

SPEEDIER

SME Program for Energy Efficiency through Delivery and
Implementation of EneRgy Audits

D9.2 – IMPACT ANALYSIS METHODOLOGY

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Executive Summary

SPEEDIER aims to be a highly innovative one-stop-shop solution that applies an integrated approach to energy management, providing information, advice, capacity building, energy auditing, financing, as well as the implementation of energy efficiency solutions and monitoring of impacts. This document presents the impact analysis methodology applied in SPEEDIER. It details the approaches to be applied for the measurement of the achievement of the project against set targets and indicators. Areas addressed are applicable to each of the four pilot regions in SPEEDIER and for Article 8 of the EU Energy Efficiency Directive 2012/27/EU (EU EED), which has been transposed into national legislation in all EU Member States. The document specifically covers the measurement of the project impact in terms of primary energy savings, CO₂ saving, investments in sustainable energy, enhancing energy culture, building capacity and enabling policy.

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1 Introduction

1.1 Aims

The aim of the Impact Analysis Methodology deliverable is to detail SPEEDIER approaches for the obtainment and capture of measurements for achievement of the project results against targeted objectives and indicators. The deliverable defines a standardised approach for the assessment of SPEEDIER across each of the four pilots so that comparisons can be made between countries. It covers the areas of primary energy savings, CO2 saving and investments in sustainable energy as well as enhancing energy culture, building capacity and enabling policy.

1.2 Scope

The SPEEDIER project, Grant Agreement No. 847034, will be conducted in line with the principals of ISO 9001:2015 – Quality Management System Requirements and the Quality Policy¹ of the Project Coordination (i.e. International Energy Research Centre – Tyndall National Institute). The ISO 9001 standard provides a structured systematic approach for process and product quality management. It promotes consistency of use as well as ongoing improvements to our method of work and the SPEEDIER outcomes. Project work is also aligned with the requirements of two other international standards, outlined as follows:

SPEEDIER will reference the best practices of ISO 50001:2011 Energy Management System throughout the technical undertaking of the project, where deemed appropriate. This standard provides a framework for the establishment of energy management best practice to help organisations improve their energy efficiency as well as to make a return on investment. In short, the standard enables organisations to establish the systems and processes necessary to improve energy performance, including energy efficiency, use, and consumption, which is applicable to SPEEDIER.

Separately, work will also be undertaken in line with or referenced to the requirements of ISO 14001:2015, which is an international standard that specifies requirements for an effective environmental management system (EMS), where deemed appropriate.

2 Background

The SPEEDIER project is led by the experienced International Energy Research Centre (IERC), which is an integral part of the Tyndall National Institute, Cork, Ireland (www.tyndall.ie/ierc). Quality Management of the project is led by TFC Research and Innovation Limited (www.tfcengage.com), leader of work package 9. Together and working in close collaboration with Politecnico di Milano (www.polimi.it/en/), the SPEEDIER Impact Analysis Methodology was defined in this deliverable.

2.1 EU EED - Article 8 and SPEEDIER

Article 8 of the EU Energy Efficiency Directive 2012/27/EU (EU EED), which has been transposed into national legislation in all EU Member States, requires large enterprises (non-SMEs) to undertake an energy audit of their significant energy consumption once every 4 years. For most countries, the deadline for compliance is the 5th December 2019. However, a recent study² suggests that only 11% of large enterprises undertaking an audit intend to implement any of its recommendations. Furthermore, 2 in 5 businesses cited a lack of funding or finance as a reason for inaction. The latter is one of the issues being addressed by SPEEDIER.

Article 8 also requires individual Member States to set up national incentives to assist Small-to-Medium Sized Enterprises (SMEs) to undertake energy audits. Globally of importance, SMEs account for 99.98% of European enterprises³ and are responsible for approximately 13% of total energy demand.⁴ It is evident that SMEs have enormous potential to save energy and contribute towards the ability of the existing EU member states to achieve their collective targets under the EED of a 32.5 per cent improvement in energy efficiency by 2030. To date, little of this potential has been realised with studies estimating that only 25% of SMEs in Europe have undertaken an energy audit⁵. The reasons for this low uptake among SMEs are well documented in other studies and include barriers such as lack of time, resource, in-house expertise, finance and the low priority nature of energy efficiency compared to other business needs^{2, 6}.

It is against this background that the challenges for the SPEEDIER project were set up. In response to these challenges, SPEEDIER aims to be a highly innovative one-stop-shop solution that applies an integrated approach to energy management, providing information, advice, capacity building, energy auditing, financing, implementation of energy efficiency solutions and monitoring of impacts. The approaches relevant for application of impact analysis, including the four pilot sites, are defined in this deliverable.

² SGS; *Bridging the gap to further energy savings*; 21 March 2016; <https://www.sgs.co.uk/en-gb/news/2016/03/sgs-bridging-the-gap-to-further-energy-savings>

³ Muller, P, et al; 2017; Annual Report on European SMEs 2016/2017, Focus on self-employment; European Commission

⁴ Accelerating Energy Efficiency in Small and Medium-sized Enterprises, 2015, International Energy Agency

⁵ CHANGE Project report; Energy Efficiency in SMEs: Success Factors and Obstacles, 2010, EUROCHAMBRES

⁶ Fresner, J, et al, 2016, Energy efficiency in small and medium enterprises: Lessons learned from 280 energy audits across Europe, Journal of Cleaner Production.

2.2 SPEEDIER contributions to EU Article 8

SPEEDIER aims to contribute to six focal points of EU EED Article 8 as follows:

1. Primary energy savings triggered by the project (in GWh/year);
2. Reduction of greenhouse gases emissions (in tCO₂e/year);
3. Investment in sustainable energy triggered by the project (in €);
4. Market stakeholders with increased skills/capacity/competencies and long-lasting training schemes;
5. Number of people/enterprises with enhanced energy culture;
6. Policies and strategies created/adapted at national level.

The targets for the project's contributions to each of the above Article 8 focal points are described and the means to measure the actual impact that the SPEEDIER project is defined.

2.3 Brief overview of the Proposed SPEEDIER Service

SPEEDIER delivers a self-financing outsourced energy management service with much benefit to SMEs, enabling them to implement energy conservation measures and also access the energy services market. The service will be available via energy consultants, auditors and experts and will facilitate the uptake of energy audits, and the subsequent implementation of energy efficiency measures in SMEs. The service also streamlines for SMEs the process of identifying and implementing energy saving measures. This is achieved through the process of outsourcing to a SPEEDIER Expert the time-consuming energy management activities that require technical expertise. It includes the activities of performing an energy audit, training staff in good energy practices, obtaining quotes from suppliers for implementation of energy saving measures, project managing the installation as well as measuring and also verifying the savings). As such SPEEDIER makes significant inroads to help remove barriers, especially the lack of in-house expertise, lack of time, lack of resources and conflicting priorities that would prevent SMEs from undertaking energy audits and acting on the recommendations. The service will be show-cased at four EU regions.

