ENERGY PRACTITIONER TRAINING PROGRAM

Low-tech energy efficiency solutions in the Baltic Sea Region

A Training Compendium for Energy Practitioners

Developed under the Easy Energy project

Interreg Baltic Sea Region Programme 2021-2027

Project #C051

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www.interreg-baltic.eu/project/easy-energy

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1. Foreword

This compendium has been developed as part of the Easy Energy project, co-funded by the Interreg Baltic Sea Region Programme 2021-2027. It is addressed to people who work at the interface between energy efficiency knowledge and practical action: staff of local public authorities, employees of business support organisations, chamber representatives, and professionals working in regional development and advisory services across the Baltic Sea Region.

The core message of Easy Energy is direct: a large share of the energy-saving potential in public buildings and small enterprises remains untapped, not because the solutions are complicated, but because the path from awareness to action is blocked by real and perceived barriers. Costs feel too high. Audits seem too technical. Implementation looks like someone else's job. The measures sit on a shelf.

This training programme is a response to that gap. It does not train engineers or certified energy auditors. It trains Energy Practitioners: capable, motivated, practically equipped people who can help municipalities and SMEs take their first credible steps toward energy savings using straightforward, affordable, low-tech measures. Energy Practitioners know enough to be useful. They know their limits. They know when to refer on. And they know how to motivate people who are sceptical or simply too busy to act. The compendium serves two purposes. First, it is a learner handbook: a structured resource that participants can use before, during, and after training. Second, it is a trainer resource: a foundation from which facilitators can design workshops, exercises, and local adaptations. Both uses are legitimate and encouraged.

The content draws on the practical knowledge developed and tested across the Baltic Sea Region through Easy Energy's pilots and partnerships. It reflects real conditions in Danish municipalities, Estonian enterprises, Polish buildings, and many other contexts. Where source material is complete, this compendium reports it accurately. Where training recommendations go beyond tested results, the text makes this clear.

All relevant materials cited in this book, like the collection of blueprints, can be downloaded from https://easy-energy-bsr.eu/ . The website also links to the Padlet used for the first pilot training, with lots of additional resources.

Organisations that deliver this training in future are invited to adapt it to their regional context, translate it into local languages, and integrate their own case examples. Transfer and continued use beyond the project partnership is the intended outcome. The training should outlast the project.

2. Executive Summary

The Easy Energy project brings together partners from across the Baltic Sea Region to address a persistent challenge: the large gap between available low-cost energy-saving measures and their actual implementation in public buildings and small enterprises. Despite rising energy costs, tightening regulatory requirements, and growing public awareness, a significant share of simple, affordable measures remains unimplemented. The reasons are practical: limited budgets, lack of internal technical expertise, time pressure, and the perceived complexity of formal energy audits.

The project's response is the Energy Practitioner: a trained intermediary who is not a certified energy auditor or engineer, but a capable adviser who can identify low-tech energy-saving opportunities, explain implementation options clearly, motivate action, and support the uptake of the project's practical blueprints. The training programme that qualifies Energy Practitioners is built around a focused, practical curriculum covering four solution fields: building insulation, water and warm water, electricity, and behavioural change.

This compendium is the primary reference document for that training programme. It is structured to take participants from foundational context through technical knowledge to practical advisory skills and professional practice. It covers both the hard skills required for credible technical guidance and the soft skills required to engage, motivate, and support diverse target groups across different institutional settings.

Key points for decision-makers and trainers:

- The training is designed as a compact, practice-oriented programme that can be delivered in different formats, including a one- or two-day structure and a KAIN-inspired ((Knowledge Acquisition according to Individual Needs) sequence with applied practice between sessions.
- The target audience for training delivery is staff of local authorities and business support organisations, not building engineers.
- The indirect beneficiaries are municipalities managing public buildings, small and medium-sized enterprises, and rural communities with limited access to formal energy advisory services.
- The project's blueprints are a core tool: practical, transferable solution descriptions that Energy Practitioners use to explain, adapt, and support implementation of specific measures.
- The training is designed for transfer: it can be adapted, translated, and delivered by other organisations beyond the project partnership without significant additional development cost.
- A business model chapter addresses how the training can be embedded in the service portfolios of business support organisations and public administrations as a financially sustainable offering.

The compendium is written for practitioners who may not have deep technical expertise. It deliberately avoids dense technical language, prioritises practical guidance, and includes tools, templates, exercises, and case examples to support applied learning.

3. How to Use This Compendium

This document is designed to function as both a learner handbook and a trainer resource. Depending on your role and purpose, you will use it differently.

If you are a training participant

Read the compendium before and alongside your training sessions. You do not need to memorise every detail. Focus on understanding the core ideas in each chapter, then return to the technical sections and tools when you need them in practice. The exercises and reflection tasks are designed to help you connect the content to your own work context. Use the templates in Chapter 20 from your first advisory conversations onwards.

If you are a trainer or facilitator

This compendium provides the full content base for the training programme. You can structure sessions around individual chapters, use the learning objectives as session goals, and draw on exercises, case examples, and role-plays for interactive training design. Each chapter is largely self-contained, which means you can adapt the sequence to your audience, shorten or deepen specific modules, and integrate your own regional examples alongside the ones provided here.

If you are planning to transfer or adapt the programme

The compendium is written to be transferable. The content can be translated into national languages, adapted to reflect local building stock and regulatory frameworks, and updated to incorporate new solution examples as they become available. Chapter 22 provides specific guidance on transfer logic, business models, and train-the-trainer approaches.

Navigation aids

Each major chapter begins with a brief introductory paragraph and a learning objectives box. Each chapter ends with a key takeaways section. Callout boxes throughout the text highlight practical tips, important definitions, and safety notes. Exercise boxes and case example boxes are clearly marked and numbered.

Terminology note

Throughout this compendium, the following terms are used consistently. 'Energy Practitioner' refers to the trained role described in this programme. 'Municipalities' refers to local public authorities and the buildings they manage. 'SMEs' refers to small and medium-sized enterprises, with particular attention to micro and small enterprises. 'Blueprints' refers to the practical solution descriptions developed by the Easy Energy project. 'Baltic Sea Region' (BSR) refers to the countries and regions covered by the Interreg Baltic Sea Region Programme.

4. Project Context: Easy Energy in the Baltic Sea Region

This chapter provides the context for the development of the Energy Practitioner role. Understanding the project logic, regional conditions, and why low-threshold energy efficiency matters will help practitioners explain the approach to their own organisations and to the target groups they advise.

4.1 Background of the Project

Easy Energy is co-funded under the Interreg Baltic Sea Region Programme 2021-2027 (Project #C051). The project runs from November 2023 to October 2026 . The partnership comprises 8 public institutions, 5 Business support organisations, and 1 University of applied sciences from Denmark, Estonia, Finland, Germany, Latvia, Lithuania, and Poland. Its central purpose is to support public buildings and small enterprises in taking practical, affordable energy-saving steps without requiring expensive formal audits or complex technical installations.

The project is structured around three linked streams of work. The first stream develops the blueprints and the practical solution knowledge. The second stream tests the solutions and the training approach through real-world pilots with municipalities and SMEs. The third stream transfers the results, builds organisational capacity, and establishes durable delivery models so that the training continues to reach new audiences after the project ends.

The Energy Practitioners training programme was developed in Activity A1.3 and tested in Activity A2.3. The transfer and business model work sits within Activity A3.1. This compendium is one of the core transfer-oriented training materials supporting the further use, adaptation, and delivery of the Energy Practitioner programme.

4.2 Energy Transition Context in the Baltic Sea Region

The Baltic Sea Region is geographically, climatically, and economically diverse. Countries such as Denmark, Finland, and Sweden have well-developed energy efficiency infrastructure, advanced building standards, and established advisory systems. Countries such as Latvia, Lithuania, Estonia, and Poland have significant proportions of older building stock, often constructed before modern energy performance standards were introduced, with substantial untapped savings potential.

Across the region, European policy frameworks are driving new demands on building owners. The EU Energy Efficiency Directive, the REPowerEU plan, and national building renovation strategies require reductions in energy consumption from public buildings and commercial premises. At the same time, energy prices have risen sharply since 2022, making savings directly relevant to operating budgets and business profitability.

The combination of policy pressure, rising costs, and ageing building stock creates both an urgent need and a practical opportunity. The gap between what organisations could save and what they actually implement is larger than regulatory frameworks alone can close. Local, accessible advisory capacity is essential.

4.3 Why Low-Threshold Energy Efficiency Matters

Professional energy audits are valuable. They produce detailed analyses, identify major investment opportunities, and provide a technical baseline for renovation planning. However, they are also expensive, typically costing between EUR 2,000 and EUR 10,000 per building, and they are not designed to support the small, practical steps that can be taken without specialist contractors or large capital budgets and without delay.

Many organisations know they should act on energy efficiency. Decision-makers in small municipalities and micro-enterprises are often aware that simple measures would save money. The barrier is not awareness alone. It is the combination of competing priorities, limited staff time, uncertainty about where to start, and a lack of practical, locally available guidance.

Low-threshold approaches address this by reducing the cost of entering the action. A measure that costs EUR 20 to EUR 200 and can be installed in an afternoon does not require a board decision, a procurement process, or external financing. It requires someone to clearly recommend it, explain how to do it, and follow up. That is what Energy Practitioners do.

4.4 Relevance for Municipalities and SMEs

Municipalities managing public buildings are responsible for significant energy expenditures. A municipality with 20 to 50 buildings, including schools, kindergartens, libraries, sports halls, and administrative offices, may spend hundreds of thousands of euros annually on energy. Even a 5 percent reduction in that total represents substantial savings that can be redirected to other public priorities.

For SMEs, energy is a direct cost affecting profitability. Micro and small enterprises, which make up the vast majority of businesses across all BSR countries, often lack a dedicated energy or facilities management function. The owner or manager deals with energy costs as one of many operational pressures, usually reactively. Practical, affordable guidance that does not require formal procurement or expert contractors fits well in this context.

4.5 Relevance for Rural Areas

Rural municipalities and enterprises face additional challenges. They are often further from specialist advisory services, have smaller and more varied building portfolios, and have limited access to national or regional support programmes. At the same time, older rural building stock, including community halls, rural schools, and agricultural business premises, frequently offers some of the highest potential for simple insulation and heating improvements.

Energy Practitioners who work in or for rural settings need to be adaptable. Advice may need to be given remotely, in small-group settings, or informally. The practical orientation and accessible language of the training are particularly important in these contexts.

Key Takeaways

- Easy Energy runs from 2023 to 2026 under the Interreg Baltic Sea Region Programme, targeting public buildings and SMEs.
- The BSR contains diverse building stock and energy advisory capacity; many countries have significant untapped savings potential.
- Professional audits are valuable but too costly for most small organisations; low-threshold approaches fill a genuine gap.
- Municipalities and SMEs are the primary indirect beneficiaries; rural areas have additional access challenges that practitioners should address.

5. Why Low-Tech, DIY and Easy Energy Solutions Are Needed

Before an Energy Practitioner can effectively advise others, they need to understand the problem clearly: why do organisations with energy-saving potential so rarely act on it? This chapter examines the barriers to conventional energy efficiency measures and explains why the low-tech, practical approach at the heart of Easy Energy is not a compromise but a deliberate strategic choice.

Learning Objectives

1. Identify at least four structural barriers that prevent municipalities and SMEs from implementing energy efficiency measures.
2. Explain the distinction between quick-win measures and capital-intensive interventions.
3. Describe the relationship between technical measures and behavioural change.

5.1 Barriers to Conventional Energy Audits and Costly Measures

The barriers to energy efficiency action are well-documented and fall into several overlapping categories.

Financial barriers are often the most visible. Full energy audits for commercial or public buildings typically cost EUR 2,000 to EUR 10,000 per building. Capital investments in building envelope renovation, heating system replacement, or ventilation upgrades can run into tens or hundreds of thousands of euros. For a small municipality or a micro-enterprise with a constrained budget, the upfront cost is simply prohibitive, even when the long-term return on investment is positive.

Capacity barriers are equally significant. Small organisations have limited staff time for activities that fall outside core operations. Facility management may be the part-time responsibility of a building caretaker, an administrative officer, or even the owner. There is no dedicated energy manager, and there is no one whose job it is to research measures, obtain quotes, or manage an installation project.

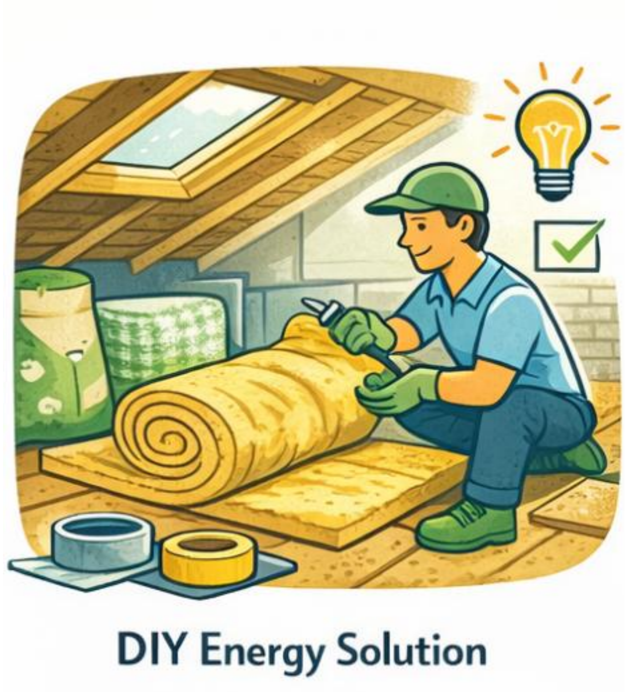
Knowledge and confidence barriers matter too. Even when staff members understand the general principle that insulation saves heating costs, they may not know which specific measures are suitable for their building, which products to buy, or how to avoid common mistakes. Uncertainty creates inaction.

