







2nd Training Webinar: Soft Skills

Energy Efficiency Support Programme

11th December 2018































Presenters

Benjamin Curnier

Director, Southern Africa

CARBON TRUST



Consultant

CARBON TRUST











Agenda

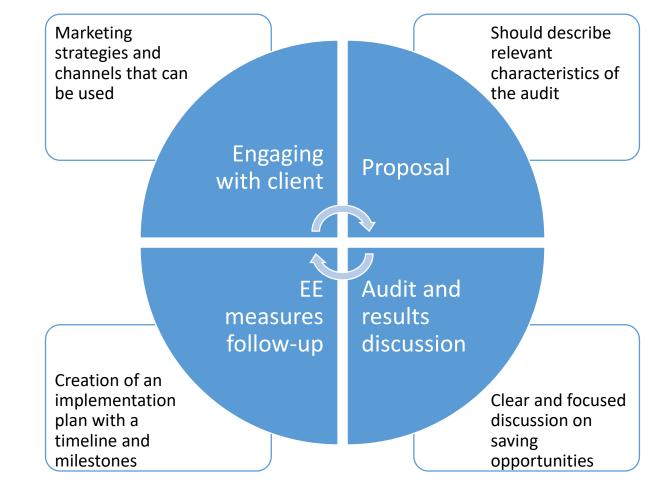
- 1. The sales cycle
 - 1.1 Engaging with the client and preparing a proposal
 - 1.2 Presenting and discussion results
 - 1.3 Implementation of measures
- 4. Financing options
- **5. Training resources**
- 6. Q&A







Sales Cycle









Client engagement

Direct engagement

- Direct remote contact (email, telephone call, LinkedIn message)
- Networking through sector events
- Presentation in workshops or conferences
- Direct distribution of pamphlets

Indirect engagement

- Social-media (e.g. having an active page on LinkedIn)
- Ads in sector-specific journals or websites
- Partnerships







Most obvious targets

COMPANY ASSOCIATIONS

- Grouping associations of companies within a sector or industry
- Easier to reach various sector specific companies
- These could be approached as a communication target or as partners for the selling of energy services

LARGE USERS OF ENERGY

- Large consumers of energy will be more receptive to hear about energy saving opportunities
- These are not only large industries but also hospitals, hotels or schools
- These often make good casestudies as the potential for savings is larger







Marketing tools

When best to use

PRESENTATIONS

- One to many approach
- Ability to convey more information
- People will remember a *good* presentation

when best to use

When the audience is needs to understand the product (new product in the market)

PAMPHLETS

NEWSLETTERS

- Can be distributed widely
- More personal contact if handed in hand (e.g. in conferences)
- People can take it home and review it later

When you need to make yourself known to the market

One to many approach
 When y

- Easy to reach many people (if you already have their contacts)
- Can make it a periodic thing

When you already have a large contact network and want to keep these relationships

USE CASE-STUDIES AS OFTEN AS POSSIBLE!







What should be the message

Potential benefits (best illustrated with case-studies)

• Savings that can be achieved through energy efficiency measures

What is an energy audit

- What does it entail and what are the various steps
- Who conducts the energy audits

Real cost of energy for a company

• The real cost of energy (inefficiency) is not always obvious as it goes beyond the purchase of electricity

Main outputs of an energy audit

• What should the client expect at the end of an energy audit – energy audit report with a number of potential saving opportunities found

These 2 messages are especially relevant in markets where this is a **new service**









Understanding clients' drivers

CONCERNS

Public awareness Energy security

MOTIVATIONS

Understand better the internal processes

Driving costs down

Differentiation from competition

Clients will be more engaged if their specific concerns and motivation are addressed in the initial approach

Show that energy audit impacts go beyond just energy usage (kWh)