2.4 SPEEDIER Pilot Sites

SPEEDIER will target groups of SMEs in 4 EU regions. It will be piloted as follows:

- 1) In **Spain**, we will test a location based approach, engage with SMEs based at a single business park to demonstrate that advantages of clustering SMEs give them better access to the economies of large scale projects;
- 2) In **Ireland** and **Romania**, SMEs in the manufacturing and hospitality sectors respectively will be approached to test a sector based approach to service delivery;
- 3) In **Italy**, a more general approach of accessing SMEs from any sector via ESCOs (Energy Service Companies) will be tested.

These pilots will be used to test the developed SPEEDIER Service to create a fully functioning and self-sustaining service that can be rolled out across the EU. A number of iterations will be applied. Details of the each pilot and their individual targeted measures are outlined in Table 1.

Table 2: Pilot Measurement Indication

Location	Ireland	Lead Partner	LIT
Target sector/group	SMEs in the manufacturing sector.		
Description	The industrial sector accounts for 21% of final energy consumption in Ireland (Eurostat) and 95% of manufacturing companies in Ireland have less than 50 employees (DBEI).		
Engagement	LIT regularly work with Limerick for Engineering Group (L4E), who have a network of 1,353 manufacturing companies.		
Targets	<ul style="list-style-type: none"> • 50-75 SMEs involved in awareness actions. • 400-500 employees involved in awareness actions. • 15 SMEs involved in pilot action in Ireland. • 150 employees involved in pilot action. 		
Location	Spain	Lead Partner	PCT
Target sector/group	SMEs & Large enterprises in multi-sectoral, multi tenanted buildings at the Cartuja Science & Technology Park (STP).		
Description	The STP is the first international example of the reuse of a world exhibition (Expo'92) facility as a connection point between universities, science and business. The STP has an essential competitive advantage: it is a Park within the city, very close to the city centre and well connected to the airport and railway station. Presently, there are 56 buildings inherited from the Universal Exposition and 35 new buildings within the STP. It hosts 442 private companies, research, technology and training entities that generates 16,700 direct employment and 2,066 million € of economic activity.		
Engagement	PCT is the managing company of the science park and a partner in the SPEEDIER project.		
Targets	<ul style="list-style-type: none"> • 75-80 SMEs involved in awareness actions. • 350-500 employees involved in awareness actions. • 40 SMEs involved in pilot action in Spain. • 200 employees involved in pilot action. 		
Location	Romania	Lead Partner	AEEPM
Target sector/group	Hospitality sector.		
Description	The service sector in Romania accounts for 8% of final energy consumption in Romania. The number of tourists accommodated by the Romanian hospitality sector has doubled in the last 10 years (via: The Romania Journal), with growth expected to continue, making this an important market for energy efficiency.		
Engagement	Letter of support from Federation of Hotels Industry who have a network of over 200 hotel members.		
Targets	<ul style="list-style-type: none"> • 40-60 SMEs involved in awareness actions. • 250-400 employees involved in awareness actions. • 35 SMEs involved in pilot action in Romania. • 200 employees involved in pilot action. 		
Location	Italy	Lead Partner	Polimi
Target sector/group	SMEs in Italy.		
Description	Italy has the largest Energy Services Company (ESCO) market in Europe working with organisations across all sectors and sizes to identify, implement and (in some cases) finance energy efficiency measures. In Italy we will take a more general approach, using SPEEDIER to enhance the ESCO service offering and attract more SMEs to their portfolio.		

Engagement	The Energy Strategy team within Polimi's Department of Management, Economics & Industrial Engineering has a network & database of over 80 ESCOs, 100 SMEs actively engaged in their research programmes.
Targets	<ul style="list-style-type: none"> • 50 SMEs involved in awareness actions • 250-400 employees involved in awareness actions • 20 SMEs involved in pilot action in Italy • 100 employees involved in pilot action.

3 Impact Assessment Methodology

The description of work outlines the expected impact of the SPEEDIER Project in terms of:

- number of people or enterprises with enhanced energy culture;
- primary energy savings triggered by the project;
- investments in sustainable energy triggered by the project;
- market stakeholders with increased skills/capacity and long lasting training schemes;
- policies and strategies created or adopted at national level and
- reduction of greenhouse gas emissions.

This section describes in detail for each of the above categories the overall targets for the SPEEDIER project broken down by pilot site. The actions that will be taken under SPEEDIER to achieve these targets is also briefly described. The method of measuring progress against each target (i.e. the Impact Analysis Methodology) is also described in detail.

3.1 Enhancing Energy Culture

SPEEDIER aims to enhance the energy culture of the organisations and individuals that participate in the pilot actions through a series of engagement events and training sessions (described in more detail in section 3.1.2). For the purpose of the impact assessment methodology, we will define enhanced energy culture using the following criteria. Please note that only one of the criteria need apply to count an organisation or individual as having enhanced energy culture.

- An increase in awareness of the potential of the SPEEDIER Service to reduce energy consumption.
- An increase in awareness of the multiple benefits of an energy efficient workplace.
- An increase in the number of employees taking action to save energy as part of their normal working routine.
- An increase in the ability to make more informed decisions in line with SPEEDIER objectives.

3.1.1 Expected Impacts

The description of work defines the expected impacts described in **Error! Reference source not found.** as a means of assessing the number of individuals or organisations with enhanced energy culture.

Table 2: Criteria for assessing enhanced energy culture from the Description of Work

Ref	Criteria	Ireland	Spain	Romania	Italy	Total
A.1	Number of organisations involved in pilot action & capacity building events.	15	40	35	20	110
A.2	Number of individuals involved in pilot action & capacity building events.	150	200	200	100	650
A.3	Number of organisations involved in awareness actions & engagement events.	50	75	50	50	225

In addition to these targets we will also count the number of organisations and individuals with enhanced energy culture using the criteria defined above and the methodology defined in sections 3.1.2 and **Error! Reference source not found..**

Table 3: Other criteria for measuring enhanced energy culture

Ref	Other criteria
A.4	Number of organisations with enhanced energy culture.
A.5	Number of individuals with enhanced energy culture.

3.1.2 Methodological approach

Across the four pilot regions, 110 organisations will be registered for the SPEEDIER Service. Staff at all levels of these organisations will receive energy efficiency training, which is critical for the success of the SPEEDIER Service, as it is the first step in achieving energy savings through the implementation of no cost energy efficiency measures through enhancing the energy culture of the organisation. These initial energy and cost savings are crucial; they make up the seed capital for the revolving energy efficiency fund that will be reinvested in low, medium and high cost measures.