Organisational and procurement barriers affect municipalities in particular. Spending on building improvements above certain thresholds triggers formal procurement processes. Projects need to be budgeted in advance, approved through governance structures, and reported on. Small, low-cost measures that do not clearly fit into investment budgets often fall into a gap between routine maintenance and formal project spending.

5.2 Limited Budgets, Limited Staff Time, Limited Technical Expertise

The target groups that Easy Energy is designed to reach are characterised by a specific combination of constraints: they have enough resources to implement simple measures, but not enough to navigate complex advisory and investment processes. This is the zone of realistic action.

A municipality spending EUR 500,000 annually on energy for its building stock can justify a EUR 5,000 training investment if it produces EUR 25,000 in annual savings. But it cannot easily justify a EUR 50,000 audit programme for a building that has already had its roof insulated and its lighting upgraded. The marginal gains from increasingly complex measures diminish relative to the cost and effort required.



For SMEs, the calculation is similar. A small manufacturing company or a rural hotel cannot spare the owner for a full audit process and the subsequent management of a multi-stage renovation project. But it can act on a recommendation to install aerators on its tap fittings at a cost of EUR 20 to EUR 50 each and recover that investment within two to four months.

Case Example: Why SMEs and municipalities avoid full energy audits

Project experience across the Baltic Sea Region confirms that small public buildings and SMEs frequently avoid full energy audits despite their potential benefits. The reasons are practical and understandable: limited budgets make expensive assessments difficult to justify, time constraints prevent thorough evaluations, and lack of technical expertise creates uncertainty about where to begin. As a result, simple and affordable measures, such as improved insulation, smart lighting controls, and water-saving fixtures, remain unused. The potential for straightforward energy savings is substantial but largely untapped across the region.

5.3 Benefits of Quick-Win and Low-Investment Approaches

Quick-win measures produce several benefits beyond the direct energy savings they achieve. They build confidence. When a small organisation implements a simple measure and sees a measurable result in its next utility bill, it is far more likely to take the next step. Success creates momentum. This behavioural and motivational dimension is as important as the technical one.

Quick wins are also low-risk. A pipe insulation sleeve that costs EUR 10 can be installed in ten minutes and produces a clear reduction in heat loss. If the installation turns out not to be perfectly positioned, it can be adjusted. Compare this to a full heating system replacement, which involves contractors, warranties, disruption to the building's operations, and a multi-year payback calculation. The asymmetry of risk is enormous.

Low-investment measures are also transferable. A measure demonstrated in one building can be replicated across a portfolio of similar buildings with minimal additional guidance. An Energy Practitioner who has helped a municipality install reflective mats behind radiators in one school can share that experience across ten schools in the same district.

5.4 Link Between Technical Measures and Behavioural Change

Technical measures and behavioural change are complementary, not alternatives. Installing a thermostatic radiator valve reduces heating costs, but its effect is amplified when building users also understand how to ventilate efficiently, avoid leaving doors open, and set temperatures appropriately for different times of day.

Conversely, behavioural campaigns that ask people to change their habits without any supporting infrastructure often have limited and short-lived effects. Telling staff to turn off lights is less effective than installing motion-activated lighting controls, which make the right behaviour automatic.

The best outcomes come from combining practical technical steps with awareness and habit change. Energy Practitioners work on both dimensions. They explain and facilitate technical measures, and they also support the communication campaigns, the visible displays of energy use, and the small routines that sustain savings over time.

Exercise 1: Barrier mapping

Think of an organisation you know well, whether a public building, a business, or your own workplace. List as many barriers to energy efficiency action as you can identify in that context. Classify each barrier as financial, capacity-related, knowledge-related, or organisational. Then identify two or three low-tech measures that could be taken despite these barriers. Share your analysis with a partner or small group.

Key Takeaways

- Financial, capacity, knowledge, and organisational barriers combine to prevent action even where simple solutions exist.
- Quick-win measures build confidence, reduce risk, and create momentum for further steps.
- Behavioural change and technical measures reinforce each other and should be addressed together.
- Energy Practitioners operate in the zone between passive awareness and complex investment: practical, accessible, immediate.

6. The Easy Energy Approach

This chapter describes what makes the Easy Energy approach distinctive and how it differs from conventional energy efficiency programmes. Understanding the approach clearly will help practitioners explain it credibly to decision-makers, staff, and target group members.

6.1 Low-Tech and Easy Solutions

The defining characteristic of the Easy Energy approach is its focus on measures that can be understood, implemented, and maintained without specialist contractors, complex equipment, or advanced technical knowledge. This is not because complex solutions are unimportant, but because they are already well-served by existing advisory and consulting markets. The gap that Easy Energy addresses is different.

Low-tech solutions share several characteristics. They are generally inexpensive to purchase, often costing between a few euros and a few hundred euros per measure. They can be installed by facility staff or the building users themselves, or with minimal specialist assistance. They produce visible, measurable results within weeks or months rather than years. They do not require structural modifications to the building. And they can be explained to a non-specialist audience in plain language.

The term 'DIY' applies to some but not all of these measures. Attic insulation with blown-in granulate, for example, can be done by a non-specialist in simple roof configurations. Filling cavity walls with perlite granulate is best done by an experienced contractor. The key distinction is not whether professional help is needed, but whether the measure is accessible in terms of cost, decision-making complexity, and payback period.

6.2 Solution Fields: Building Insulation, Water, Warm Water, Electricity

The Easy Energy project covers four interconnected solution fields:

Building insulation

Insulation measures address heat loss through the building envelope, including the roof and attic floor, external walls, basement ceilings, and windows. Key solutions covered by the project include top floor ceiling insulation using blown-in or batt materials, blown-in insulation for timber and masonry walls, closure of radiator niches to restore wall thickness, reflective mats behind radiators, insulation film for older windows, window reglazing, door closers, insulating blinds and shutters, and pipe insulation for heating and hot water circuits.

Water and warm water

Water solutions focus on reducing both cold water consumption and the energy used to heat water. Key solutions include flow aerators for taps and showerheads, sensor-activated touchless faucets, thermostatic radiator valves, smart radiator thermostats, heating curve regulation, hydronic balancing of heating circuits, and heating load management through scheduling and occupancy control.

Electricity

Electricity solutions address lighting and plug loads. Key solutions include LED retrofitting, lighting controls using lux sensors (daylight-responsive dimming), motion and occupancy sensors for lighting, timer-controlled sockets for standby load reduction, and energy visualisation tools that make consumption visible to building users and managers.

Behavioural change

Behavioural solutions address the human dimension of energy use. Key approaches include regular radiator maintenance routines, correct ventilation practices, temperature management, assignment of individual responsibility for energy actions, awareness campaigns, and the celebration of visible results.

6.3 Importance of Practical Blueprints

The blueprints are a central tool of the Easy Energy approach. Each blueprint provides a structured description of a specific low-tech measure, including what it is, how it works, what materials and steps are involved, what savings can be expected, what the typical cost is, and what the main considerations and risks are. Blueprints are designed to be practical and transferable: they can be printed, shared with building managers, adapted to local conditions, and used as the basis for on-site advice.

Energy Practitioners use the blueprints in two ways. First, as a reference when advising target groups: the blueprint gives the practitioner a reliable, tested description of the measure that they can explain confidently. Second, as a communication tool with target groups: a building manager who receives a clear, illustrated blueprint is better equipped to decide whether a measure is suitable, to plan its implementation, and to brief a contractor if one is needed.

Practical tip

Always carry or have access to the relevant blueprints when conducting a site visit or advisory session. A physical or digital blueprint is far more persuasive than a verbal description. It shows that the measure is documented, tested, and not just a personal opinion.

6.4 Piloting, Evaluation and Transfer Logic

The Easy Energy project tests its solutions and its training approach through pilots before finalising and transferring them. This matters for Energy Practitioners because it means the solutions they promote are grounded in real implementation experience, not only in theoretical energy calculations.

The transfer logic of the project is straightforward: solutions and training developed and tested with a limited set of partner organisations are packaged in formats, such as this compendium, the blueprints, and the business model documentation, that allow other organisations in the Baltic Sea Region and beyond to adopt and adapt them. Energy Practitioners are themselves part of this transfer: each practitioner who is trained and begins working with their own target groups extends the reach of the project's results.

Key Takeaways

- Low-tech solutions are affordable, practical, and accessible without specialist contractors or large budgets.
- The four solution fields are building insulation, water and warm water, electricity, and behavioural change.
- Blueprints are a core practical tool; practitioners should know how to use and present them.
- The project's transfer logic means that each trained practitioner extends the reach of tested results.

7. The Role and Profile of the Energy Practitioner

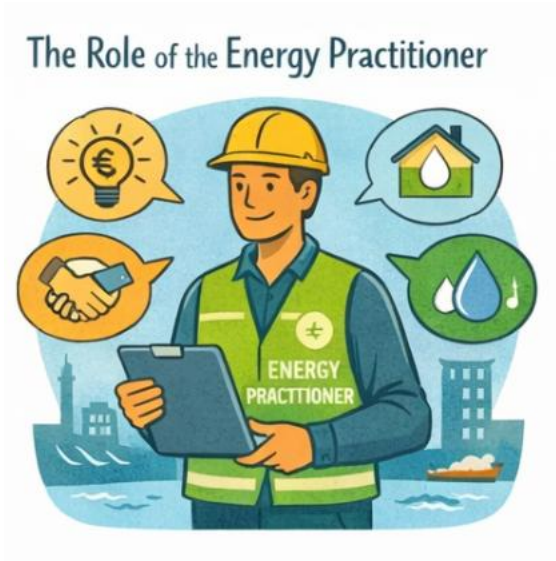
This chapter defines the Energy Practitioner role precisely, distinguishes it from other professional roles, and explains what added value practitioners bring to municipalities and SMEs. Understanding your own role clearly is essential before you begin advising others.

Learning Objectives

4. Define the Energy Practitioner role and its boundaries clearly.
5. Explain the difference between an Energy Practitioner and a certified energy auditor.
6. Identify the added value practitioners bring to different types of organisations.
7. Describe the ethical responsibilities of the role.

7.1 Definition of the Role

An Energy Practitioner is a trained intermediary who helps organisations identify low-tech energy-saving opportunities, understand available solutions, and take practical first steps toward implementation. The role is deliberately positioned between passive information provision and specialist technical consulting.



The training programme that qualifies Energy Practitioners is designed for delivery in a focused one-to-two-day format. It equips participants with enough knowledge to be immediately useful, without requiring the depth of study associated with engineering qualifications or energy audit certification. The scope of the role is defined by the solution fields covered in the project and the practical tools, principally the blueprints, developed to support those fields.

Energy Practitioners are trained to do five things: raise awareness about energy-saving opportunities and make them concrete; provide practical guidance on specific low-tech measures from the project's solution portfolio; help identify high-impact improvements through straightforward walkthrough assessments; motivate target group members to take their first steps; and refer cases that exceed the practitioner's scope to appropriate specialists.

7.2 Boundaries of the Role Compared to an Energy Auditor or Engineer

The Energy Practitioner role has clear boundaries that practitioners must respect. These boundaries protect both the practitioner and the people they advise. The exact boundary between informal advice, technical consultancy, and regulated professional services may vary by country. Trainers should therefore adapt this section to the applicable national legal and professional framework.

Energy Practitioner	Certified Energy Auditor / Engineer

Identifies low-tech quick-win measures from the project's solution portfolio	Conducts comprehensive technical analysis of the entire building envelope and systems
Explains solutions in plain language using blueprints and practical examples	Produces detailed audit reports with calculations, certificates, and technical specifications
Supports decision-making and motivates action without issuing technical opinions	Issues professional opinions, recommendations, and technical certifications
Conducts informal walkthrough assessments based on visual observation	Conducts formal measurement-based assessments using specialist equipment
Refers complex cases to specialists	Handles complex technical, legal, and regulatory matters directly
Requires a one-to-two day training programme	Requires formal engineering or building science qualifications plus certification
Does not provide legally binding confirmation of technical compliance, regulatory compliance, or funding eligibility	Can certify compliance with building codes, energy performance standards, and grant conditions

Important

Energy Practitioners should never present themselves as energy auditors, engineers, or technical consultants. If asked a question outside your scope, the correct response is always to acknowledge the boundary and offer to refer the person to an appropriate specialist. Being clear about what you do not know is a sign of professional credibility, not weakness.

7.3 Added Value for Municipalities and SMEs

The added value of the Energy Practitioner role is clearest when seen from the perspective of the people being served. A municipal facility manager who has never had a formal energy audit and cannot justify the cost may never act without a local, accessible, low-cost entry point. An Energy Practitioner provides that entry point.

The value is not only technical. It is motivational. It is the difference between an organisation that knows it should do something and one that actually does something. Research and project experience consistently show that the presence of a local contact person who understands the practical context, speaks in accessible language, and follows up is a critical factor in whether organisations act on energy-saving opportunities.

For municipalities, Energy Practitioners provide local advisory capacity that reduces dependence on expensive external consultants for simple measures. For SMEs, they offer practical guidance from someone who understands the realities of running a small business and does not expect the owner to have time for complex procurement or reporting.

7.4 Role in Awareness Raising, Advising, Motivating, Signposting and Transfer

The Energy Practitioner role combines five interconnected functions:

Awareness raising: making energy-saving opportunities visible, concrete, and relevant to specific organisations and their situations. This includes sharing examples, demonstrating measures, and making energy costs tangible.