These could be later **used in the proposal**

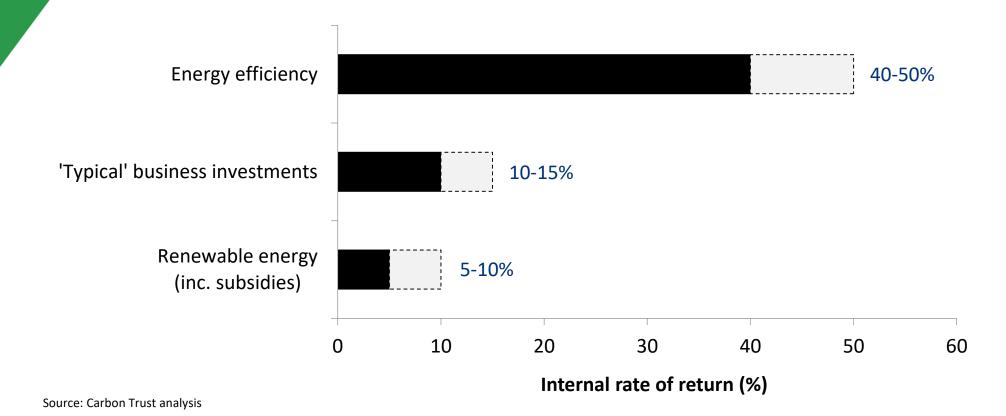








Presenting benefits - examples





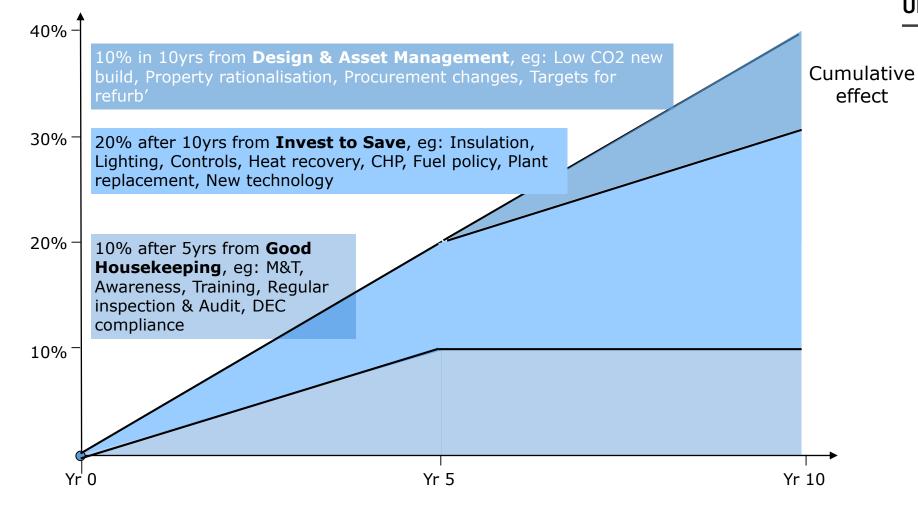






Presenting benefits - examples

UK EXAMPLE

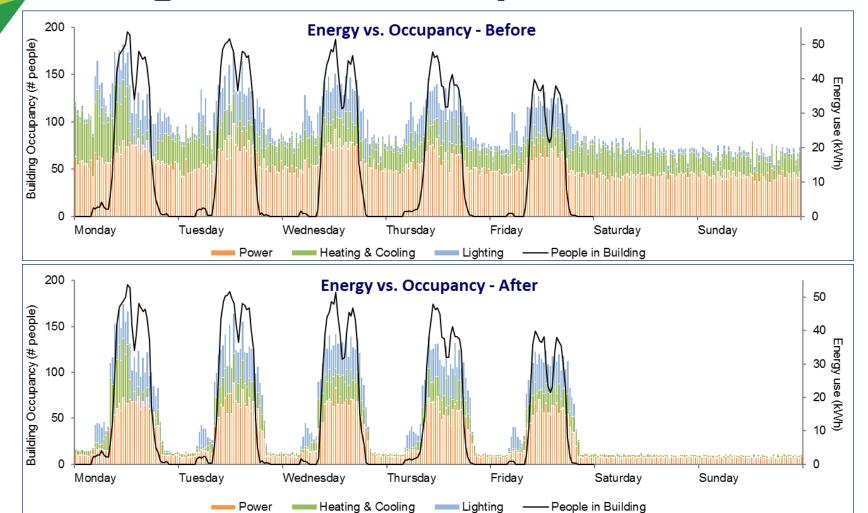








Presenting benefits - examples



Large cost savings by removing most of the baseload consumption!