Throughout the SPEEDIER project, the following activities will be undertaken to enhance energy culture:

- **Stakeholder engagement events** will be held in each pilot region (Task 5.1). The intention of these events is to attract organisations to sign up for the SPEEDIER Service, but will also talk about the potential improvement in profitability through reducing energy consumption through simple actions.
- **Focus group events** will be held in each pilot region (Tasks 2.3 and 2.4). The intention of the focus group events is to find out in more detail the opinions and attitudes of SPEEDIER stakeholders on energy auditing and implementing energy efficiency measures. Whilst not directly intended to enhance energy culture, those attending these events could be influenced by the discussions and return to their organisation having learned something about energy efficiency.
- **Capacity Building and Training Events** will be held with each SME that signs up to the SPEEDIER Service in each pilot region. These training events are designed to deliver information on the benefits of energy efficiency for the organisation and will target staff at all levels from general operational staff to senior managers. The intention is to allow the staff themselves to come up with simple ideas for energy saving as they are the ones who know the business best and see the opportunities at first hand. By encouraging as many staff as possible to attend the training events the overall energy culture of each business will be enhanced.
- **An e-Learning suite of materials and mobile app** will be developed for download and use by businesses participating in SPEEDIER. This will contain useful information and tools that can be used to ensure long term impact of enhanced energy culture. The mobile app will use gamification to engage with users and help to ensure long term interest. It will also allow us to gather data about the impact that SPEEDIER has had on energy culture through surveys and questionnaires with app users.

- **Evaluation surveys and questionnaires** will be used after each event to determine the impact of the training and engagement activities. In addition, once a business has participated in the SPEEDIER Service (i.e. received training, been assigned a SPEEDIER Expert, had an energy audit and implemented some energy saving recommendations) a further evaluation survey will be carried out to assess the impact on energy culture.

3.1.3 How will the actual impact be measured?

The actions that will be taken to measure the impacts A.1 to A.4 are shown in Table 4 below.

Table 4: How to measure number of organisations and individuals with enhanced energy culture

Ref	Criteria	How to measure?	Evidence
A.1	Number of organisations involved in pilot action & capacity building events	<ul style="list-style-type: none"> Count the number of SME registrations for SPEEDIER in each pilot region. Count the number of organisations whose staff attended a capacity building event. Count the number of SMEs that received an energy audit. 	<ul style="list-style-type: none"> List of unique entries in the SPEEDIER registration form database. List of organisations that attended a capacity building event. Energy audit reports written by SPEEDIER Experts.
A.2	Number of individuals involved in pilot action & capacity building events	<ul style="list-style-type: none"> Count the number individuals that attended the capacity building events. Count the number of downloads of the e-learning suite. Count the number of downloads of the SPEEDIER mobile app. 	<ul style="list-style-type: none"> Sign in sheet from each training & capacity building event. Log from SPEEDIER website analytics of number of downloads of e-learning suite. Log from Apple/Android app stores of number of downloads of the SPEEDIER mobile app.
A.3	Number of organisations involved in awareness actions & engagement events	<ul style="list-style-type: none"> Count the number of unique organisations that attend engagement events. Count the number of unique organisations receiving the SPEEDIER newsletter Count the number of followers on SPEEDIER social media accounts 	<ul style="list-style-type: none"> Sign in sheet from each engagement event. List of newsletter subscribers from mail chimp List of Twitter followers. List of LinkedIn followers.
A.4	Number of organisations with enhanced energy culture	<ul style="list-style-type: none"> Count the number of organisations whose staff attended a capacity building event Count the number of positive responses from individuals at participating organisations to questions about energy culture on feedback forms used at each SPEEDIER event, evaluation forms used after delivery of the SPEEDIER Service, and surveys run via the SPEEDIER app 	<ul style="list-style-type: none"> List of organisations that attended a capacity building event. Original survey forms and responses received. Responses received to surveys issued via the mobile app.
A.5	Number of individuals with enhanced energy culture	<ul style="list-style-type: none"> Count the number individuals that attended the training and capacity building events. Count the number of individual positive responses to questions about energy culture on feedback forms, evaluation forms, and surveys run via the SPEEDIER app. 	<ul style="list-style-type: none"> List of individuals that attended a capacity building event. Original hard copies of completed feedback forms and surveys. Electronic survey responses from mobile app.

3.2 Primary Energy Savings

The implementation of the SPEEDIER Service will result in primary energy savings through reducing the total energy consumption of each SME that takes part in the pilot action.

3.2.1 Expected Impacts

Table 5 shows the expected range of primary energy savings that SPEEDIER will achieve, broken down by country. The methodology used to calculate these ranges is given in the description of work.

Table 5: Targets on primary energy savings from SPEEDIER Description of Work

Pilot Region	Primary Energy Savings (GWh/year)	
	Minimum	Maximum
Ireland	0.516	1.650
Spain	0.308	0.986
Romania	2.212	7.072
Italy	0.758	2.425
Total	3.795	12.133

3.2.2 Methodological approach

Once registered for the SPEEDIER Service, SMEs will be assigned a SPEEDIER Expert who will carry out the following actions.

- Measure baseline energy consumption at each SME through gathering data from sources such as energy bills, meter readings, invoices for purchases of fuels, or energy monitoring software. Where possible, energy data will be obtained for the 12 months preceding the organisation signing up to SPEEDIER in order to set a reliable baseline. Where 12 months of actual data is not available, data from a shorter time period can be extrapolated to estimate annual final energy consumption, or an estimate can be made based on either an inventory of energy consuming equipment on site, or benchmarking against other similar organisations.
- Deliver the training to all staff and assist the organisation to reduce energy consumption through improving energy culture
- Carry out an energy audit of the business to identify areas of significant energy use and ways to reduce energy consumption.
- Make recommendations on the order in which energy saving recommendations should be implemented.
- Assist the business to implement the recommended energy saving measures through a range of actions that could include:
 - Assisting to access finance for the measures,
 - Obtaining quotes for works from technology suppliers and installers,
 - Project managing the installations,
 - Measuring and monitoring energy consumption before and after implementation.
- Continue to monitor energy consumption throughout the duration of SPEEDIER to measure or estimate the final energy consumption of the organisation after the intervention.

3.2.3 How will the actual achieved impact be measured?

The actual primary energy savings achieved by SPEEDIER will be measured using the methodology described in Table 6. The methodology will be followed for every organisation involved in SPEEDIER, giving the parameters B.1 to B.12 for every organisation. Parameters are then summed across organisations in each pilot to give total final and primary energy savings for Ireland, Spain, Romania and Italy, before summing the country totals to give B.15, the Total Primary Energy Savings achieved by SPEEDIER.

