main Elements

- Regularly track and evaluate energy-saving measures
- Continuously improve operational controls and procedures
- Update procurement and design considerations to ensure they align with energy efficiency goals
- Offer regular training programs and assess staff competencies

Components in Detail

Components	Description	Checklist
Action Planning	Comprehensive plans with resources	
Operating Criteria	Comprehensive operating procedures	
Maintenance Planning	Comprehensive preventive maintenance	
Operational Procedures	Comprehensive procedures for all SEUs	
Operational Controls	Comprehensive operational controls	
Implementation Tracking	Comprehensive progress verification	
Procurement and Design		
Procurement Criteria	Life-cycle cost analysis in procurement	
Supplier Engagement	Supplier performance evaluation	
Design Considerations	Energy efficiency integrated in design	
Energy Performance Evaluation	Comprehensive analysis of alternatives	

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Components	Description	Checklist
Competence Requirements	Comprehensive competency framework	
Training Programmes	Comprehensive training program	
Awareness	Organization-wide energy awareness	
Skills Assessment	Regular competency assessments	

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Step 3: Implement Action Plans

Level 4 – Organization-wide Integration

Main Elements

- Energy-saving actions are integrated across all operational levels
- Staff fully engaged and trained in energy efficiency
- Procurement and design fully aligned with energy performance targets
- Implementation of continuous tracking and improvement processes

Components in Detail

Components	Description	Checklist
Action Planning	Strategic plans with risk assessment	
Operating Criteria	Optimized parameters with monitoring	
Maintenance Planning	Predictive maintenance with analytics	
Operational Procedures	Advanced procedures with continuous improvement	
Operational Controls	Advanced control systems with automation	
Implementation Tracking	Advanced tracking with performance analytics	
Procurement and Design		
Procurement Criteria	Strategic energy-efficient procurement	
Supplier Engagement	Strategic supplier partnerships	
Design Considerations	Life-cycle optimization in all designs	
Energy Performance Evaluation	Advanced modeling of energy performance	

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Components	Description	Checklist
Competence Requirements	Advanced capability development system	
Training Programmes	Advanced professional development	
Awareness	Energy efficiency embedded in culture	
Skills Assessment	Strategic workforce capability planning	

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Step 4: Continuously Monitor and Improve efficiency

Level 1 – Identification / Awareness

Main Elements

- Monitor basic energy usage data
- Identify the need for formal energy performance evaluation
- Conduct initial assessments of energy-saving measures

Components in Detail

Components	Description	Checklist
Monitoring Plan	Basic monitoring of key parameters	
Measurement Equipment	Basic energy meters	
Data Analysis	Simple analysis of energy data	
Evaluation of Compliance	Initial review of requirements	
Internal Audit	Basic energy performance checks	
Management Review Process	Basic management review	
Review Outputs	Basic decisions recorded	
Nonconformities	Basic identification of issues	
Corrective Actions	Simple corrective actions	
Continual Improvement	Simple improvements implemented	

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Step 4: Continuously Monitor and Improve efficiency
Level 2 – Documentation

Main Elements

- Develop and document a formal monitoring plan
- Implement measurement equipment and begin data analysis
- Set up a process for compliance evaluation
- Schedule regular internal audits of energy performance

Components in Detail

Components	Description	Checklist
Monitoring Plan	Documented monitoring plan	
Measurement Equipment	Calibrated measurement equipment	
Data Analysis	Documented analysis methodology	
Evaluation of Compliance	Documented compliance evaluation	
Internal Audit	Documented audit program	
Management Review Process	Planned reviews with agenda	
Review Outputs	Documented outputs with actions	
Nonconformities	Documented nonconformity process	
Corrective Actions	Documented corrective action process	
Continual Improvement	Planned improvement methodology	

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Step 4: Continuously Monitor and Improve efficiency

Level 3 – Regular Revision

Main Elements

- Continuously review energy data and improve monitoring methods
- Conduct periodic management reviews of energy performance
- Address nonconformities and implement corrective actions
- Regularly update the monitoring plan based on data analysis

Components in Detail

Components	Description	Checklist
Monitoring Plan	Comprehensive monitoring	
Measurement Equipment	Comprehensive measurement system	
Data Analysis	Comprehensive analysis with trends	
Evaluation of Compliance	Regular compliance assessments	
Internal Audit	Comprehensive audit system	
Management Review Process	Comprehensive review process	
Review Outputs	Comprehensive improvement decisions	
Nonconformities	Root cause analysis system	
Corrective Actions	Verification of effectiveness	
Continual Improvement	Systematic improvement process	

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Step 4: Continuously Monitor and Improve efficiency

Level 4 – Organization-wide Integration

Main Elements

- Energy performance is reviewed and improved continuously across the organization
- Nonconformities are addressed promptly and systematically
- Internal audits drive ongoing improvements in energy use
- Energy management processes are fully integrated into the organization's strategic goals

Components in Detail

Components	Description	Checklist
Monitoring Plan	Advanced monitoring with analytics	
Measurement Equipment	Advanced metering with automation	
Data Analysis	Advanced analytics with modeling	
Evaluation of Compliance	Proactive compliance management	
Internal Audit	Strategic audit integrated with business	
Management Review Process	Strategic reviews integrated with business	
Review Outputs	Strategic decisions with resource allocation	
Nonconformities	Advanced prevention methodology	
Corrective Actions	Systematic improvement approach	
Continual Improvement	Culture of excellence and innovation	

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Project Partners

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