Presenting benefits – payback of energy efficiency



UK EXAMPLE

	ELECTRONICS COMPANY	LEISURE CENTRE	WASTE REPROCESSING FACILITY
Days taken to perform audit	5	5	4
Cost of Energy Audit (£)	4,000	4,000	3,000
Annual energy costs (£)	215,000	400,000	340,000
Identified annual recurring cost savings (£)	50,000	140,000	70,000
Energy savings identified by survey	24%	35%	20%
Capital investment required	175,000	371,000	90,000
Simple payback time (years)	3.45	2.65	1.4



prøgrammes





Presenting benefits – payback of specific technologies



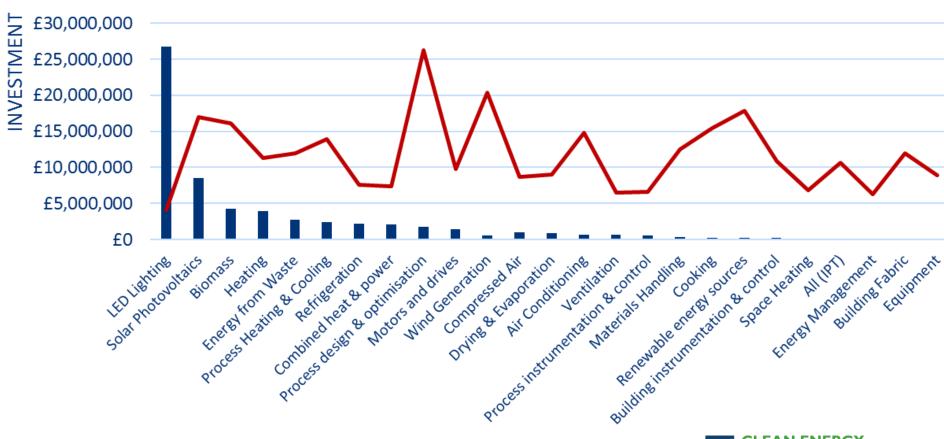
UK EXAMPLE

PAYBACK

2

0

18









Developing a proposal



1. Client's background and motivation / benefits

2. Scope of work of audit

3. Timeline

4. Audit team and budget

5. Outputs of the energy audit

A proposal should be short and clear to avoid any misunderstandings







Scope of work

EXAMPLE

Review of formal documentation

Review of the company's policy, strategy and operational plans as they relate to the Site being surveyed.

Expert data analysis

Using the energy data supplied, the consultant will conduct an expert data analysis leading to an energy performance report for the site. This will include a comparison with published benchmarking metrics where appropriate alongside insightful commentary on the energy performance of the site.

Site visit and assessmen[†]

Systematically review all major energy using processes and systems

Measure using

Measure using appropriate instrumentation, energy usage and/o outputs from key systems

Capture the data and information necessary to assess the energy performance of each systems

Assess the opportunities for onsite renewable energing generation/utilisation

Model impact of existing systems

Using the data and information gathered during the site visit analyse, model and quantify the cost and carbon impact of the major systems, provide a detailed breakdown of energy usage and develop an evidence-based energy requirement for the site.

Detail your advice and guidance as to the most cost and carbon efficient solution(s) available to fulfil the site's needs.

analysis

Cost-benefit

Clear statement of 'next steps' stell stel

For each key recommendation, the consultant shall provide a clear 'next steps' commentary that informs the client what they should do next to advance the project towards implementation / further consideration.