Table 6: Steps for assessing primary energy savings from SPEEDIER

Ref	Parameter	Units	How to measure?	Evidence
B.1	Baseline annual electricity consumption	kWh	<ul style="list-style-type: none"> • SPEEDIER Expert collects 12 months of electricity bills and sums the actual kWh usage recorded on each bill, OR; • SPEEDIER Expert uses electricity meter readings that are 12 months apart to calculate actual annual electricity consumption in kWh, OR; • SPEEDIER Expert estimates annual electricity consumption by extrapolating from electricity bills or electricity meter readings covering a period shorter than 12 months, OR; • SPEEDIER Expert estimates annual electricity consumption based on benchmarking data and building floor area, OR; • SPEEDIER Expert estimates annual consumption from first principles based on heat loss calculations, equipment inventories and occupied/in use hours. 	As applicable: <ul style="list-style-type: none"> • Electricity bills • Electricity meter readings • Other energy monitoring software outputs • Extrapolation calculations • Building floor area • Building energy benchmarks used • Equipment inventory • Building fabric details
B.2	Baseline annual gas consumption	kWh	<ul style="list-style-type: none"> • SPEEDIER Expert collects 12 months of gas bills and sums the actual kWh usage recorded on each bill, OR; • SPEEDIER Expert uses gas meter readings that are 12 months apart to calculate actual annual gas consumption in kWh, OR; • SPEEDIER Expert estimates annual gas consumption by extrapolating from gas bills or gas meter readings covering a period shorter than 12 months, OR; • SPEEDIER Expert estimates annual gas consumption based on benchmarking data and building floor area, OR; • SPEEDIER Expert estimates annual gas consumption from first principles based on heat loss calculations, equipment inventories and occupied/in use hours. 	As applicable: <ul style="list-style-type: none"> • Gas bills • Gas meter readings • Other energy monitoring software outputs • Extrapolation calculations • Building floor area • Building energy benchmarks used • Equipment inventory • Building fabric details
B.3	Baseline annual oil consumption	kWh	<ul style="list-style-type: none"> • SPEEDIER Expert collects 12 months of oil invoices or oil delivery notes and sums the actual number of litres of oil purchased. SPEEDIER Expert 	<ul style="list-style-type: none"> • Invoices for oil purchases

Ref	Parameter	Units	How to measure?	Evidence
			<p>then uses the conversion factors for each country to convert litres of oil to kWh depending on the type of oil purchased, OR;</p> <ul style="list-style-type: none"> • SPEEDIER Expert uses records of oil tank level indicators over a 12 month period to calculate the actual number of litres of oil used in a year. SPEEDIER Expert then uses the conversion factors for each country to convert litres of oil to kWh depending on the type of oil purchased, OR; • SPEEDIER Expert estimates annual oil consumption by extrapolating data available on oil consumption covering a period shorter than 12 months, OR; • SPEEDIER Expert estimates annual oil consumption based on benchmarking data and building floor area, OR; • SPEEDIER Expert estimates annual oil consumption from first principles based on heat loss calculations, equipment inventories and occupied/in use hours. 	<ul style="list-style-type: none"> • Delivery notes for oil purchases • Oil tank level indicator readings • Extrapolation calculations • Building floor area • Building energy benchmarks used • Equipment inventory • Building fabric details • Conversion factors used (litres of oil to kWh)
B.4	Baseline annual other fuel consumption	kWh	<ul style="list-style-type: none"> • SPEEDIER Expert collects 12 months of other fuel invoices or other fuel delivery notes and sums the actual number of litres or kg of other fuel purchased. SPEEDIER Expert then uses the conversion factors for each country to convert litres of other fuel to kWh depending on the type of other fuel purchased, OR; • SPEEDIER Expert uses records of other fuel tank level indicators over a 12 month period to calculate the actual number of litres of other fuel used in a year. SPEEDIER Expert then uses the conversion factors for each country to convert litres of other fuel to kWh depending on the type of other fuel purchased, OR; • SPEEDIER Expert estimates annual other fuel consumption by extrapolating data available on other fuel consumption covering a period shorter than 12 months, OR; • SPEEDIER Expert estimates annual other fuel consumption based on benchmarking data and building floor area, OR; • SPEEDIER Expert estimates annual other fuel consumption from first principles based on heat loss calculations, equipment inventories and occupied/in use hours. 	<ul style="list-style-type: none"> • Invoices for other fuel purchases • Delivery notes for other fuel purchases • Other indication of other fuel usage • Extrapolation calculations • Building floor area • Building energy benchmarks used • Equipment inventory • Building fabric details • Conversion factors used (litres or kg of other fuel to kWh)

Ref	Parameter	Units	How to measure?	Evidence
B.5	New annual electricity consumption	kWh	<ul style="list-style-type: none"> At the end of SPEEDIER pilots, (i.e. after the participating organisation has implemented some energy efficiency measures) SPEEDIER experts repeats the process described in B.1 for the most recent year of available data. If necessary, electricity consumption figures can be weather corrected using degree day data for the location of the participating business, to account for any increases or decreases in consumption due to differences in weather between the baseline and final year. 	<ul style="list-style-type: none"> See B.1 Degree day data for base year and test year Weather correction calculations
B.6	New annual gas consumption	kWh	<ul style="list-style-type: none"> At the end of SPEEDIER pilots, (i.e. after the participating organisation has implemented some energy efficiency measures) SPEEDIER experts repeats the process described in B.2 for the most recent year of available data. If necessary, gas consumption figures can be weather corrected using degree day data for the location of the participating business, to account for any increases or decreases in consumption due to differences in weather between the baseline and final year. 	<ul style="list-style-type: none"> See B.2 Degree day data for base year and test year Weather correction calculations
B.7	New annual oil consumption	kWh	<ul style="list-style-type: none"> At the end of SPEEDIER pilots, (i.e. after the participating organisation has implemented some energy efficiency measures) SPEEDIER experts repeats the process described in B.3 for the most recent year of available data. If necessary, oil consumption figures can be weather corrected using degree day data for the location of the participating business, to account for any increases or decreases in consumption due to differences in weather between the baseline and final year. 	<ul style="list-style-type: none"> See B.3 Degree day data for base year and test year Weather correction calculations
B.8	New annual other fuel consumption	kWh	<ul style="list-style-type: none"> At the end of SPEEDIER pilots, (i.e. after the participating organisation has implemented some energy efficiency measures) SPEEDIER experts repeats the process described in B.4 for the most recent year of available data. If necessary, other fuel consumption figures can be weather corrected using degree day data for the location of the participating business, to account for any increases or decreases in consumption due to differences in weather between the baseline and final year. 	<ul style="list-style-type: none"> See B.4 Degree day data for base year and test year Weather correction calculations