Advising: providing informed, practical recommendations on specific low-tech measures, drawing on the project's blueprints and the practitioner's training. Advice must be within the scope of the role.

Motivating: encouraging organisations to take their first steps, sustaining momentum through follow-up, celebrating visible results, and helping to overcome scepticism and inertia.

Signposting: directing organisations to appropriate resources, funding opportunities, specialist services, or more advanced advisory programmes when their needs exceed the practitioner's scope.

Transfer: sharing good practice, reporting on results, and contributing to the broader spread of Easy Energy solutions within and beyond the practitioner's own organisation and network.

7.5 Ethical and Professional Standards

Energy Practitioners operate in a position of trust. Target groups rely on them for accurate information and honest guidance. Several ethical principles apply:

- Honesty about scope: never claim expertise you do not have or give technical opinions outside your training.
- Accuracy: only recommend solutions that are supported by the project's blueprints and tested knowledge base.
- No commercial conflicts: do not recommend specific brands or suppliers for personal gain.
- Respect for autonomy: present options and information; let organisations make their own decisions.
- Confidentiality: treat any sensitive commercial or operational information shared during advisory conversations with discretion.
- Referral responsibility: refer promptly when a situation requires specialist expertise, and follow up to ensure the referral was useful.

Key Takeaways

- Energy Practitioners are trained intermediaries, not auditors or engineers; their scope is defined by the project's solution portfolio.
- The role adds value through awareness, advice, motivation, signposting, and transfer, not through technical certification.
- Clear role boundaries protect both practitioners and the organisations they serve.

- Ethical practice, including honesty, accuracy, and referral responsibility, is as important as technical knowledge.

8. Competence Profile of an Energy Practitioner

This chapter sets out the knowledge, skills, and attitudes that an Energy Practitioner needs. It provides a framework for both training design and self-assessment. The competence profile is used at the end of this compendium in the form of a self-assessment tool.

8.1 Knowledge

Energy Practitioners need sufficient knowledge to advise confidently within their scope. The following knowledge areas are core to the role:

- Basic energy efficiency concepts: heat loss, thermal insulation, energy consumption in buildings, the relationship between building envelope quality and heating costs.
- The four solution fields: building insulation, water and warm water, electricity, and behavioural change; the key measures within each field; typical savings potential and investment costs.
- The project blueprints: what each blueprint covers, how to read and apply it, how to present it to target groups.
- Typical building types in the regional context: public buildings managed by municipalities, commercial and light industrial premises used by SMEs, rural building stock.
- The basics of heating systems: radiators, thermostatic valves, hydronic circuits, heating curve regulation, and how simple adjustments affect energy consumption.
- The basics of electricity use in buildings: lighting systems, standby loads, LED technology, lighting controls.
- Water efficiency: how aerators and sensor faucets work, typical consumption patterns in offices and public buildings.
- Behavioural change principles: why information alone does not produce action, what makes behavioural nudges effective, how to make energy savings visible.
- Scope and referral knowledge: when to refer to a certified auditor, an installer, an engineer, or a funding body.

8.2 Skills

Skills are what practitioners do with their knowledge. The following skill areas are central:

- Advisory conversation: conducting a structured first meeting, asking questions that identify relevant opportunities, presenting options clearly, and agreeing next steps.
- Building walkthrough: conducting an informal visual assessment of a building, identifying obvious loss areas, taking simple notes, and using the findings to recommend specific measures.
- Blueprint presentation: explaining a blueprint to a non-technical audience, answering common questions, and helping the target group assess suitability for their own situation.
- Needs assessment: identifying which solution fields are most relevant for a given organisation, prioritising measures by likely impact and feasibility.

- Action planning: helping organisations develop a simple, realistic plan for implementing one or more measures.
- Communication and facilitation: conducting advisory sessions with individuals and small groups, presenting at awareness-raising events, and facilitating practical workshops.
- Referral: identifying the right specialist or resource for cases that exceed the practitioner's scope.

8.3 Attitudes

Attitudes are often the most important determinant of a practitioner's effectiveness, particularly in motivational and trust-building interactions:

- Openness: genuinely curious about the target group's situation and constraints, rather than assuming a standard solution fits all.
- Patience: willing to work at the pace of the target group, recognising that change takes time and small steps matter.
- Honesty: clear about what the practitioner knows and does not know, about what is realistic and what is uncertain.
- Enthusiasm for the practical: genuinely interested in finding workable solutions rather than identifying problems.
- Respect for the target group: treating municipal staff, SME owners, and building managers as competent adults with valid constraints, not as people who simply need to be educated.

8.4 Minimum and Advanced Competence Levels

Competence area	Minimum level (after training)	Advanced level (with experience)
Technical knowledge	Can explain all four solution fields and describe at least 8 specific measures accurately	Can address detailed questions about individual measures, typical edge cases, and common installation pitfalls
Blueprint use	Can read and explain any blueprint in the project collection to a non-technical audience	Can adapt blueprint guidance to specific building types and advise on local material availability
Advisory conversation	Can conduct a structured first conversation, identify obvious opportunities, and agree simple next steps	Can manage complex multi-stakeholder conversations, handle resistance, and support multi-step implementation plans
Walkthrough assessment	Can conduct a basic visual walkthrough and identify three to five priority measures in a typical building	Can systematically assess a building portfolio, prioritise across multiple buildings, and support a phased action plan

Referral	Knows the boundaries of the role and can identify when referral is needed	Has a network of appropriate specialists and can brief them effectively on cases they receive
Communication	Can present solutions clearly in one-to-one and small group settings	Can design and deliver awareness-raising workshops and public presentations

Key Takeaways

- The competence profile covers knowledge, skills, and attitudes; all three are needed for effective practice.
- The minimum competence level is achievable through the training programme; advanced competence develops through practice and experience.
- Self-assessment against this profile is a valuable tool for identifying learning priorities before and after training.

9. Technical Foundation Module

This chapter provides the foundational technical knowledge that every Energy Practitioner needs, regardless of which solution fields they focus on. It is not a physics textbook. It covers the concepts necessary to understand how buildings use energy, where losses occur, and why the measures in the project's solution portfolio work.

Learning Objectives

8. Explain the basic principles of heat loss in buildings.
9. Identify the main categories of energy use in public buildings and SMEs.
10. Describe the key loss areas and typical savings potential for low-tech measures.
11. Distinguish between low-tech measures and capital-intensive interventions in terms of cost and payback.

9.1 Basic Energy Efficiency Concepts

Buildings lose heat through their envelope, which includes the roof, walls, floors, windows, and doors. The rate of heat loss depends on the thermal conductivity of the materials involved and the temperature difference between inside and outside. In the Baltic Sea Region, where winters are cold and heating seasons are long, these losses represent a significant share of total energy costs.

The key quantity for understanding insulation is the lambda value, written as the Greek letter. The lambda value describes a material's ability to conduct heat: a low lambda value means the material conducts heat poorly and therefore insulates well. Insulation materials work by trapping a large mass of still or very slowly moving air within a low-conductivity structure. Still air is an excellent insulator; the challenge is to keep it still.

A related concept is the U-value of a building element. The U-value describes the overall heat transmission coefficient of a wall, window, or roof: the lower the U-value, the better the insulation. Improving a building element's insulation reduces its U-value and therefore the rate at which heat flows through it.

Moisture management is inseparable from insulation. When warm, humid indoor air moves through a building construction and reaches a point where the temperature drops below the dew point, the water vapour it carries condenses and becomes liquid water within the construction. This can cause structural damage, mould growth, and frost cracking on external surfaces. Good insulation practice always addresses vapour movement, either through a vapour barrier on the warm side of the construction or through controlled ventilation of the cold side. Energy Practitioners do not need to design these solutions, but they need to understand the risk so they can identify when professional advice is required.

Key concept: moisture control

> Insulation measures can change temperature and moisture conditions within a wall, roof, or floor construction. For this reason, moisture control must always be considered together with insulation. Where the existing construction is unclear, where moisture damage is already visible, or where the intervention affects the building envelope in a substantial way, Energy Practitioners should refer the case to a qualified building professional.

9.2 Energy Use in Public Buildings and SMEs

Energy use in buildings divides broadly into heating and cooling, hot water, lighting, and electrical equipment and plug loads. The relative shares vary by building type and climate:

Energy use category	Typical share in older public buildings (heating climate)
Space heating	55 to 70 percent of total energy
Hot water preparation	10 to 20 percent
Lighting	10 to 15 percent
Electrical equipment and plug loads	5 to 15 percent
Ventilation fans and pumps	3 to 8 percent

The dominance of space heating in older buildings in the Baltic Sea Region explains why insulation and heating system improvements have the greatest absolute savings potential. However, the relative ease of achieving quick results from lighting and behavioural measures, combined with their low cost, makes them highly attractive as first steps.

9.3 Typical Loss Areas and Savings Potential

The main areas of unnecessary energy loss in typical older public buildings and SME premises are:

- Roof and attic: uninsulated or under-insulated attic floors or pitched roof constructions are among the most significant sources of heat loss. Heat rises, and a poorly insulated roof allows it to escape rapidly.
- External walls: masonry or timber walls without adequate insulation, particularly with empty cavities.
- Windows and doors: single-glazed or older double-glazed windows, poorly sealed frames, and gaps around door frames.
- Thermal bridges: points in the construction where insulating layers are interrupted, such as the junction of a floor slab with an external wall, radiator niches, and window reveals.
- Heating and hot water pipes: uninsulated or poorly insulated pipes in unheated spaces such as basements and attic spaces. Just 20 mm of insulation on an uninsulated hot water pipe can reduce heat loss by up to 90 percent.
- Radiator niches: recessed areas where radiators have been placed in older buildings reduce wall thickness and therefore insulation value at the most critical point of the heating element.

- Standby electrical loads: equipment left on standby, chargers left plugged in, and lighting left on in unoccupied spaces.

9.4 Low-Tech Versus Capital-Intensive Measures

Measure type	Characteristics	Examples
Low-tech / quick-win	Low cost, short payback, minimal disruption, often DIY or low-skill installation	Pipe insulation, aerators, LED bulbs, reflective mats, motion sensors, window film
Medium investment	Moderate cost, 1 to 5 year payback, requires simple contractor work	Window reglazing, TRV installation, hydronic balancing, radiator niche closure
Capital-intensive	High cost, 5 to 20+ year payback, requires design and specialist installation	Full wall insulation, roof renovation, heating system replacement, window replacement

Energy Practitioners focus on the first two categories. The third category is important and should not be dismissed, but it requires specialist support that goes beyond the practitioner role. The practitioner's job is to identify and facilitate quick wins, and to refer capital-intensive opportunities to appropriate specialists.

Exercise 2: Building energy audit walk-through

Using the loss area categories above, conduct a ten-minute visual walkthrough of a building you know well (your own workplace, a public building, or a building you manage). Note any obvious loss areas you observe. Estimate whether each is a low-tech, medium-investment, or capital-intensive opportunity. Share your findings with a training partner and identify which three measures would be your top recommendations.

Key Takeaways

- Heat loss through the building envelope is the dominant energy challenge in older buildings in the Baltic Sea Region.
- Moisture management is inseparable from insulation; practitioners need to recognise when it requires specialist attention.
- Heating and hot water dominate energy use in typical public buildings; lighting and plug loads are more easily addressed.
- Low-tech and medium-investment measures are the Energy Practitioner's primary focus; capital-intensive measures require specialist referral.

10. Solutions Module I: Building Insulation

This chapter covers the building insulation measures in the Easy Energy solution portfolio in practical detail. For each measure, it explains how it works, what the typical application looks like, what savings can be expected, and what key considerations and risks apply. This is the content that Energy Practitioners will use most frequently in advisory practice.

Learning Objectives

12. Describe at least six specific building insulation measures from the project portfolio.
13. Explain the key installation considerations and risks for each measure.
14. Identify which measures can be done as DIY and which require professional contractors.
15. Use blueprint descriptions to explain measures to a non-technical audience.

10.1 Overview of Building Insulation Solutions

Building insulation solutions in the Easy Energy portfolio address the main areas of heat loss in typical older buildings: the roof and attic, external walls, basement ceilings, windows, and radiator systems. Together, these measures can reduce heating energy consumption significantly, with the exact savings depending on the starting condition of the building.

All insulation measures share a fundamental principle: they increase the amount of still air trapped within the building envelope, reducing the rate at which heat flows from warm interior spaces to the cold exterior. The practical challenge is always to achieve this while managing moisture movement safely.

10.2 Typical Easy Measures

Top Floor Ceiling Insulation

Insulating the floor of an unheated attic is one of the most cost-effective energy measures available in older buildings. Heat rises naturally, and an uninsulated or under-insulated attic floor allows a disproportionate share of heating energy to escape. The measure can be done by laying insulation batts or by blowing in loose-fill material such as recycled paper granulate.

When working on attic floor insulation, focus points include raising the attic boardwalk to maintain access, mounting windbreaker plates along the roof footing to ensure that cold airflow in the attic does not penetrate the insulation, and inspecting or installing a vapour barrier before adding additional material. Blown-in granulate can be done as a DIY task when laid from bags but produces better results when applied by a professional with specialist blowing equipment. Batt insulation can be done as DIY; two layers should be applied in a staggered pattern to close all gaps.

Basement Ceiling Insulation

Insulating the ceiling of an unheated basement floor reduces heat loss from the floor above. The key challenge here is that temperature shifts in a basement can be dramatic after insulation is installed: in summer, the basement may be cooler than the outdoor air, shifting the dew point to the walls and windbreaker. In winter, moisture-laden indoor air drives toward the colder basement. The solution requires good basement ventilation and a vapour barrier on the warm side of the insulation.