DESK-BASED DATA ANALYSIS

SITE VISIT

REPORTING

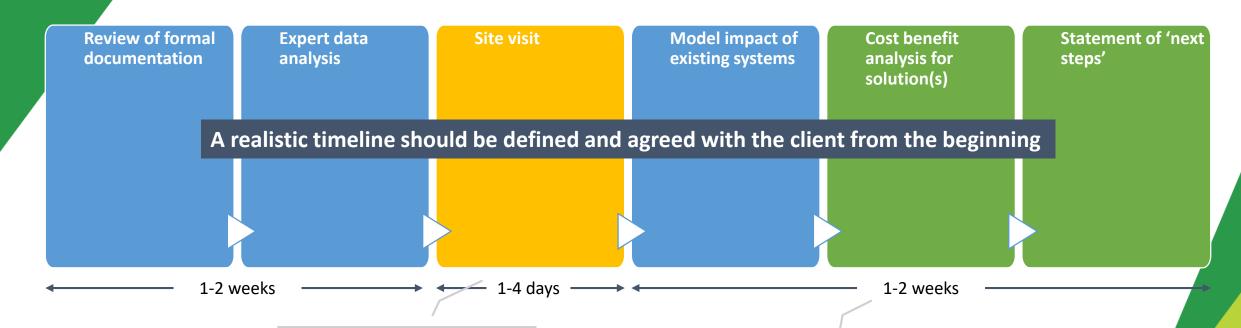






Defining the timeline





Site visit is most relevant date;

it should be scheduled with time to review any possible data from client

Time to analyse data and do the report will depend on the complexity of the site audit. Understanding the possible time needs is important so that expectations can be met









Audit team and budget

- Structure of the team and budget are dependent on the complexity of the audit (e.g. Level 1 audit vs. Level 3 audit)
- Daily fee should vary accordingly to the experience and seniority of the auditors (usual rates can vary from \$300 to \$700 depending on the market)
- If budget is too high for the client, the scope of the audit can be negotiated to cover fewer sites or only some of the energy uses







Example Proposal





This document will be available to all participants in their respective language







Presenting results

- These should include:
 - Summary of the energy consumption profile highlighting main energy usages
 - If possible, benchmarking of energy consumption with similar sites
 - Proposal of energy efficient solutions along with investment and expected savings
- These should be clear and to the point
- Language used should take into consideration the technical knowledge of the client
- Use of graphs helps communicating results in a visual way







Presenting results - examples

EXAMPLES

Assessed breakdown of energy by end-use

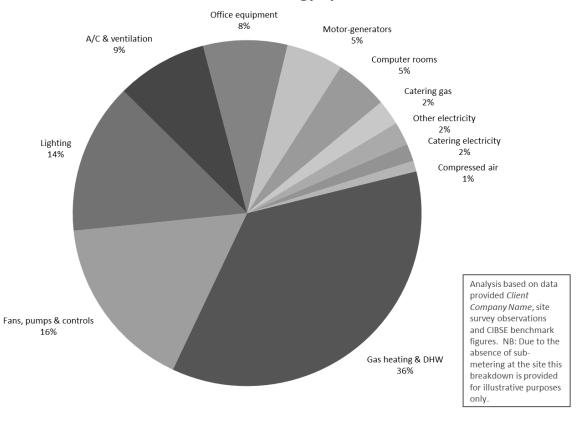
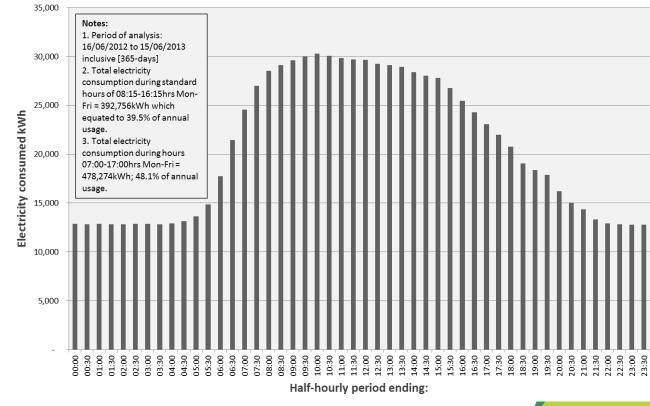


Figure 15: Building 1 annual electricity usage half-hourly profile







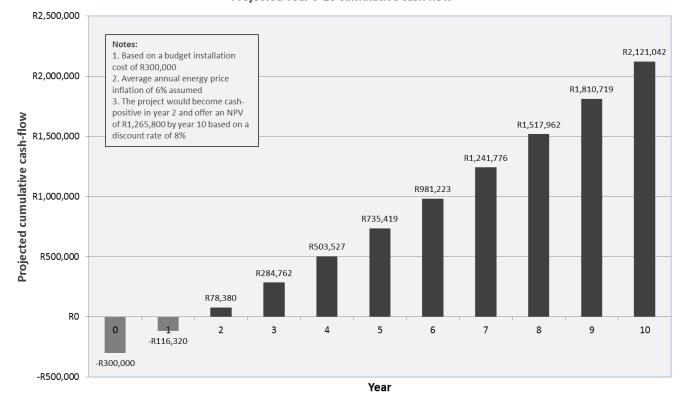


Presenting results - examples

EXAMPLES

Figure 24: Implement a comprehensive energy monitoring & targeting system

Projected Year 0-10 cumulative cash flow









1

Preparing the investment plan

Could be shown as a table including a list of EE measures with:

- expected savings
- investment
- payback period

EXAMPLE

		Esti	mated a	nnual sav	vings		Ecor	nomics
Recommendations	El	ectrici	ty		Gas		Cost	Payback
	kWh	\$	tCO ₂	kWh	\$	tCO,	\$	Years

- 1. Development and implement a site-wide energy management policy and strategy
- 2. Implement a comprehensive energy monitoring and targeting system
- 3. Install a site-wide energy management system (EMS) to exercise optimised time and temperature control over HVAC systems

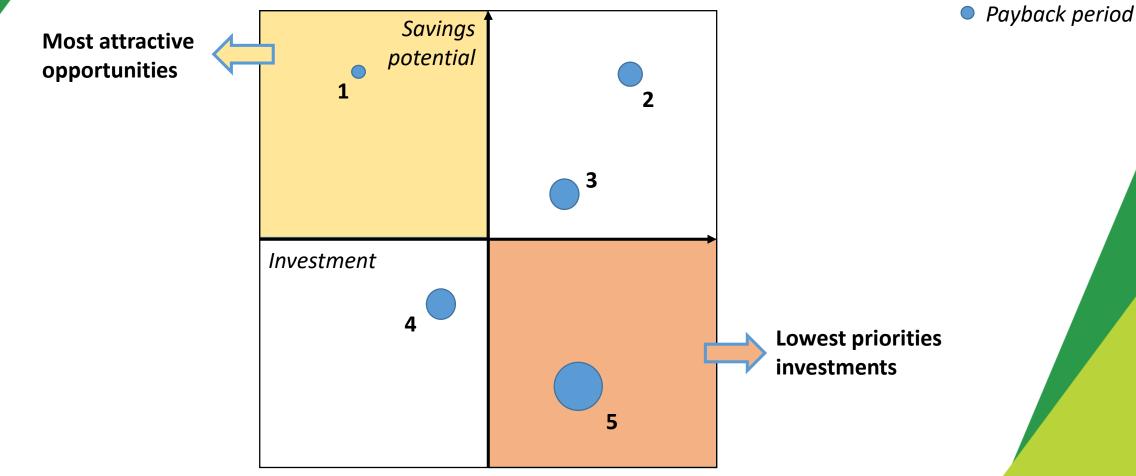
Least effort and highest return measures should be listed first







Prioritising EE opportunities/investments









Defining the implementation plan



assigning a responsible staff member establishing a deadline

setting milestones and period review periods how to assess progress







Implementation plan

EXAMPLE

EE project	Estimated Investment	Estimated annual savings	Priority	Implementation period	Responsible Team	Owner	Status	Delayed?	Next Steps
Lighting Replacement	2,500	4,000	High	Oct-Dec 2017	Building Facilities Management	Mr. XX	Implementation phase	Yes	Roll-out
Boiler replacement	5,000	4,500	High	1 st quarter 2018	Building Facilities Management	Mr. YY	Procurement phase	No	Procurement decision
Switch off campaign	1,000	700	Medium	3 rd quarter 2019	HR & Building Facilities Management	Mr. ZZ	In pipeline	No	Creation of engagement materials

The Implementation Plan should be shared with all the staff with responsibilities in delivering the projects and senior management. It should also be reviewed at regular intervals (e.g. end of each quarter)







1

Engaging with stakeholders

- Many energy efficient gains come from modifying behaviours of employees or clients
- For a successful engagement the company needs to understand what do they care about?