Ref	Parameter	Units	How to measure?	Evidence
B.9	Annual electricity savings	kWh	Annual electricity savings = B.1 – B.5	Calculation
B.9_{IE} B.9_{ES} B.9_{RO} B.9_{IT}	Total annual electricity savings by country	kWh	B.9 _{IE} = Σ B.9 for the 15 Irish organisations involved in the pilot action B.9 _{ES} = Σ B.9 for the 40 Spanish organisations involved in the pilot action B.9 _{RO} = Σ B.9 for the 35 Romanian organisations involved in the pilot action B.9 _{IT} = Σ B.9 for the 20 Italian organisations involved in the pilot action	Calculation
B.10	Annual gas savings	kWh	Annual gas savings = B.2 – B.6	Calculation
B.10_{IE} B.10_{ES} B.10_{RO} B.10_{IT}	Total annual gas savings by country	kWh	B.10 _{IE} = Σ B.10 for the 15 Irish organisations involved in the pilot action B.10 _{ES} = Σ B.10 for the 40 Spanish organisations involved in the pilot action B.10 _{RO} = Σ B.10 for the 35 Romanian organisations involved in the pilot action B.10 _{IT} = Σ B.10 for the 20 Italian organisations involved in the pilot action	Calculation
B.11	Annual oil savings	kWh	Annual oil savings = B.3 – B.7	Calculation
B.11_{IE} B.11_{ES} B.11_{RO} B.11_{IT}	Total annual oil savings by country	kWh	B.11 _{IE} = Σ B.11 for the 15 Irish organisations involved in the pilot action B.11 _{ES} = Σ B.11 for the 40 Spanish organisations involved in the pilot action B.11 _{RO} = Σ B.11 for the 35 Romanian organisations involved in the pilot action B.11 _{IT} = Σ B.11 for the 20 Italian organisations involved in the pilot action	Calculation
B.12	Annual other fuel savings	kWh	Annual other fuel savings = B.4 – B.8	Calculation
B.12_{IE} B.12_{ES} B.12_{RO} B.12_{IT}	Total annual other fuel savings by country	kWh	B.12 _{IE} = Σ B.12 for the 15 Irish organisations involved in the pilot action B.12 _{ES} = Σ B.12 for the 40 Spanish organisations involved in the pilot action B.12 _{RO} = Σ B.12 for the 35 Romanian organisations involved in the pilot action B.12 _{IT} = Σ B.12 for the 20 Italian organisations involved in the pilot action	Calculation
B.13_{IE} B.13_{ES} B.13_{RO} B.13_{IT}	Total annual Final Energy savings as a result of SPEEDIER by country	kWh	B.13 _{IE} = B.9 _{IE} + B.10 _{IE} + B.11 _{IE} + B.12 _{IE} B.13 _{ES} = B.9 _{ES} + B.10 _{ES} + B.11 _{ES} + B.12 _{ES} B.13 _{RO} = B.9 _{RO} + B.10 _{RO} + B.11 _{RO} + B.12 _{RO} B.13 _{IT} = B.9 _{IT} + B.10 _{IT} + B.11 _{IT} + B.12 _{IT}	Calculation
B.14_{IE} B.14_{ES}	Annual Primary Energy Savings	kWh	B.14 _{IE} = (B.9 _{IE} x Primary Energy Factor) + B.10 _{IE} + B.11 _{IE} + B.12 _{IE} B.14 _{ES} = (B.9 _{ES} x Primary Energy Factor) + B.10 _{ES} + B.11 _{ES} + B.12 _{ES}	• Calculation

Ref	Parameter	Units	How to measure?	Evidence
B.14_{RO} B.14_{IT}	as a result of SPEEDIER by country		$B.14_{RO} = (B.9_{RO} \times \text{Primary Energy Factor}) + B.10_{RO} + B.11_{RO} + B.12_{RO}$ $B.14_{IT} = (B.9_{IT} \times \text{Primary Energy Factor}) + B.10_{IT} + B.11_{IT} + B.12_{IT}$	<ul style="list-style-type: none"> Primary Energy Factor from H2020 Guidance
B.15	Total Annual Primary Energy Savings as a result of SPEEDIER	kWh	$B.15 = B.14_{IE} + B.14_{ES} + B.14_{RO} + B.14_{IT}$	<ul style="list-style-type: none"> Calculation.

3.3 Reduction in greenhouse gas emissions

The implementation of the SPEEDIER Service will result in greenhouse gas emissions savings through reducing the total energy consumption of each SME that takes part in the pilot action.

3.3.1 Expected Impacts

Table 7 shows the expected range of greenhouse gas emissions savings that SPEEDIER will achieve, broken down by country. The methodology used to calculate these ranges is given in the description of work.

Table 7: Targets on reduction in GHG emissions

Pilot Region	Reduction in GHG emissions (tCO ₂ e/year)	
	Minimum	Maximum
Ireland	109	347
Spain	54	171
Romania	323	1032
Italy	119	380
Total	604	1930

3.3.2 Methodological approach

Greenhouse gas emissions savings are achieved as a direct result of the primary energy savings achieved by SPEEDIER through the methodological approach described in Section 3.2.2.

3.3.3 How will the actual achieved impact be measured?

Greenhouse gas emission savings will be calculated for each country using the methodology described in Table 8 (below) and then summed to give the total annual greenhouse gas emissions saved by SPEEDIER.

Table 8: Steps for assessing greenhouse gas emission savings from SPEEDIER

Ref	Parameter	Units	How to measure?	Evidence
C.1_{IE} C.1_{ES} C.1_{RO} C.1_{IT}	Annual GHG savings resulting from electricity savings by country	tCO ₂ e	$C.1_{IE} = B.9_{IE} \times \text{Electricity emissions factor Ireland}$ $C.1_{ES} = B.9_{ES} \times \text{Electricity emissions factor Spain}$ $C.1_{RO} = B.9_{RO} \times \text{Electricity emissions factor Romania}$ $C.1_{IT} = B.9_{IT} \times \text{Electricity emissions factor Italy}$	<ul style="list-style-type: none"> • Calculations • Electricity emissions factors by country from DoW
C.2_{IE} C.2_{ES} C.2_{RO} C.2_{IT}	Annual GHG savings resulting from gas savings by country	tCO ₂ e	$C.2_{IE} = B.10_{IE} \times \text{Gas emissions factor Ireland}$ $C.2_{ES} = B.10_{ES} \times \text{Gas emissions factor Spain}$ $C.2_{RO} = B.10_{RO} \times \text{Gas emissions factor Romania}$ $C.2_{IT} = B.10_{IT} \times \text{Gas emissions factor Italy}$	<ul style="list-style-type: none"> • Calculations • Gas emissions factors by country from DoW
C.3_{IE} C.3_{ES} C.3_{RO} C.3_{IT}	Annual GHG savings resulting from oil savings by country	tCO ₂ e	$C.3_{IE} = B.11_{IE} \times \text{Oil emissions factor Ireland}$ $C.3_{ES} = B.11_{ES} \times \text{Oil emissions factor Spain}$ $C.3_{RO} = B.11_{RO} \times \text{Oil emissions factor Romania}$ $C.3_{IT} = B.11_{IT} \times \text{Oil emissions factor Italy}$	<ul style="list-style-type: none"> • Calculations • Oil emissions factors by country from DoW
C.4_{IE} C.4_{ES} C.4_{RO} C.4_{IT}	Annual GHG savings resulting from other fuel savings by country	tCO ₂ e	$C.4_{IE} = B.12_{IE} \times \text{Other fuel emissions factor Ireland}$ $C.4_{ES} = B.12_{ES} \times \text{Other fuel emissions factor Spain}$ $C.4_{RO} = B.12_{RO} \times \text{Other fuel emissions factor Romania}$ $C.4_{IT} = B.12_{IT} \times \text{Other fuel emissions factor Italy}$	<ul style="list-style-type: none"> • Calculations • Other fuel emissions factors by country from DoW
C.5_{IE} C.5_{ES} C.5_{RO} C.5_{IT}	Total annual GHG savings by country	tCO ₂ e	$C.5_{IE} = C.1_{IE} + C.2_{IE} + C.3_{IE} + C.4_{IE}$ $C.5_{ES} = C.1_{ES} + C.2_{ES} + C.3_{ES} + C.4_{ES}$ $C.5_{RO} = C.1_{RO} + C.2_{RO} + C.3_{RO} + C.4_{RO}$ $C.5_{IT} = C.1_{IT} + C.2_{IT} + C.3_{IT} + C.4_{IT}$	Calculation
C.6	Total annual GHG savings from SPEEDIER.	tCO ₂ e	$C.6 = C.5_{IE} + C.5_{ES} + C.5_{RO} + C.5_{IT}$	Calculation.