> **Safety note**
>
> Basement ceiling insulation can produce moisture problems if ventilation is inadequate or the vapour barrier is incorrectly placed. If there is any sign of existing moisture damage or mould in the basement, refer to a building professional before advising on insulation. Adding insulation on top of an existing moisture problem will make it worse.

Blown-In Insulation for Walls

Masonry walls with empty cavities can be filled with insulating material such as perlite granulate. This is a proven solution with good results. It should be done by a professional with a track record in this type of work. Important considerations include checking and maintaining seals around doors and windows, since loose perlite will pour out when seals need to be replaced; a self-compacting variant is preferable for this reason.

Timber-framed walls can also be filled with blown-in insulation, including wood fibre and mineral wool products. This work must be done by a professional under controlled pressure to prevent compression of the insulating material over time and to maintain structural integrity. A membrane-type vapour barrier on the warm side is recommended.

Radiator Niche Closure

Older buildings often have radiator niches: recesses in the external wall where the radiator sits. These niches reduce wall thickness at the exact point where the heating element is located, creating a thermal weak spot. When replacing old cast-iron radiators with modern flat-panel models, the niche can be closed by filling it with brickwork extending the original surrounding insulation, or with an indoor insulation wall of fibre-enhanced gypsum board. A vapour barrier is required, and the outer wall temperature will change, making it important to watch for signs of frost cracking on the exterior surface.

Reflective Mat Behind Radiator

Installing a thin reflective mat between the radiator and the wall prevents heat from radiating into the wall construction and directs it into the room instead. This is one of the simplest and most accessible measures in the portfolio. The mat is thin, inexpensive, and can be installed in minutes with no specialist skills. It is less effective than adding insulation to the wall itself, but far easier. As with radiator niche closure, the outer wall temperature in that area may decrease after installation; frost cracking risk should be monitored.

Window Insulation Film

Window insulation film creates an additional layer of still air on the inside face of older single or double-glazed windows, reducing heat loss through the glass. It can be applied to inner window frames if the frames and seals are in good condition. Film applied to the full inner frame will prevent the window from being opened. This is a suitable DIY measure for many buildings. It is less effective than window replacement but costs a fraction of the price and can be a useful bridging measure.

Window Reglazing

When reglazing a window, the existing frame is retained but the glass unit is replaced with a higher-specification energy glass. The key consideration is the depth available in the existing frame: modern triple-glazing units are deeper than older double-glazing and may not fit in all frames. Checking and replacing frame seals at the same time maximises the result. It is worth checking the market for the best U-value glass unit that fits the available depth.

Insulating Blinds and Shutters

Insulating blinds, particularly honeycomb or cellular designs, create a layer of still air on the inside of the window, similar to insulation film but with the added benefit of being operable. They can be positioned to allow or block sunlight, providing some regulation of solar heat gain. For best effect, they must be fitted as precisely to the outer frame as possible. External shutters reduce wind speed across the glass surface, which also reduces heat loss. Internal shutters have a similar but smaller effect.

Door Closers

A door closer is one of the simplest behavioural-technical hybrid measures available. It closes the door as quickly as possible after passage, preventing the sustained heat loss that comes from a door left open near a radiator. This is particularly important when the thermostat is positioned near the door, which causes unnecessary heating demand. Door closers are inexpensive, widely available, and require minimal installation skill.

Pipe Insulation

Pipe insulation has among the shortest payback periods of any measure in the portfolio. Just 20 mm of insulation on an uninsulated hot water pipe can reduce heat loss by up to 90 percent. The measure is relevant for all exposed heating and hot water pipes in unheated spaces, including basements, attic spaces, and plant rooms. Valves, pump housings, and handles should also be insulated; these are often overlooked. Some pipe insulation products are suitable for DIY installation; others require contractor work.

10.3 How Practitioners Should Explain Insulation Options to Target Groups

When explaining insulation options to a building manager or SME owner, the most effective approach is to start with what they can see and feel: a cold floor near a window, a hot water pipe running through an unheated space, a radiator sitting in a niche. Connect the visible observation to the energy loss it represents. Then describe the specific measure that addresses it in plain terms, using the blueprint as a reference.

Avoid technical jargon when speaking with non-specialists. Instead of discussing lambda values and U-values, talk about 'how quickly heat escapes through this wall' or 'how much of the heat in that pipe is lost before the water reaches the radiator.' Concrete language that relates to what people experience in the building is far more persuasive than technical specifications.

Always present a range of options when possible: a quick, inexpensive first step alongside a more comprehensive medium-term measure. This gives target groups a realistic entry point and shows that improvement does not have to wait for a large budget.

Case Example: Pipe insulation in a community centre

A community centre in a rural municipality had several metres of hot water supply pipe running through an unheated basement before reaching the building's heating system. The pipe had been in place for over 20 years and had lost its original insulation. An Energy Practitioner visiting the building during a walkthrough identified this as a priority and estimated the heat loss at several thousand kilowatt-hours per year. Pre-formed pipe insulation sleeves were purchased from a local hardware store for under EUR 80, and the facility caretaker installed them in a single morning. The improvement in heat delivery efficiency was immediately measurable.

10.4 Implementation Considerations, Limits and Safety Notes

All insulation measures have limits and risks that practitioners should be aware of:

- Never add insulation to a building element with existing moisture damage or mould without first resolving the moisture issue.
- Always consider the effect of insulation changes on the thermal balance of adjacent construction elements, particularly the risk of frost cracking on external surfaces.
- Vapour management is critical; if in doubt about the correct placement of a vapour barrier in a specific construction, refer to a building professional.
- For blown-in insulation in roofs and walls, professional installation is strongly recommended to ensure adequate pressure and coverage.
- Perlite used to fill masonry wall cavities requires attention to seals around doors and windows; self-compacting variants are preferable.

- Energy Practitioners should not give opinions on the structural adequacy of a building construction; if there are signs of structural issues, refer to an engineer.

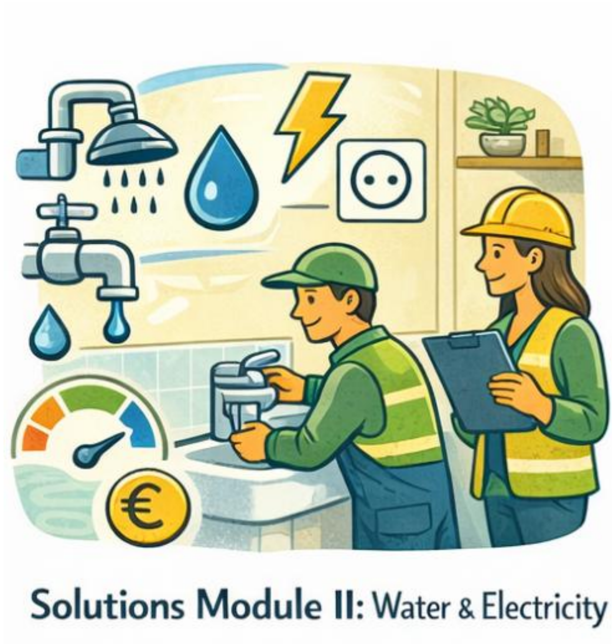
Key Takeaways

- Roof/attic insulation and pipe insulation typically offer the fastest payback periods among building insulation measures.
- Moisture management is a critical consideration in all insulation work; practitioners must recognise when professional advice is needed.
- Measures range from simple DIY tasks (reflective mats, window film, pipe sleeves) to contractor-dependent work (blown-in insulation, radiator niche closure).
- Blueprints and plain language explanations are more effective communication tools than technical specifications.

11. Solutions Module II: Water, Warm Water and Electricity

This chapter covers the water, warm water, and electricity measures in the Easy Energy portfolio.

These measures are often faster and less disruptive to implement than insulation changes, and they are highly relevant to both municipal buildings and SME premises. Behavioural improvements are integrated throughout.



Learning Objectives

16. Describe the key water-saving measures and explain how they work.
17. Explain the main heating system improvements available without major capital investment.
18. Describe the electricity efficiency measures in the project portfolio and their typical savings.
19. Integrate behavioural elements with technical measures in advisory practice.

11.1 Water-Saving Measures

Flow Aerators

A tap aerator is a small screw-on fitting attached to the tip of a tap or faucet spout. It mixes air into the water stream, reducing the flow rate while maintaining perceived water pressure. Aerators are available in different flow rates, typically between 2 and 6 litres per minute, allowing building managers to select an appropriate specification for different tap locations. They filter debris through a small built-in screen and reduce splashing and noise.

Aerators are among the most accessible measures in the entire portfolio: they cost between EUR 5 and EUR 30 per unit, can be installed by anyone with basic DIY skills in under five minutes, and produce measurable results quickly. Water savings of up to 40 percent are achievable at the tap, with a payback period of two to four months depending on usage patterns. Even lower-specification aerators save around 15 percent. Where hot water is involved, aerators also reduce water heating energy.

Sensor Water Faucets

A sensor faucet uses an infrared or motion sensor to detect the presence of hands and automatically controls water flow, stopping it immediately when hands are removed. This eliminates the water waste from taps left running. Sensor faucets are available in battery-powered and mains-connected versions and include an aerator for flow efficiency. They cost approximately EUR 250 per unit and reduce water consumption by approximately 40 percent annually. Results are typically visible within the first few months of installation. Sensor faucets are particularly suitable for public restrooms, canteen facilities, and high-use washrooms in municipal buildings and SME premises.

Behavioural water-saving practices

Technical water-saving measures work best when combined with staff awareness. Simple messages about turning off taps fully, reporting drips promptly, and understanding that hot water use also carries an energy cost are effective complements to aerator and sensor faucet installations.

11.2 Warm Water and Heating System Improvements

Thermostatic Radiator Valves

A thermostatic radiator valve (TRV) is a self-regulating device that controls the hot water flow into a radiator based on room temperature. It contains a temperature-sensitive element that expands or contracts in response to ambient temperature, opening or closing the valve accordingly. TRVs allow room-by-room temperature control and eliminate the energy waste of heating rooms that do not need it. Energy savings of 10 to 20 percent on space heating costs are achievable with proper TRV installation. Each room can have its individual set temperature, such as 18 degrees Celsius in bedrooms and 22 degrees Celsius in main work areas.

Smart Radiator Thermostats

Smart thermostats are electronic versions of TRVs that can be controlled via smartphone apps, connected to building management systems, or set to automatic schedules. They allow remote temperature control, time-based scheduling, and integration with occupancy data. Energy savings of up to 30 percent on space heating are achievable with well-configured smart systems. While the investment cost is higher than standard TRVs, the additional control capabilities make smart thermostats particularly suitable for public buildings with variable occupancy patterns, such as community halls, sports facilities, and office buildings.

Heating Curve Regulation

A heating curve regulator adjusts the supply water temperature of the heating system based on the outdoor temperature. When it is cold outside, the system increases the radiator water temperature; when it is warmer, it reduces it automatically. This weather-compensated approach prevents overheating during mild weather, which is a common and significant source of wasted heating energy. Adjusting the heating curve of an existing system is often a simple parameter change in the boiler controller, requiring no new equipment. Energy Practitioners should be aware of this option and be prepared to explain it to building managers.

Hydronic Balancing

In a hydronic heating system, water circulates through multiple radiators and heating circuits. If the system is not properly balanced, some radiators receive too much hot water and overheat while others receive too little and remain cold. The system overall operates at a higher temperature and energy intensity than necessary. Hydronic balancing adjusts the flow rate in each circuit using balancing valves. It should be done by a qualified heating technician and typically needs to be repeated every five to seven years, or after any significant changes to the system. The benefits include improved comfort, reduced pump energy consumption (by 20 to 40 percent), and lower return water temperatures that improve boiler efficiency.

Case Example: Insulation of an industrial building in Estonia

A partner from the project documented the impact of PUR foam insulation applied to the arch hall of an industrial building. Gas consumption for the four winter months from December 2024 to March 2025, after insulation, was compared with the same months a year earlier. Total gas consumption fell from approximately 21,800 cubic metres to approximately 13,050 cubic metres, and the total gas cost fell by approximately EUR 1,600 over the four-month comparison period. This represents a reduction of about 40 percent in money spent on heating gas. The payback period for the insulation investment was correspondingly short.

11.3 Electricity Efficiency Measures

LED Lighting

LED (light-emitting diode) technology is the most efficient widely available lighting technology. LED lamps produce light through electroluminescence rather than by heating a filament or exciting a gas, making them far more energy-efficient and longer-lasting than incandescent or fluorescent alternatives. An LED bulb typically uses 70 to 90 percent less energy than an equivalent incandescent bulb and lasts 15 to 25 times longer. Retrofitting fluorescent tubes and incandescent bulbs with LEDs is one of the simplest and most cost-effective measures available.

When selecting LED products, practitioners should advise target groups to consider the light colour temperature (warmer tones around 2,700 to 3,000 Kelvin for comfortable living and office spaces; cooler tones around 4,000 Kelvin for kitchens, workshops, and detail work), the colour rendering index (CRI, where values above 80 are standard and above 90 is preferable for colour-critical applications), and the lumen output required for the space. A lamp's wattage no longer adequately describes its light output; lumens should be the primary reference.

Lighting Controls: Motion, Occupancy, and Timer-Based

Lighting controls automate the on/off behaviour of lighting systems to prevent unnecessary energy use. Three main control types are relevant to the Easy Energy portfolio:

Motion-activated lighting uses passive infrared or ultrasonic sensors to detect movement and activate lights when people are present. It is suitable for stairwells, corridors, storage rooms, restrooms, and parking areas where occupancy is intermittent. Lights turn off automatically after a programmable delay when no motion is detected.

Occupancy sensors detect sustained presence using similar technology but are configured for spaces with more settled occupancy, such as offices, meeting rooms, and classrooms. They prevent the lights from switching off during low-movement periods such as concentrated desk work.

Timer-based controls set lighting schedules aligned with building operation hours. They are simple to configure and particularly effective in buildings with predictable occupancy patterns. Combined with manual override capability, they can reduce lighting energy by 20 to 40 percent in typical office and public building environments.

Daylight-Responsive Lighting (Lux-Based Control)

A daylight-responsive lighting system uses a lux sensor to continuously measure the available natural light in a space and automatically adjusts the output of artificial lighting to maintain a target illuminance level, typically 300 to 500 lux for offices. When daylight is plentiful, the lights dim; when it is overcast or the sun sets, they brighten. This provides consistently comfortable lighting conditions while saving 30 to 60 percent of lighting energy in spaces with good natural light access.

Timer Sockets and Standby Load Reduction

Electrical equipment left on standby continues to draw power even when not in active use. In offices and public buildings, standby loads from computers, monitors, printers, coffee machines, water dispensers, and advertising displays can represent a significant share of total electricity consumption. Timer sockets, available as simple mechanical dial timers or as smart Wi-Fi-connected units, can cut power to specific circuits or individual devices during out-of-hours periods, eliminating standby waste automatically.

Energy Visualisation

Making energy consumption visible to building users and managers is a powerful complement to technical measures. Energy visualisation can range from simple displayed readings on a smart meter to real-time dashboards showing consumption by floor, circuit, or system. The key principle is that what is measured and visible can be managed and discussed. Even a simple monthly comparison of electricity and heating costs displayed on a noticeboard can motivate behaviour change among staff and management.

> **Practical tip**
>
> When presenting electricity measures to SMEs, start with LED retrofitting if it has not already been done: it is almost universally applicable, the product quality has improved enormously, and the payback is typically under three years. Once LED is in place, the next conversation can move to lighting controls, which provide additional savings on top of the LED efficiency gain.

11.4 Behavioural and Operational Improvements

Several straightforward behavioural practices directly reduce energy consumption without any equipment investment:

- Correct ventilation: during the heating season, brief cross-ventilation (opening windows on opposite sides of a room for three to five minutes) is far more effective than leaving a single window tilted open for hours. Cross-ventilation rapidly replaces stale air without lowering the room temperature significantly.
- Temperature management: lowering the thermostat set point by one to two degrees Celsius reduces heating energy consumption by approximately five to ten percent per degree. Programmable thermostats can automate lower temperatures during unoccupied hours.
- Radiator maintenance: bleeding radiators regularly during the heating season to remove air pockets, checking that thermostatic valves are functioning, and ensuring that furniture does not obstruct radiator heat output are routine actions that cost nothing and prevent energy waste.
- Turning off lights: assigning individual responsibility for turning off lights in unoccupied spaces, combined with short reminders at the start of each day or week, can produce meaningful savings in high-occupancy buildings.

Exercise 3: Matching solutions to buildings

Review the solution descriptions in this chapter. Now think of three different buildings or premises you are familiar with: a public office building, a school or community centre, and a small commercial premises. For each building, identify the two or three measures from this chapter that you believe would have the highest impact for the least effort. Note your reasoning. Then compare your selections with a training partner and discuss any differences in your priorities.

11.5 Implementation Considerations, Limits and Safety Notes

- Electrical work, including the replacement of lighting fixtures and the installation of sensor systems beyond simple plug-in adapters, must be carried out by a qualified electrician in all BSR countries. Energy Practitioners advise on what to do; they do not do electrical installations themselves.
- Hydronic balancing requires a qualified heating technician; it is a technical process involving flow measurements and valve adjustments that should not be attempted without appropriate skills and equipment.
- Smart thermostat systems require consideration of connectivity infrastructure in the building; if the building has poor Wi-Fi coverage, alternative products may be needed.
- Timer sockets used for high-draw appliances such as space heaters must be rated for the load they control; practitioners should check product specifications before recommending specific products.

Key Takeaways

- Aerators and sensor faucets are among the lowest-cost, highest-return measures in the portfolio; payback is typically two to four months.
- TRVs, smart thermostats, and hydronic balancing address heating efficiency at different levels of complexity and cost.
- LED retrofitting is almost universally applicable and should generally be the first electricity measure discussed.
- Behavioural measures and technical measures reinforce each other; the best results come from combining both.

12. Working with the Project Blueprints

The blueprints are the most important practical tool that Energy Practitioners use in their advisory work. This chapter explains what the blueprints are, how to read them, how to present them, and how to choose the right blueprints for different target groups and settings.

12.1 What the Blueprints Are

The Easy Energy blueprints are structured, practical descriptions of specific low-tech energy-saving measures. Each blueprint covers one measure, such as top floor ceiling insulation, aerator installation, or LED retrofitting, in enough detail for a building manager or SME owner to understand what the measure involves, what it will cost, what savings to expect, and how to implement it. Blueprints are based on tested, real-world experience from the project's pilots and partner organisations.

The blueprint format is consistent across all measures. Each blueprint describes the measure, explains how it works, lists typical materials and products, provides an indicative cost range, describes the installation process, notes key safety and quality considerations, and indicates the typical payback period. This consistency makes it easier for practitioners to present and compare measures systematically.

12.2 How Practitioners Use Blueprints in Advisory Practice

Blueprints serve three functions in advisory practice. First, they are a knowledge reference for the practitioner: a reliable, tested description of a measure that the practitioner can study before a visit and return to when questions arise. Second, they are a communication tool in the advisory conversation: presenting a blueprint to a building manager is more credible and more useful than a verbal description alone. Third, they are a handover document: leaving a relevant blueprint with a target group organisation ensures that the advice persists beyond the conversation and can be shared internally.

Best practice

Before any site visit or advisory session, review the blueprints most relevant to the organisation you are visiting. Make sure you can explain each measure clearly in plain language. If you are unsure about any aspect, consult the blueprint carefully before the meeting and note any questions you cannot answer, so you can follow up accurately rather than speculating.

12.3 How to Interpret Blueprint Descriptions

When working with a blueprint, the following elements deserve particular attention in the advisory context:

Blueprint element	What to focus on in advisory practice
What the measure is	Can you explain it clearly in two or three sentences without using the blueprint text?

How it works	Can you explain the physical or mechanical principle in plain language, using an analogy if helpful?
Typical cost range	Is this cost realistic for the target group's situation? Are there local pricing differences to consider?
Typical savings / payback	Is the savings estimate credible for this specific building's size and usage pattern?
Installation steps	Is this DIY-capable, or does it require a contractor? Who would be the right contractor?
Key risks and limitations	Are there any conditions in this specific building that would make the measure unsuitable or require specialist review?
Transferability notes	Are there country-specific considerations, such as climate, regulation, or material availability, to flag?

12.4 How to Choose Relevant Blueprints for Different Target Groups

Not every blueprint is relevant to every organisation. The selection of the most useful blueprints for a given target group depends on several factors:

- Building type: an office building has different priority loss areas than a warehouse, a school, or a residential-above-retail mixed-use building.
- Building age and condition: older buildings typically have more untapped insulation potential; newer buildings may benefit more from heating controls and lighting upgrades.
- Current measures already in place: avoid recommending measures the target group has already implemented.
- Budget and staff capacity: prioritise measures that match the organisation's realistic capacity to act.
- Motivation and entry point: start with the measure the target group is already most interested in, even if it is not technically the highest-impact measure.

A useful rule of thumb is to arrive at a first advisory meeting with no more than three to five blueprints selected as most likely to be relevant. This prevents information overload and keeps the conversation focused. After the initial walkthrough and conversation, you can adjust and provide additional blueprints as needed.

Exercise 4: Blueprint presentation practice

Select one blueprint from the Easy Energy collection. Prepare a two-minute verbal explanation of the measure, as if you were presenting it to a municipal facility manager who has no technical background. Avoid all jargon. Include what the measure is, why it matters, what it costs, and what the first step is. Present your explanation to a training partner who will ask at least two challenging questions, such as 'Can we do this ourselves?' or 'How long will it take to pay back?' After the exercise, reflect on which parts of your explanation were clearest and which need more work.

Key Takeaways

- Blueprints are the core practical tool of advisory practice: a knowledge reference, a communication aid, and a handover document.
- Practitioners must be able to explain any blueprint clearly in plain language without relying on technical vocabulary.
- Selecting the right blueprints for a given target group requires matching the measure to the building type, condition, budget, and motivation.
- Three to five pre-selected blueprints per visit is a practical working approach.

13. Advisory Practice for Municipalities

This chapter focuses on the specific context of advising local public authorities on energy efficiency in their building portfolios. Municipal settings have distinctive characteristics that influence how advisory conversations should be structured and what solutions are most relevant.

Learning Objectives

20. Identify typical public building types and their common energy challenges.
21. Describe effective entry points for energy efficiency conversations with public administrations.
22. Explain how to connect energy measures with municipal budgets and routines.
23. Define the limits of the advisory role in a public procurement context.

13.1 Typical Building Types and Municipal Settings

A municipality's building portfolio typically includes several distinct types of premises, each with its own energy profile, occupancy pattern, and organisational responsibility:

Building type	Typical energy characteristics
Schools and kindergartens	High daytime occupancy during school year; significant heating demand; strong potential for lighting controls and TRV optimisation
Administrative offices	Weekday occupancy; moderate heating and cooling; significant standby electrical load; good candidate for timer sockets and LED retrofit
Community halls and sports facilities	Variable and event-driven occupancy; high heating losses from large volumes and frequent ventilation; strong case for smart scheduling
Libraries and cultural buildings	Extended but predictable opening hours; moderate heating; good candidate for daylight-responsive lighting
Maintenance depots and storage buildings	Intermittent occupancy; often poorly insulated; strong case for basic insulation measures and motion-activated lighting
Rural multi-purpose facilities	Low occupancy density; often older, less maintained; high insulation improvement potential

13.2 How to Speak with Public Administrations

Municipal decision-makers operate under pressures that differ from those of private enterprises. They are accountable to elected representatives and to the public. They work within annual budget cycles with little flexibility for unplanned investment. They are subject to procurement rules that can make even small purchases procedurally cumbersome. And they often deal with competing priorities from multiple departments.

Effective advisory conversations with municipal staff need to respect these realities. The most productive approaches include the following. Connect energy savings to the municipal budget: every euro saved on energy can be reallocated to services that matter to residents. Frame measures in terms of annual cost reduction, not just technical improvement. Align with existing plans: if the municipality has a climate action plan, an energy strategy, or a building maintenance schedule, identify where Easy Energy measures fit within those existing frameworks rather than presenting them as a new and additional demand. Identify the right contact person: the sustainability officer, the building manager, the facilities director, or the mayor's office depending on the size and structure of the authority.

13.3 Low-Threshold Entry Points

For municipalities that have not yet started systematic energy work, the most effective entry points are usually the simplest and most visible measures. Pipe insulation in basement areas, reflective mats behind radiators, and LED retrofitting in corridors and offices can all be implemented without formal procurement thresholds in most BSR countries. They produce visible results quickly and create a track record that supports the case for larger investments.

Another effective entry point is a building walkthrough with the facility caretaker or maintenance officer. These staff members typically have detailed knowledge of the building's weaknesses and a practical orientation that makes them good partners for implementing simple measures. Involving them in the identification and planning of improvements increases both the quality of the recommendations and the likelihood of implementation.

13.4 Connecting Solutions with Municipal Routines and Budgets

The most durable improvements in municipal energy performance are those that become part of routine maintenance practice rather than one-off projects. Energy Practitioners can support this by encouraging municipalities to incorporate energy check questions into their regular building maintenance routines: Is the pipe insulation intact? Are the TRVs functioning and set correctly? Is the attic floor accessible and checked for insulation damage? Are lights switching off in unoccupied areas?

From a budget perspective, many of the measures in the Easy Energy portfolio fall below formal procurement thresholds and can be charged to routine maintenance budgets. This is an important practical advantage. For larger measures that do require capital approval, practitioners can support the decision-making process by providing a simple cost and savings estimate that decision-makers can use to make the case internally.

13.5 Supporting Implementation Without Taking Over Technical Responsibility

Energy Practitioners advise, explain, motivate, and follow up. They do not manage procurement processes, supervise contractors, or certify that installations meet technical standards. This boundary is important both for the practitioner's protection and for the municipality's clarity about roles.

The practical application of this boundary means that a practitioner can help a facility manager understand what to ask for when briefing a contractor, can help review whether a proposed measure matches the relevant blueprint, and can help evaluate whether the result matches the intended outcome. But the practitioner does not sign off on technical work, does not act as a project manager, and does not take responsibility for compliance with building regulations.

Case Example: Inter-municipal cooperation on Energy Practitioners

The business model documentation from the project describes an approach that smaller municipalities can use to share the cost and benefit of Energy Practitioner services. A group of three to five neighbouring municipalities can jointly fund the training of one or two shared practitioners who then serve all participating authorities on a rotating basis. This model has been identified as particularly effective for rural municipalities where the building portfolio of each individual authority may be too small to justify a dedicated practitioner, but the combined portfolio across the group makes the investment clearly worthwhile.

Key Takeaways

- Municipal building portfolios are diverse; energy advice should be tailored to each building type's occupancy and energy profile.
- Effective entry points include pipe insulation, LED retrofitting, and collaborative walkthroughs with facility staff.
- Connecting measures to existing budget lines and routines is more effective than proposing new investment projects.
- The advisory role supports municipal decision-makers; it does not replace technical or procurement responsibility.