3.4 Investments in Sustainable Energy

3.4.1 Expected Impacts

Table 9 shows the expected range of investment in sustainable energy that SPEEDIER will achieve, broken down by country. The methodology used to calculate these ranges is given in the description of work. Investments in sustainable energy are defined as the capital or operational outlay that an organisation makes in order to improve energy efficiency.

Table 9: Targets on investments in sustainable energy

Pilot Region	Investments in sustainable energy (million Euro)	
	Minimum	Maximum
Ireland	0.097	0.375
Spain	0.040	0.200
Romania	0.140	0.525
Italy	0.160	0.560
Total	0.438	1.660

3.4.2 Methodological approach

A key innovation, upon which the SPEEDIER Service is founded, is the self-financing mechanism. This novel funding mechanism works by implementing simple no-cost actions first (e.g. raising energy awareness of staff or switching to a cheaper energy supplier), ring fencing the savings from these actions and using them to pay for low, medium or high cost energy efficiency measures and the continued services of the SPEEDIER Expert. The iterative cycle of implementing energy conservation measures, determining the savings against an agreed baseline, ring fencing those savings and reinvesting them into additional measures is the core innovative principle of the SPEEDIER Service that can be applied to both SMEs and large enterprises. Thus, as shown in Figure 3-1, a revolving energy efficiency fund is created for each participating business, removing any barriers relating to lack of capital or lack of access to finance and allowing deep energy efficiency upgrades to be funded. The revolving fund can include maintenance and operational savings, grants or low interest loans, tax or other incentives (e.g. renewable heat incentives) in addition to the reduction on energy bills to maximise the ring fenced fund that is available for reinvestment.

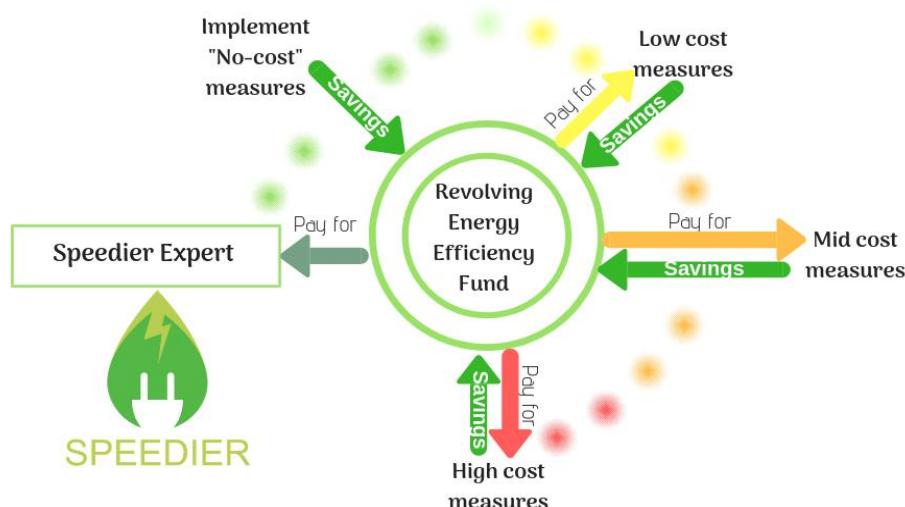


Figure 3-1: SPEEDIER Service self-financing mechanism

3.4.3 How will the actual achieved impact be measured?

Investments in sustainable energy will be calculated for each country using the methodology described in Table 10 (below) and then summed to give the total investment in sustainable energy achieved by SPEEDIER.

Table 10: Sustainable Energy Investment

Ref	Parameter	Units	How to measure?	Evidence
D.1	Annual electricity bill savings	€	$D.1 = B.9 \times \text{electricity unit price}$	<ul style="list-style-type: none"> • Calculation • Electricity unit price from electricity bill
D.2	Annual gas bill savings	€	$D.2 = B.10 \times \text{gas unit price}$	<ul style="list-style-type: none"> • Calculation • Gas unit price from gas bill
D.3	Annual oil bill savings	€	$D.3 = B.11 \times \text{oil unit price}$	<ul style="list-style-type: none"> • Calculation • Oil unit price from oil invoices
D.4	Annual other fuels savings	€	$D.4 = B.12 \times \text{other fuels unit price}$	<ul style="list-style-type: none"> • Other fuels unit price from other fuels invoices
D.5	Total annual energy bill savings	€	$D.5 = D.1 + D.2 + D.3 + D.4$	Calculation
D.6	Annual maintenance saving	€	Depending on the measures installed the SPEEDIER Expert will estimate the annual maintenance saving in agreement with the key contact at each participating organisation. This could be based on longer replacement cycles, reduced cost of parts, reduced labour required for maintenance and will be estimated on a case by case basis	Records of assumptions made in estimating reduced maintenance costs.
D.7	Value of grants received for investment in energy efficiency	€	Depending on the measures installed and the country in which the participating organisation is based, different grant funding schemes may be available for certain types of energy efficiency measures. The SPEEDIER Expert will have local knowledge of the available grant schemes and can assist the SME to apply.	Grant offer letter or other confirmation of grant money received.
D.8	Value of loans received for investment in energy efficiency	€	Depending on the measures installed and the country in which the participating organisation is based, different loan schemes may be available for certain types of energy efficiency measures. The SPEEDIER Expert will have local knowledge of the available loan schemes and can assist the SME to apply.	Loan offer letter or other confirmation of loan received.
D.9	Value of tax or other incentives received for energy efficiency	€	Depending on the measures installed and the country in which the participating organisation is based, different tax and other incentive schemes may be available for certain types of energy efficiency measures. The SPEEDIER Expert will have local knowledge of the	Calculation of tax reduction or other incentive amounts received by the SME.