14. Advisory Practice for SMEs

This chapter addresses the distinctive realities of advising small and micro-enterprises. SME contexts differ significantly from public sector settings, and effective advisory practice needs to reflect these differences.

14.1 Realities of Micro and Small Enterprises

The vast majority of enterprises in all Baltic Sea Region countries are micro or small businesses with fewer than ten or fifty employees respectively. These organisations share several characteristics that define the advisory challenge:

The owner or manager is typically the decision-maker for everything, including energy. There is no facilities management function, no sustainability officer, and no one with dedicated time for energy improvement projects. The owner makes the decision, the owner organises the implementation, and the owner pays the bill.

Cash flow is the primary financial filter. A measure that requires a EUR 5,000 upfront investment may produce an excellent three-year return but will be rejected immediately if the business has a tight month ahead. Measures with very short payback periods, or those that can be financed from petty cash or routine maintenance budgets, have a fundamentally different reception from capital investment proposals.

Time is the scarcest resource. A short, clear advisory conversation that produces a concrete recommendation and a realistic action is far more valuable than a comprehensive energy assessment report that sits unread in an inbox.

14.2 Sector-Neutral Practical Advice

While specific measures may vary by sector, most of the Easy Energy portfolio applies across a wide range of SME types. Lighting upgrades, aerators, sensor controls, pipe insulation, TRV optimisation, and simple heating curve adjustments are relevant to a hardware shop, a small hotel, a hairdresser, a light manufacturing workshop, and an agricultural cooperative. The sector-neutral orientation of the portfolio is an advantage: practitioners can work across different business types without needing deep sector-specific knowledge.

The one area where sector context matters is the thermal and operational profile of the building. A bakery has very different energy dynamics from a chilled food storage unit or an administrative office. Energy Practitioners do not need to understand every sector's processes in detail, but they should ask questions about how the space is used, when it is occupied, and what the main energy costs are before recommending specific measures.

14.3 Addressing Time Pressure, Limited Cash Flow and Low Internal Capacity

The most effective approach for advising SMEs combines brevity, specificity, and respect for the owner's constraints. Structure advisory conversations around three questions: What is the most expensive energy problem in this building right now? What is the quickest and most affordable measure to address it? What is the very next concrete action the owner needs to take?

Avoid presenting long lists of possible measures. A list of ten things to do is ten things the owner will not do. A single clearly prioritised recommendation with a specific product, a cost estimate, and a description of how to get it done is far more likely to produce action.

Where possible, help the owner see the connection between energy savings and profitability directly. For a small restaurant, cutting the monthly energy bill by EUR 200 has the same effect on net profit as increasing monthly sales by EUR 400 or more, depending on profit margins. Making this comparison vivid is often the most powerful thing a practitioner can say.

14.4 Presenting Quick Wins and Prioritising Feasible Measures

In an SME context, the first measure recommended should ideally be implementable within a week, costing under EUR 200, and visible in the next energy bill. Not every building will have such an obvious quick win, but many do: replacing a remaining incandescent or halogen bulb, installing an aerator on the sink in the back office, putting a timer socket on the coffee machine in the waiting room. These small actions build trust and momentum.

After the quick win is established, the conversation can move to the medium-term measure that has the highest impact for the available budget. This sequencing, quick win first, then medium-term priority, is more effective than presenting the highest-impact measure first and discovering that the owner finds it too expensive or complex to act on.

Exercise 5: SME advisory role play

In pairs, one participant takes the role of an Energy Practitioner and the other takes the role of the owner of a small hotel with 15 rooms, two small meeting rooms, and a breakfast room. The hotel is in a rural location and has not done any energy improvements in ten years. The owner has twenty minutes available for the conversation. The practitioner should conduct a structured advisory conversation: ask appropriate questions, identify two or three priority measures from the solution portfolio, and agree one specific next action. After the role play, both participants reflect on what worked well and what would have made the conversation more effective.

Key Takeaways

- SME owners are the sole decision-maker, have minimal time, and filter all measures through cash flow.
- The most useful advisory conversations are brief, specific, and result in one clear next action.

- Start with a quick win that can be done immediately; this builds trust and momentum for larger measures.
- Connect energy savings to business profitability directly: saved costs flow straight to the bottom line.

15. Soft Skills for Energy Practitioners

Technical knowledge about energy measures is necessary but not sufficient. Energy Practitioners spend the majority of their working time in conversations, presentations, and advisory interactions where the quality of their communication, their ability to build trust, and their skill in handling scepticism determine whether advice is heard and acted upon. This chapter covers the soft skills that are central to effective practice.

Learning Objectives

24. Describe six key soft skills for Energy Practitioner practice and explain why each matters.
25. Apply basic principles of motivational interviewing in a simulated advisory conversation.
26. Explain technical energy concepts in plain language suitable for a non-specialist audience.
27. Demonstrate active listening and appropriate questioning techniques.

15.1 Communication

Effective communication for Energy Practitioners is primarily about translation: taking technical concepts and expressing them in plain language that is immediately meaningful to a non-specialist audience. This requires both knowledge of the subject and sensitivity to the vocabulary and background of the person you are speaking with.

A survey conducted as part of the Easy Energy project identified good communication skills as one of the six most important competences for Energy Practitioners working across the Baltic Sea Region. The key focus areas are translating technical concepts for diverse audiences, using visual communication techniques, active listening in multicultural settings, and clear written and verbal communication.

Practical communication principles include: use short sentences and concrete nouns; avoid acronyms and technical abbreviations unless you have checked that the other person uses them themselves; use comparisons to everyday experiences ('the heat loss from this attic is like leaving a large window open all winter'); check understanding regularly rather than only at the end; and adjust your vocabulary and level of detail based on the response you receive.

15.2 Trust Building

Trust is the foundation of any advisory relationship. Without trust, information is not believed, recommendations are not followed, and the practitioner's time is wasted. Trust develops over time and through consistent behaviour: being honest about what you know and do not know; following through on commitments such as sending information or making a referral; showing genuine interest in the

organisation's specific situation rather than offering generic advice; and respecting the target group's constraints rather than dismissing them.

A practical trust-building technique is to share examples from other comparable organisations: 'A municipality similar to yours in a neighbouring district tried this and here is what they found.' Real examples are more persuasive than abstract principles and signal that the practitioner has relevant experience and connections.

15.3 Motivational Interviewing Basics

Motivational interviewing is a communication approach originally developed for health behaviour change that has been widely applied in energy and sustainability advisory settings. Its core insight is that people are more likely to act on reasons they articulate themselves than on reasons they are given by others. The practitioner's role is to ask questions that help the target group discover and express their own motivation for change.

Four basic principles apply: express empathy rather than judgment; develop discrepancy between where the organisation is now and where it wants to be; roll with resistance rather than confronting it directly; and support self-efficacy by helping the target group recognise its own capacity to act.

Practically, this means asking questions such as: 'What are the biggest energy costs you are trying to manage this year?' 'What has prevented you from acting on this before?' 'If you did take this step, what difference would it make for you?' 'What would be a realistic first step for your organisation?' These questions shift the conversation from the practitioner advising to the target group exploring.

15.4 Active Listening

Active listening means giving full attention to what the other person is saying, processing both the content and the underlying concerns or motivations, and responding in a way that demonstrates you have understood. It is the opposite of waiting for the other person to stop talking so you can say what you planned to say.

Practical active listening techniques include: making brief, non-verbal acknowledgments (nodding, maintaining eye contact) that signal attention; paraphrasing what you have heard ('So what I am understanding is that your main concern is the upfront cost, not the idea of making changes?'); asking follow-up questions that build on what was just said; and tolerating pauses without rushing to fill them.

15.5 Handling Scepticism and Resistance

Scepticism and resistance are normal. Decision-makers have heard many promises about new approaches that did not deliver. They have limited time and many priorities. And they may have had negative experiences with previous energy projects. Rather than treating resistance as an obstacle to overcome, treat it as information about what matters to the person and what would make a genuine difference.

Common forms of resistance in energy advisory conversations include: 'We tried something like this before and it did not work.' 'We do not have the budget right now.' 'My staff will not change their habits.' 'The building is too old for this to make a difference.' Each of these objections deserves a thoughtful, specific response, not a dismissal. Validate the concern, add relevant information, and redirect to a realistic first step.

15.6 Explaining Technical Matters in Plain Language

This is one of the most consistently challenging soft skills for practitioners who have strong technical knowledge. The more deeply a person understands something, the harder it can be to remember what it is like not to understand it. The result is explanations that assume knowledge the listener does not have.

Useful techniques include: start with the effect, not the cause ('This measure will reduce your heating bill by around 10 to 15 percent'); use analogies that connect to the listener's experience; show before-and-after if possible, either with photos or with simple cost comparisons; and use the blueprint as a visual anchor that makes abstract concepts concrete.

15.7 Group Facilitation and Workshop Moderation

Energy Practitioners often work with small groups as well as in one-to-one advisory settings. Group sessions require additional facilitation skills: managing multiple participants with different levels of knowledge and motivation, keeping discussions focused and productive, ensuring that quieter participants can contribute, and summarising and recording agreed actions.

For group awareness-raising events, practical principles include: start with what participants already know and care about rather than with a presentation of the whole topic; use questions rather than lectures to draw out existing knowledge; demonstrate a specific measure physically if possible rather than only describing it; and end with a clear, concrete next step that individuals can take.

15.8 Presentation Skills

When presenting to groups, whether at a municipal meeting, a chamber event, or a community workshop, the most common mistake is covering too much content. An effective twenty-minute presentation on energy efficiency for SMEs should make one or two points memorably rather than reviewing the entire topic superficially. Choose the most compelling examples, the most surprising data point, and the most relevant measure for that specific audience. Everything else can go in a handout.

Six key soft skills identified by the Easy Energy project

1. Good communication: translating technical concepts for diverse audiences and speaking clearly across cultures.

2. Problem solving: finding workable solutions for different building types, budgets, and organisational contexts.

3. Persuasion: achieving stakeholder commitment by presenting benefits clearly and overcoming resistance thoughtfully.

4. Knowledge transfer: sharing expertise effectively through training, mentoring, and practical demonstrations.

5. Understanding structures: thinking systemically about how building elements and energy systems interact.

6. Good manners and cultural awareness: building trust across the culturally diverse Baltic Sea Region.

Key Takeaways

- Soft skills are not secondary to technical knowledge; they determine whether knowledge produces action.
- Trust, active listening, and the ability to speak plain language are the highest-leverage communication skills for practitioners.
- Motivational interviewing helps target groups discover their own motivation rather than receiving it from the practitioner.
- Handling resistance well, by validating concerns and redirecting to realistic first steps, is more effective than arguing.

16. Reaching the Project Target Groups Effectively

Knowing what to say is only part of the challenge. Reaching the right people, through the right channels, in ways they find credible and relevant, is equally important. This chapter covers the communication channels, formats, and approaches that Energy Practitioners can use to engage municipalities, SMEs, and rural audiences.

16.1 Communication Channels

Different target groups use different communication channels, and practitioners need to meet people where they are. For municipal staff, official correspondence channels, intranet communications, and direct relationships with facility managers and sustainability officers are usually most effective. For SMEs, chamber newsletters, sector association communications, informal business networks, and social media platforms are often more relevant than formal channels. For rural communities, local radio, community noticeboards, and trusted local figures often carry more weight than digital communications alone.

16.2 Awareness-Raising Formats

Awareness-raising events serve to make energy-saving opportunities visible and concrete for audiences that have not yet engaged with the topic. Effective formats include short presentations at existing meetings (a fifteen-minute slot at a municipal building managers meeting, or at a chamber members assembly), tabletop demonstrations of specific measures at trade events, posters and infographics in relevant premises, and short video content showing a measure being installed and producing results.

The most effective awareness-raising leads with the financial benefit rather than the environmental one. For a municipal officer, 'This measure will save EUR 3,000 per year for that sports hall' is more compelling than 'This measure will reduce carbon emissions by five tonnes per year.' Both are true; the financial framing is usually the stronger entry point.

16.3 One-to-One Advice

Individual advisory conversations are where most practical change originates. A practitioner who spends an hour with a building manager or business owner, understands their specific situation, and leaves them with a clear and realistic recommendation has done something no general awareness campaign can replicate. One-to-one advice should be structured around the templates in Chapter 20 and should always end with an agreed next step.

16.4 Small Group Sessions

Small group sessions of three to ten participants are a productive middle format between mass awareness-raising and individual advice. They work well for groups of comparable organisations, such as a group of community hall managers in a district, a cluster of SMEs in the same sector, or a group of municipal caretakers. Peer learning is a strong driver of motivation in these settings: participants who hear a colleague describe a successful measure are far more likely to try it than participants who only hear a practitioner describe it.

16.5 On-Site Demonstrations

Demonstrating a measure in a real building is among the most persuasive forms of communication available. Showing a building manager how an aerator is installed, and then demonstrating the difference in water flow, takes five minutes and produces a lasting impression. Where a measure has already been installed in a reference building, arranging a visit to that building for a small group of potential implementers is extremely effective.

16.6 Using Good Practice Examples

Case examples and testimonials from comparable organisations in similar contexts are highly persuasive. Practitioners should actively collect and share examples from within the project's network and from their own advisory experience. Examples should be specific: the type of building, the specific measure installed, the cost, and the measurable saving achieved. Abstract claims that 'energy efficiency saves money' are far less persuasive than 'a community hall in a rural municipality spent EUR 450 on pipe insulation and reduced its heating bill by EUR 1,400 in the following heating season.'

16.7 Reaching Rural Target Groups

Rural audiences require additional attention. Access to advisory services is more limited, travel distances for site visits are longer, and the available communication channels are different. Practitioners working with rural audiences should invest in the relationships with local connectors: parish council clerks, local agricultural advisers, rural entrepreneurs networks, and community leaders who can serve as trusted intermediaries. Digital communication tools are increasingly available in rural areas and should be used to extend the reach of face-to-face advisory work, including follow-up after visits, sharing of blueprints and simple guides, and virtual group sessions when in-person meetings are impractical.

Key Takeaways

- Channel selection should be audience-specific: official channels for municipalities, networks and informal channels for SMEs, trusted local figures for rural areas.
- Financial framing is usually the most effective entry point in awareness-raising, ahead of environmental framing.
- On-site demonstrations and peer learning in small groups are among the most persuasive advisory formats.

- Rural audiences need adapted approaches, including local connectors and digital communication tools for extended reach.

17. Behaviour Change and Awareness Raising

A significant share of energy-saving potential in buildings can be achieved without any technical installation through changes in how buildings are used, managed, and maintained. This chapter draws on the behavioural and social campaign experience within the Easy Energy project to give practitioners a practical toolkit for the behavioural dimension of their work.

17.1 Why Information Alone Is Not Enough

The information-deficit model of behaviour change holds that if people had more information about a problem, they would act differently. Decades of research and practical experience in energy, health, and environmental behaviour show that this model is wrong. People who know they waste energy continue to waste energy. People who understand that turning off standby appliances saves money continue to leave them on standby. Information is necessary but not sufficient.

The reasons are multiple. Habits operate below the level of active decision-making: we turn the lights off or leave them on according to learned patterns, not according to a fresh evaluation each time. Social norms shape behaviour: if everyone in the office leaves their computer on overnight, it feels normal and the individual who turns it off feels like the oddity. Immediate convenience consistently outweighs abstract future benefits. And the cognitive load of a busy working day leaves little space for sustained attention to energy-saving behaviours.

17.2 Behavioural Barriers

Common behavioural barriers to energy efficiency action in organisational settings include:

- Diffusion of responsibility: when no one is specifically responsible, no one acts. The lights stay on because 'someone else will turn them off.'
- Present bias: immediate convenience is valued more highly than future savings, even when the future savings are large relative to the immediate inconvenience.
- Complexity aversion: actions that seem to require planning, learning, or significant effort are systematically avoided.
- Social proof: people look to others to determine what is normal and appropriate. If energy waste is the norm, reducing it feels abnormal.
- Invisibility of energy: unlike the cost of materials or labour, energy costs are invisible at the point of use and only become visible when the bill arrives.

17.3 Practical Nudges and Routines

Nudge approaches work by changing the default behaviour, the social norm, or the visibility of energy use, without requiring active decision-making at each instance. Effective nudge approaches for Energy Practitioners to recommend include:

- Assigning responsibility: designating a specific person in each team or department as the 'energy responsible' for their area. This person ensures lights are off, windows are closed after ventilation, and equipment is turned off at end of day. Responsibility for specific small actions consistently produces more reliable behaviour change than general awareness campaigns.
- Making energy visible: displaying a simple monthly comparison of energy consumption in a visible location, such as the staff room noticeboard or the entrance to the office. Visible data creates social accountability.
- Making the right behaviour the default: replacing switch-off reminders with automatic controls such as motion sensors or timer sockets is the most effective nudge, because it removes the need for the behaviour change altogether.
- Using commitment devices: asking people to make a specific, visible commitment to one energy-saving action, and then reviewing it at the next team meeting, produces significantly higher follow-through than general requests.

17.4 Making Savings Visible

Visibility is one of the most powerful drivers of sustained behaviour change. When people can see the direct consequence of their actions, whether the electricity consumption on a smart meter display, the comparison of this month's heating bill with last year's equivalent, or a simple graph showing energy use by hour of day, they are more motivated to maintain improvements and to identify further opportunities.

Social campaigns documented within the project highlight the value of launching explicit awareness campaigns using posters, email communications, and digital displays to communicate energy-saving messages; educating staff on simple actions such as efficient ventilation techniques and smart thermostat operation; organising hands-on workshops focused on practical, applicable skills; and celebrating progress by sharing results, recognising energy champions, and building momentum through positive reinforcement.

17.5 Encouraging Small First Steps

Behaviour change is more reliably achieved through small, concrete, specific actions than through ambitious general commitments. An organisation that commits to switching off lights in unoccupied rooms for the next four weeks is more likely to sustain the behaviour than one that commits to a 20 percent energy reduction over the next year. Small steps also produce quick, visible results that provide positive feedback and reinforce the motivation to continue.

Practitioners should help target groups identify the specific, small, immediately actionable behaviour they will change first. Not 'we will improve our energy efficiency' but 'from Monday, the last person to leave the meeting room turns off the projector and the lights, and we will review how it is going in three weeks.'

Case Example: Behavioural campaign in a sports club

Project materials describe how assigning responsibility for specific energy actions to designated facility staff or team leads in a sports club increased awareness and encouraged collective responsibility, reducing energy waste across shared spaces. The responsible individuals ensured windows were closed after ventilation periods, lights were turned off when facilities were unoccupied, and maintenance needs were reported promptly. The combination of assigned responsibility and social visibility of the actions produced a sustained improvement in energy behaviour without any technical investment.

Key Takeaways

- Information alone does not change behaviour; practitioners need to address habits, social norms, and environmental design.
- Assigning specific responsibility, making energy visible, and using automatic controls are the three most reliable nudge approaches.
- Small, specific, immediately actionable commitments are more effective than large, ambitious general ones.
- Positive reinforcement, celebrating visible results, sustains behaviour change over time.

18. Training Delivery Methods for the Energy Practitioner Programme

This chapter is addressed primarily to trainers and organisations planning to deliver the Energy Practitioner programme. It covers the recommended training structure, suggested learning outcomes, formats, and exercises, and provides guidance on blended and online delivery options.

18.1 Suggested Training Structure

The Energy Practitioner training is designed as a compact, modular programme. One recommended delivery model follows the KAIN approach, combining an initial learning phase, a short practice period in the participant's own work context, and a follow-up session for reflection, consolidation, and advanced application.

Session	Content and purpose
Day 1 (full day)	Project context and Energy Practitioner role; Technical foundation: basic energy efficiency concepts; Solutions modules: insulation, water, warm water, electricity; Blueprint introduction and practical exercises; First advisory conversation simulation
On-the-job period (2 to 4 weeks)	Participants conduct at least one advisory walkthrough or conversation in their own work context; They document their observations and any challenges encountered
Day 2 (full day)	Experience exchange from the on-the-job period; Advanced advisory practice: municipalities and SMEs; Soft skills workshop: communication, motivational interviewing, handling resistance; Behaviour change tools; Business model and transfer; Final competency self-assessment

18.2 Suggested Learning Outcomes for the Full Programme

By the end of the complete training programme, participants should be able to:

- Explain the Easy Energy project approach and the role of the Energy Practitioner clearly to a non-specialist audience.
- Describe the main measures in all four solution fields (insulation, water, warm water, electricity) in plain language.
- Conduct a structured first advisory conversation with a municipal building manager or SME owner.
- Use the project blueprints as a communication and reference tool in advisory practice.
- Apply basic principles of motivational interviewing and active listening in advisory conversations.
- Identify the boundaries of the practitioner role and refer appropriately to specialists.

- Design a simple one-step action plan for a target group organisation based on a walkthrough assessment.

18.3 Workshop Formats and Exercises

The training should include a mix of formats to maintain engagement and build practical skills:

- Short presentations (maximum 15 to 20 minutes): deliver technical content in digestible segments. Use real examples and the project blueprints as visual anchors.
- Small group discussion: pose practical questions, such as 'What are the most common barriers you encounter in your work context?' and use structured discussion to draw out and share experience.
- Role plays: simulate advisory conversations (see exercises in Chapters 14 and 15). Role plays are the single most effective way to develop advisory communication skills.
- Building walkthrough exercises: where possible, conduct a live or simulated walkthrough of a real building and ask participants to identify measures and prioritise recommendations.
- Case work: present a building description or a short scenario and ask participants to develop a recommendation, select relevant blueprints, and prepare a two-minute explanation for the building owner.
- Peer learning: in the Day 2 session, structure the experience exchange so participants explicitly share what they tried, what worked, and what they would do differently.

18.4 Online and Blended Learning Options

The Energy Practitioner training can be adapted for blended delivery, combining online preparation and self-study with in-person practical sessions. A recommended blended structure is:

- Pre-course online module: participants study the project context, the role definition, and the technical solution fields using this compendium and any accompanying online materials. This allows Day 1 to focus on applied practice rather than content delivery.
- In-person Day 1: focused on applied skills, role plays, and blueprint practice. The efficiency of the in-person time improves significantly when participants have completed pre-reading.
- Online peer support between sessions: a shared online space, such as a project-based LinkedIn group or a simple discussion forum, where participants can ask questions, share observations from their on-the-job period, and support each other.
- In-person or online Day 2: experience exchange, advanced skills, and final assessment. This session can be delivered online if an in-person meeting is not possible, though the quality of interaction is higher in person.

Key Takeaways

- The two-day KAIN format with an on-the-job period produces better results than a single-day training alone.

- Role plays and live walkthroughs are the most effective exercises for building practical advisory skills.
- Blended delivery is feasible and allows in-person time to be focused on practice rather than content delivery.
- Peer learning during the Day 2 experience exchange is a high-value element that should not be shortened.

19. Practical Tools and Templates

This chapter provides ready-to-use templates and tools for Energy Practitioner practice. These can be printed, adapted to local context, and used from the first advisory conversation onwards. They are deliberately simple and designed to save time, not add to administrative burden.

19.1 First Advisory Conversation Template

FIRST ADVISORY CONVERSATION - Energy Practitioner Template	
Organisation name	...
Contact person and role	...
Date and location	...
Building type(s) involved	...
Current energy costs (approximate)	...
Main energy concerns expressed	...
Measures already in place	...
Priority areas identified (walkthrough or discussion)	...
Blueprint(s) presented / discussed	...
Agreed next step (specific action, person responsible, deadline)	...
Follow-up date agreed	...
Referral needed? (Yes / No; if Yes, to whom)	...

19.2 Site Visit Checklist

Use this checklist during a building walkthrough to ensure you observe all key areas systematically:

Area / Element	Observed condition / Notes
Roof / attic floor: insulation present and adequate?	
Attic / roof: vapour barrier present and intact?	
External walls: signs of cold spots, mould, or frost cracking?	
Wall cavities: filled or empty?	
Basement ceiling: insulated? Any moisture signs?	
Windows: single or double glazed? Frame condition? Seals intact?	
Doors: self-closing? Draughts visible?	

Radiator niches: present? Closed or open?	
Reflective mats behind radiators: present?	
Heating pipes in unheated spaces: insulated?	
TRVs on radiators: present? Functional? Set appropriately?	
Lighting type: LED or older technology?	
Lighting controls: manual switches only, or sensors/timers?	
Standby equipment: anything visible on standby in unoccupied areas?	
Water taps: aerators present? Any drips?	
Hot water pipes: insulated along their length?	
Energy meter: accessible? Visible to building users?	
Any other notable observations	

19.3 Simple Needs Assessment Form

Use this brief form before a site visit or at the start of an advisory conversation to understand the organisation's priorities and starting point:

Question	Organisation's response
What are your main energy costs? (heating, electricity, hot water)	
Which areas or systems do you think waste the most energy?	
What have you already done to improve energy efficiency?	
What is your approximate annual energy budget?	
What budget is available for improvement measures this year?	
Who makes decisions about building maintenance and improvements?	
How much staff time can realistically be dedicated to implementation?	
What is your primary motivation for improving energy efficiency?	

19.4 Measure Prioritisation Template

Measure	Impact (H/M/L)	Feasibility (H/M/L)

Complete this table after the initial assessment. Rate each identified measure for its expected energy saving impact (High/Medium/Low) and its implementation feasibility given the organisation's budget, staff capacity, and building conditions. Prioritise measures that score High on both dimensions, then High impact/Medium feasibility, and so on.

19.5 Action Plan Template

Action (specific measure)	Responsible person	Target date
First step: quick-win measure		
Follow-up: medium-term measure 1		
Follow-up: medium-term measure 2		
Referral (if applicable): contact specialist re...		

19.6 Referral Template for Cases Needing Expert Auditors or Engineers

When a case exceeds the scope of the Energy Practitioner role, use this simple structure for the referral:

Referral element	Content
Organisation being referred	
Specific issue or opportunity identified	
Why this exceeds the practitioner's scope	
Recommended specialist type (energy auditor, structural engineer, heating technician, etc.)	
Specific questions the organisation should ask the specialist	

Follow-up action by Energy Practitioner after referral	

20. Boundaries, Risks and Referrals

Energy Practitioners operate with significant responsibility toward the organisations they advise. Getting the scope of the role right and knowing when to step back is not just a professional formality. It protects the people who receive the advice, and it protects the practitioner.

20.1 When the Energy Practitioner Should Not Give Technical or Legal Advice

The practitioner role does not include giving structural engineering opinions, certifying compliance with building regulations, advising on the legal obligations of building owners, issuing energy performance assessments, specifying technical installations (beyond what is described in the blueprints), or interpreting subsidy or funding rules in ways that could be binding.

A simple rule applies: if the advice you are considering could expose the target group to legal, financial, or safety consequences if it turns out to be wrong, and you are not qualified to accept professional responsibility for that advice, do not give it. Refer instead.