Ref	Parameter	Units	How to measure?	Evidence
			available tax and other incentive schemes and can assist the SME to apply.	
D.10	Total potential value of the revolving fund after 1 year	€	$D.10 = D.5 + D.6 + D.7 + D.8 + D.9$	Calculation
D.11	Investment in sustainable energy through installation of low, medium and high cost measures	€	SPEEDIER Expert will keep track of the low, medium and high cost measures installed by each participating organisation through their ongoing relationship as outsourced energy manager.	<ul style="list-style-type: none"> • Invoices for parts, labour and management costs associated with the implementation of low, medium and high cost measures. • Statement of investment amount from each participating organisation.
D.12_{IE} D.12_{ES} D.12_{RO} D.12_{IT}	Total investment in sustainable energy broken down by country	€	$D.12_{IE} = \Sigma D.11$ for all participating organisations in Ireland $D.12_{ES} = \Sigma D.11$ for all participating organisations in Spain $D.12_{RO} = \Sigma D.11$ for all participating organisations in Romania $D.12_{IT} = \Sigma D.11$ for all participating organisations in Italy	Calculation.
D.13	Total investment in sustainable energy as a result of SPEEDIER.	€	$D.13 = D.12_{IE} + D.12_{ES} + D.12_{RO} + D.12_{IT}$	Calculation.

3.5 Capacity building

SPEEDIER will build capacity by increasing the number of individuals with increased skills, capabilities and competencies in the energy sector and developing a long lasting training scheme.

3.5.1 Expected Impacts

The description of work defines the criteria described in Table 11 as a means of assessing the number of individuals with increased skills, capabilities or competencies and the long term nature of these training schemes. SPEEDIER intends to deliver a long lasting training scheme by ensuring that SPEEDIER Trainers go on to train at least 5 more SPEEDIER Experts per year in order to grow the network of SPEEDIER Experts in Europe. This is expected to happen beyond the end of the SPEEDIER project and full details of how this will be achieved will be given in the Train the Trainer Plan (D6.3) and the SPEEDIER business model strategies (D8.10). SPEEDIER Trainers will be asked to outline their plans to achieve this before the end of SPEEDIER and will be supported in the roll out where possible.

Table 11: Criteria for assessing enhanced energy culture from the Description of Work

Ref	Criteria	Total
E.1	Number of individuals registered as a SPEEDIER Expert.	50
E.2	Number of people receiving training to become a SPEEDIER Trainer.	40
E.3	Number of SPEEDIER Experts trained by each SPEEDIER Trainers per year.	5

3.5.2 Methodological approach

Work Package 6 is designed to train 50 SPEEDIER Experts (i.e. Energy auditors or Energy experts) from the four pilot regions in how to successfully deliver the SPEEDIER Service. A register of SPEEDIER Experts will be developed, listing all the individuals that are qualified to deliver SPEEDIER. This will enable SMEs wishing to participate in the SPEEDIER Service after the end of the project to find a qualified SPEEDIER Expert in their region.

To ensure the longevity of the training scheme, 40 SPEEDIER Experts wishing to become SPEEDIER Trainers will attend an additional training course to learn the pedagogical approaches required to training new SPEEDIER Experts. The Train-the-trainer plan developed in Deliverable 6.3, lays the foundations for training further SPEEDIER Trainers who can in turn train SPEEDIER Experts, thus, expanding the register of SPEEDIER Experts and ensuring the long-term sustainability of the service.

3.5.3 How will the actual achieved impact be measured?

The actions that will be taken to measure the impacts E.1 to E.3 are shown in Table 12 below

Table 12: How to measure impact on building capacity and long lasting training schemes

Ref	Criteria	How to measure?	Evidence
E.1	Number of individuals registered as a SPEEDIER Expert.	<ul style="list-style-type: none"> Count the number of individuals on the register of SPEEDIER Experts. 	<ul style="list-style-type: none"> Register of SPEEDIER Experts. Record of CPD Certificates issued to SPEEDIER Trainers.
E.2	Number of people receiving training to become a SPEEDIER Trainer.	<ul style="list-style-type: none"> Count the number of individuals that attended, successfully completed and received a CPD certificate to become a SPEEDIER Trainer. 	<ul style="list-style-type: none"> Attendance sheet from training events for SPEEDIER Trainers. Record of CPD Certificates issued to SPEEDIER Trainers.
E.3	Number of SPEEDIER Experts trained by each SPEEDIER Trainers per year.	<ul style="list-style-type: none"> Count the number of individuals on the register of SPEEDIER Experts that were trained by a SPEEDIER Trainer. 	<ul style="list-style-type: none"> Register of SPEEDIER Experts. Record of CPD Certificates issued to SPEEDIER Trainers.

3.6 Policies & Strategies

SPEEDIER provides a direct means for Member States to comply with the provision in Article 8 of the EED to develop programmes to encourage SMEs to undergo energy audits and implement the subsequent recommendations. SPEEDIER creates a framework that allows SMEs to access the technical assistance and information they need to increase their energy efficiency. SPEEDIER Work package 7 is dedicated to translating the results of SPEEDIER into usable policies recommendations and strategies that can be adopted at a national level by EU Member states to assist them in meeting their obligations under Article 8 of the EED. In Work package 9, the SPEEDIER consortium will also develop a CWA (CEN Workshop Agreement standards document) to standardise the SPEEDIER Service in full or part or the interoperability component to ensure consistency when it is rolled out across Member States. The undertaking has a dependency on securing a standardisation institution as secretariat and the governing rules of the CWA process. The aim is to strengthen sustainability and take up confidence beyond the life of the project.

3.6.1 Expected Impacts

The description of work defines the expected impacts outlined in Table 13.

Table 13: Criteria for assessing policy and strategy impact

Ref	Criteria
F.1	Best Practice Guidelines for SMEs & large enterprises. (Deliverable 7.1)
F.2	Roadmap for SPEEDIER to contribute to achieving the EU's objectives. (Deliverable 7.2)
F.3	Action plans showing how SPEEDIER can assist in achieving EU wide policy targets. (Deliverable 7.3)
F.4	Technical report on SPEEDIER replication potential across EU Member States. (Deliverable 7.4)
F.5	CEN CWA standard document. (Deliverable 9.8)

In addition to the documents produced above, which aim to provide a clear roadmap and strategy for any Member State to adopt the SPEEDIER Service as a means of achieving their obligations under Article 8 of the EED, it is also expected that the SPEEDIER Service will achieve the following targets described in Table 14.