20.2 When to Refer to Auditors, Engineers, Installers or Funding Experts

Situation	Appropriate referral
Building shows signs of structural damage or subsidence	Structural engineer
Suspected mould, condensation, or moisture damage in walls or roof	Building pathologist or specialist contractor
Interest in accessing national or EU energy efficiency grants or subsidies	Local energy agency or grant administrator
Target group wants a certified energy performance assessment	Certified energy auditor
Target group is planning a major renovation or heating system replacement	Certified energy auditor and relevant installer
Electrical installation work is needed	Qualified electrician
Heating system installation or modification is needed	Qualified heating engineer or plumber

20.3 Basic Safety and Liability Awareness

Energy Practitioners should be aware of the following general safety principles:

- Never recommend removing existing insulation, vapour barriers, or building elements without specialist guidance.
- Do not advise on asbestos-containing materials; if asbestos is suspected (particularly in older buildings), refer to a specialist immediately.

- Be careful with electrical systems: do not open electrical panels, and do not advise on wiring or load capacity.
- If a building shows signs of significant structural risk (visible cracks, sagging floors, leaning walls), focus first on the safety issue and refer before discussing energy measures.
- Document your advisory conversations using the templates in Chapter 19; this provides a record that your advice was within scope and was presented as guidance, not as professional certification.

Liability note

The Energy Practitioner role is advisory, not certifying. To reduce risk, practitioners should stay within their defined scope, communicate limits clearly, document advice given, and refer cases requiring regulated professional expertise. Questions of professional liability and legal responsibility must be assessed under the applicable national framework

21. Transfer, Business Model and Sustainability

This chapter addresses how the Energy Practitioner training programme can continue to reach new audiences after the Easy Energy project ends. It covers the transfer logic, train-the-trainer approaches, local adaptation, and the business model options that make delivery financially sustainable.

21.1 How the Training Can Be Used Beyond the Project Partnership

The Easy Energy project has been designed from the outset with transfer in mind. The training materials, blueprints, and compendium are all formatted and licensed to allow adoption and adaptation by other organisations. The goal is that organisations across the Baltic Sea Region and beyond can take the programme, adapt it to their local context, and deliver it without needing to involve the original project partners.

The transfer logic has three stages. First, direct uptake: organisations that engage with the project during its lifetime adopt the training and begin delivering it. Second, peer transfer: organisations that have successfully delivered the training share it with comparable organisations in their network. Third, institutional embedding: the training becomes part of the regular service portfolio of chambers, energy agencies, or municipal associations, ensuring continuity regardless of individual project funding cycles.

21.2 Train-the-Trainer Logic

A train-the-trainer approach multiplies the reach of the programme by qualifying a second tier of trainers who can then deliver the training independently. For the Energy Practitioner programme, train-the-trainer delivery requires participants to develop not only practical energy knowledge and advisory skills, but also the facilitation skills needed to run training sessions effectively. The Day 2 content in Chapter 18 provides most of the relevant material; trainers also need to work through a supervised delivery of at least one session before becoming independent trainers.

21.3 Local Adaptation

Local adaptation is encouraged and expected. The technical content of the blueprints, the solution descriptions, and the advisory tools is broadly applicable across the Baltic Sea Region, but the specific product examples, regulatory references, cost estimates, and case studies should be updated for each country or region. National energy agencies, building standards bodies, and local partner networks are valuable sources for this adaptation.

Trainers adapting the programme are encouraged to replace or supplement the case examples in this compendium with examples from their own regional experience. Local examples are significantly more persuasive to local audiences than examples from other countries, even when the technical content is identical.

21.4 Business Model

The project's business model analysis identifies two primary organisational types for sustainable delivery: business support organisations (BSOs) and public administrations.

For BSOs, including chambers of commerce, chambers of crafts, and industry associations, the training may be integrated into existing professional development or advisory service portfolios. Depending on regional pricing, participant numbers, and delivery costs, the programme can support a cost-covering or revenue-generating model. Each organisation should therefore calculate its own local pricing and cost assumptions before launch.

For public administrations, the primary case is usually internal capacity building rather than direct revenue generation. The economic case depends on the size of the building portfolio, the baseline level of energy waste, and the extent to which low-threshold measures are subsequently implemented. Municipalities should therefore assess expected value in terms of avoided costs, improved internal know-how, and better identification of quick-win measures.

Example of revenue streams for BSO delivery of the Energy Practitioner training (from project analysis)

Training fees: EUR 150 to EUR 300 per participant; EUR 2,250 to EUR 6,000 per session of 15 to 20 participants.

On-site energy walkthroughs: EUR 200 to EUR 500 per half-day visit for SME clients.

Follow-up workshops (thematic deep-dives): EUR 80 to EUR 150 per participant.

Implementation support engagements: EUR 300 to EUR 800 per engagement.

Certification renewal: EUR 50 to EUR 100 per year for annual update and networking events.

Indirect value: member retention, new member attraction, profile in sustainability services.

21.5 Online and Offline Delivery

The training can be delivered fully in person, fully online, or in a blended format as described in Chapter 18. In-person delivery produces the strongest outcomes for skills development, particularly for the advisory communication skills that are central to the practitioner role. Online delivery is more accessible and reduces travel and venue costs. A blended approach, with online pre-study and in-person practice sessions, combines the advantages of both.

Key Takeaways

- Transfer beyond the project partnership is the intended outcome; the materials are designed for adoption, adaptation, and independent delivery.
- Train-the-trainer approaches multiply reach and should be incorporated from the first delivery onwards.
- Local adaptation, particularly of case examples, significantly increases relevance for regional audiences.
- Both BSO and public administration delivery models can be viable, but the final model should be adapted to local demand, delivery costs, and organisational purpose.

22. Final Conclusions

The Energy Practitioner Training Programme is intended as a practical and transferable response to the gap between the availability of affordable energy-saving measures and their actual implementation. Its added value lies in equipping intermediary actors with enough technical understanding, communication skill, and procedural clarity to support first-step action in municipalities and SMEs.

The programme works because it is honest about what it is and what it is not. Energy Practitioners are not experts in everything. They do not replace certified auditors or building engineers. But they fill a real and important function that no other advisory model currently serves effectively in most parts of the Baltic Sea Region: they provide accessible, trusted, locally available guidance that helps small organisations take their first steps and continue making progress. The technical foundation of the programme, the blueprints and solution modules, is grounded in tested, real-world experience from the project's pilots. The savings potential described is not theoretical. It is based on actual measurements from actual buildings in the region. The soft skills dimension of the programme reflects an equally important reality: technical knowledge without communication skills, motivational awareness, and professional judgment produces very limited practical impact. Practitioners who combine technical understanding with the ability to engage, motivate, and follow up with their target groups produce dramatically better results than those who focus on technical knowledge alone.

For trainers and organisations planning to use this compendium, the key message is that the programme works best when it is delivered in a way that reflects the practitioner context of the participants. Rural practitioners need rural case examples. BSO staff need SME advisory scenarios. Municipal officers need municipal budget and procurement context. The compendium provides the foundation; local adaptation provides the relevance. The training should outlast the project. Every organisation that adopts this programme, delivers it, adapts it, and improves it extends the reach of the Easy Energy approach and contributes to the energy transition across the Baltic Sea Region. That transfer is the ultimate measure of the programme's success.

Annexes

Annex A: Glossary

Term	Definition
Baltic Sea Region (BSR)	The group of countries and regions covered by the Interreg Baltic Sea Region Programme
Blueprint	A structured, practical description of a specific low-tech energy-saving measure developed by the Easy Energy project.
BSO (Business Support Organisation)	An organisation that provides services to businesses, including chambers of commerce, industry associations, and sectoral agencies.
DIY (Do It Yourself)	Installation or maintenance work carried out by building users or facility staff without specialist contractors.
Energy Practitioner	A trained intermediary who helps municipalities and SMEs identify low-tech energy-saving opportunities and take practical steps toward implementation.
Hydronic balancing	The process of adjusting water flow in a water-based heating system to ensure that each radiator or circuit receives the correct flow rate.
KAIN method	Knowledge Acquisition according to Individual Needs; a training methodology using two classroom phases with an on-the-job period in between.
Lambda value	A measure of a material's thermal conductivity; the lower the lambda value, the better the material's insulating performance.
LED	Light Emitting Diode; a highly energy-efficient solid-state lighting technology.
Low-tech solution	An energy-saving measure that can be implemented without specialist equipment or engineering expertise.
LUX	A measure of light intensity on a surface; 1 lux equals 1 lumen per square metre.
Nudge	An approach to behaviour change that makes the desired behaviour easier, more visible, or the default, without removing choices.
Payback period	The time required for the energy savings from a measure to equal the cost of implementing it.

Perlite	A naturally occurring, lightweight mineral material used as loose-fill insulation in masonry wall cavities.
PIR sensor	Passive Infrared sensor; a motion detection device used in occupancy-controlled lighting and heating systems.
TRV (Thermostatic Radiator Valve)	A self-regulating valve fitted to a radiator that adjusts the flow of hot water to maintain a set room temperature.
U-value	A measure of heat transmission through a building element; the lower the U-value, the better the insulation.
Vapour barrier	A layer of low-permeability material placed on the warm side of an insulated construction to prevent moisture from migrating into the cold parts of the construction.

Annex B: Abbreviations

Abbreviation	Meaning
BSO	Business Support Organisation
BSR	Baltic Sea Region
BMS	Building Management System
CRI	Colour Rendering Index
DIY	Do It Yourself
EMS	Energy Management System
EU	European Union
KAIN	Knowledge Acquisition according to Individual Needs
LED	Light Emitting Diode
PIR	Passive Infrared
PUR	Polyurethane (insulation foam)
SME	Small and Medium-sized Enterprise
TREA	Tartu Regional Energy Agency
TRV	Thermostatic Radiator Valve

Annex C: Sample Workshop Agenda

The following is a sample one-day training agenda for Day 1 of the Energy Practitioner programme:

Time	Session
09:00 - 09:30	Welcome, introductions, and programme overview
09:30 - 10:15	Project context: Easy Energy and the Energy Practitioner role (presentation and discussion)
10:15 - 10:30	Coffee break
10:30 - 11:30	Technical foundation: energy use in buildings, loss areas, and basic insulation concepts
11:30 - 12:15	Solutions Module I: Building insulation (with blueprint introduction)
12:15 - 13:00	Lunch
13:00 - 13:45	Solutions Module II: Water, warm water, and electricity
13:45 - 14:30	Working with blueprints: practical exercise (Exercise 4)
14:30 - 14:45	Coffee break
14:45 - 15:30	Advisory practice: role play (Exercise 5)
15:30 - 16:00	On-the-job assignment briefing: what to do before Day 2
16:00 - 16:15	Day 1 review and questions

Annex D: Competency Self-Assessment Tool

Complete this self-assessment at the end of the training programme. Rate your confidence in each area on a scale of 1 (not yet confident) to 5 (fully confident). Identify your three lowest-rated areas as priorities for further practice.

Competence area	Self-rating (1-5)	Notes / development priority
I can explain all four solution fields in plain language		
I can read and present any blueprint to a non-technical audience		
I can conduct a structured first advisory conversation		
I can conduct a visual building walkthrough and identify priorities		
I can explain the limits of my role and when to refer		
I can apply basic motivational interviewing principles		

I can explain technical matters without jargon		
I can handle scepticism and resistance constructively		
I can deliver a short awareness-raising presentation		
I can facilitate a small group advisory session		
I understand the business model for sustainable delivery		
I know how to use the practical tools and templates		

Annex E: Sample Case Studies for Training Use

Case Study 1: Primary school in a mid-sized municipality

A primary school built in the 1970s had not undergone significant energy improvements. The school's facility manager participated in a municipal Energy Practitioner training. Following Day 1, she conducted a walkthrough of the school during the on-the-job period. She identified several metres of uninsulated hot water pipes in the basement, two radiators sitting in wall niches in a classroom corridor, and incandescent bulbs still in use in several storage rooms. The facility manager installed pre-formed pipe insulation sleeves on the basement pipes herself over a single afternoon at a material cost of under EUR 100. The radiator niche closures were planned for the summer maintenance programme. The incandescent bulbs were replaced with LED equivalents during the following month. Total investment in the quick-win measures was under EUR 250. The facility manager reported a noticeable improvement in the basement corridor temperature and a reduction in the school's monthly energy costs in the following billing period.

Case Study 2: Rural guesthouse

A small family-run guesthouse with eight rooms in a rural area had been experiencing rising heating costs. The owner had avoided a formal energy audit due to cost concerns. An Energy Practitioner from a local business support organisation conducted a two-hour advisory visit. The main issues identified were an uninsulated attic floor above the guest room corridor, older single-glazed windows in two of the guest rooms, and radiators without thermostatic valves. The practitioner presented three blueprints covering attic floor insulation, TRV installation, and window insulation film. The owner installed insulation film on the single-glazed windows before the next heating season for a cost of under EUR 80. TRVs were installed by a local plumber the following month. The attic floor insulation was planned for the following year using blown-in granulate. The owner reported a meaningful reduction in heating costs in the first heating season after the initial improvements.

Case Study 3: Municipal administrative building

A municipal administrative office building from the 1980s was consuming significantly more heating energy per square metre than comparable modern buildings. The municipality's sustainability officer attended an Energy Practitioner training and conducted an internal assessment of the building. Key findings included empty radiator niches in four offices, no reflective mats behind any radiators, no TRVs on any of the 24 radiators in the building, and an uncontrolled heating schedule running continuously including weekends. The officer prioritised: reflective mats (installed immediately by the caretaker at a cost of EUR 160 total), TRV installation (carried out by a contractor over two days at a cost of EUR 1,800), and heating schedule programming (adjusted by the boiler technician at no additional cost). The combined measures reduced the building's heating consumption by an estimated 12 to 15 percent in the following year.