Table 14: Additional criteria for assessing policy and strategy impact

Ref	Criteria	Total
F.6	Number of SMEs supported in the implementation of an energy audit.	110
F.7	Number of initiatives or actions taken to improve or create audit supporting schemes.	4

3.6.2 Methodological approach

The methodology for producing Deliverables 7.1, 7.2, 7.3, 7.4 and 9.8, which are the means of demonstrating the expected impacts F.1. to F.5) is described in more detail in the description of work and briefly summarised below.

- **Best Practice Guidelines** will be developed for SMEs and large enterprises in the EU (Task 7.1). Significantly influenced by the SPEEDIER pilots performed in Ireland, Spain, Italy and Romania, the Guideline will be a reference document for enterprises to assist them in identifying and implementing actions to improve their energy efficiency

measures. Key learning points from the implementation of Work packages 4, 5 and 6 will be summarised along with any insights gathered via the ongoing market watch activities with regard to policy shifts, incentives and approaches to energy auditing approaches across Europe.

- **The SPEEDIER Roadmap** focuses on how SPEEDIER can support the elements proposed in the Energy Efficiency Plan 2011 and the Energy Efficiency Directive in pursuit of Commission objectives (Task 7.2). The SPEEDIER Roadmap is based on the 5 dimensions that were adopted by the European Council in March 2015 namely: Energy security, solidarity and trust; fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonizing the economy and; research, innovation and competitiveness⁷.
- **The SPEEDIER Action Plan** will be developed to encourage Member States to implement more ambitious and better-coordinated climate and energy policies. This work (Task 7.3) demonstrates how SPEEDIER could be adopted by Member States as a way of complying with Article 8 of the EED.
- **The SPEEDIER technical report on replication potential** across the EU Member States, developed in Task 7.4, will take the key lessons learned through the implementation of the SPEEDIER Service in Ireland, Spain, Romanian and Italy and extrapolate them to show how the service could be replicated in of the Member States. The technical report can be used as a reference document by other stakeholders that demonstrates the most appropriate ways to replicate SPEEDIER depending on the conditions in other locations.
- **CEN CWA standard document:** one of the ways that SPEEDIER will meet the expected targets on policies and strategies to be created and adopted at a national and European level is through the creation of a CWA (CEN Workshop Agreement) standard document (Task 9.4). In SPEEDIER, the CWA standard document will be based on the SPEEDIER Service in part or full or an interoperable component, which aims to further strengthen trust and confidence in the Service at European level. A CEN Workshop Agreement (CWA) is a document published by the European Committee for Standardization (CEN). It is an agreement developed and approved in a CEN workshop. The workshop is open to the direct participation of anyone with an interest in the development of the agreement. There is no geographical limit on participation. Participants can be from outside Europe and the proposed new process. SPEEDIER partner TFC Research and Innovation Limited as well as other @Stair4Security project members including the standardisation institutions CEN/CENELEC, DIN and AFNOR among other partners, are presently working on a revision of the CWA. The CWA is aimed to be fast and flexible having a potential to be a stepping stone for a full standard. A CWA does not have the status of a European Standard and it may not conflict with a European Standard so if a conflicting EN⁸ is

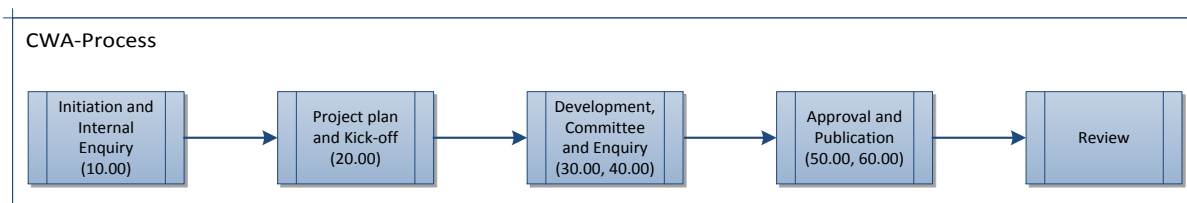
⁷ European Council, 2015. Council Conclusions of March 2015. <http://www.eesc.europa.eu/resources/docs/european-council-conclusions-19-20-march-2015-en.pdf>

⁸ EN: European Standards (ENs) are documents that have been ratified by one of the three European Standardization Organizations (ESOs), CEN, CENELEC or ETSI; recognized as competent in the area of voluntary technical standardization as for the EU Regulation 1025/2012.

subsequently published, then the CWA shall be withdrawn as the Standard will replace it.

The development of a CEN Workshop Agreement will be based on the drafting of a Project Plan (SPEEDIER D9.7) and is in line with the new proceedings. Figure 3-2 highlights the process of the wip/revise CWA.

Figure 3-2: WIP/Recommendations for the CWA process



3.6.3 How will the actual achieved impact be measured?

The actions that will be taken to measure the impacts F.1 to F.7 are shown in Table 15 below.

Table 15: How to measure impact on policies and strategies

Ref	Criteria	How to measure?	Evidence
F.1	Best Practice Guidelines for SMEs & large enterprises.	<ul style="list-style-type: none"> Best Practice Guidelines are publically available for download. 	Deliverable 7.1 submitted
F.2	Roadmap for SPEEDIER to contribute to achieving the EU's objectives.	<ul style="list-style-type: none"> Roadmap for SPEEDIER is publically available for download. 	Deliverable 7.2 submitted
F.3	Action plans showing how SPEEDIER can assist in achieving EU wide policy targets.	<ul style="list-style-type: none"> Action plans are publically available for download. 	Deliverable 7.3 submitted
F.4	Technical report on SPEEDIER replication potential across EU Member States.	<ul style="list-style-type: none"> Technical report is publically available for download. 	Deliverable 7.4 submitted
F.5	CEN CWA standard document.	<ul style="list-style-type: none"> CEN CWA standard is available for use. 	Deliverable 9.8 submitted
F.6	Number of SMEs supported in the implementation of an energy audit.	<ul style="list-style-type: none"> Count the number of SMEs participating in SPEEDIER that received energy audit reports. Count the number of SMEs not participating directly in SPEEDIER that received energy audit reports completed by a SPEEDIER Expert. 	Energy audit reports written by SPEEDIER Experts.
F.7	Number of initiatives or actions taken to improve or create audit supporting schemes	<ul style="list-style-type: none"> Count the number of Member States that have at least one SPEEDIER Experts listed on the register of SPEEDIER Experts. Count the number of Member States that have at least one registered SPEEDIER Trainer. 	Register of SPEEDIER Experts. Register of SPEEDIER Trainers.