Piano stairs

Making it a "fun" option, a lot more subway commuters used the stairs instead of the escalators

Electric Bill Example Energy Used Last Month: 637 kWh Electricity Bill: \$22.82 Your Energy Use compared to your neighbors:

Feedback & gamification

By providing feedback with a marking system, people will want to improve their "score" by using less energy









Strategies for engagement and behaviour change

Active decision Conscious/Considered

 Rewards for turning off monitors

Hug

Smack

- Build energy reduction objectives into job specifications
 - Disincentive Punish
- Reduce air conditioning

Incentive Reward

- Make switches easier to see
- Set printers to double sided

Nudge

Shove

Automatic/Unconscious Passive decision

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Assessing progress

- Crucial to **understand the success** of initiatives
- Can be used to evaluate/prioritise future saving opportunities
- Evaluation of progress against deadlines and defined targets/ expectations
- Targets should be clear and measurable
- Essential to evaluate performance (energy usage) before and after implementation for a relevant period of time
- Communicating the success of implemented initiatives can help engage stakeholders in future energy saving programmes







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Types of contract

How it works

Risk lies with?

Paid-up-front contract

The audit is delivered at the cost (budget) that was agreed at the beginning and that is in the proposal

Risk is totally owned by the **client**

"No-charge" service

The audit has no cost to the client and the auditing company charges the budget for this service in potential subsequent energy efficiency delivery programmes

Risk is totally owned by the auditing company

EPC contract

There are a number of formats for this contract but in general, the auditing company is paid from the savings obtained from energy efficiency projects that are contracted from the start

Risk is **shared** between the client and the auditing company







Energy Performance Contracting (EPC)

- Energy performance contracts are essentially contracts where payment to contractors are linked to the project's energy savings, i.e. the cost of an investment in energy efficiency is paid back through the savings it generates.
- The projects must be sized such that the savings offset the cost of financing, installing and operating that technology. By definition, the future savings must be greater than the sum of the costs.
- In performance contracting, usually a third-party contractor designs, installs, finances and, if required, operates a new technology. The contractor is then paid according to the savings achieved i.e. the performance



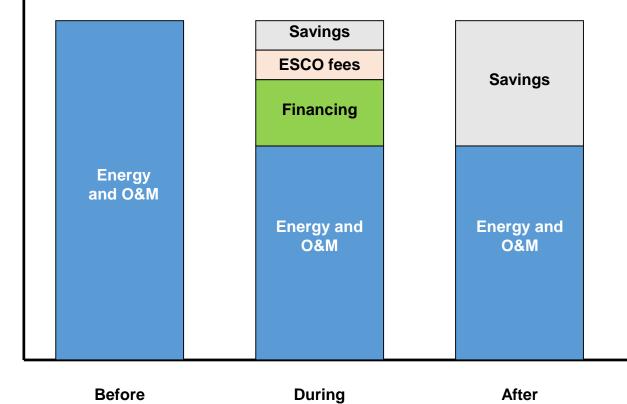




How does it work?

Total utility expenditure, £

contract



contract







contract

The main advantage of EPCs for clients is the transfer of risk to the Auditing company

Advantages for customers

- **Reduced risk** the contractor takes on the risk of not achieving savings
- **Turn-key services** the performance contractor provides all required services
- The business or institution needs less internal expertise, and can concentrate on core activities
- Project financing can be 'off balance sheet' and not affect debt load
- EPC contracts usually need some advanced monitoring systems It is possible that this might not be suited to be applied in WA Savings are normally much higher than if the business or institution carries the
- Additional improvements to envi performance can be paid for out c

Advantages for Auditing company

- Opportunity to profit from energy savings made
- Opportunity to **extend their expertise** in new markets
- **Broadening of customer base**
- Opportunity to lock-in major clients







Alternative financing options

- There are financing programmes that support the implementation of energy efficiency projects
- These are available to most companies even if some focus on supporting SMEs.
- There are two types of available financing
 - Loans programmes
 - Funding programmes







Financing programmes in ECOWAS region

Programme	Service offered	Countries Included
ECOWAS Renewable Energy Facility (EREF)	It provides grant co-funding for small to medium sized renewable energy and energy efficiency (RE&EE) projects and businesses in rural and peri-urban areas.	ECOWAS member states
GEF-Strategic Programme for West Africa (SPWA) Energy Component	The programme applies a holistic approach and assists the ECOWAS countries in the mitigation of the existing barriers for the establishment of renewable energy and energy efficiency markets. The SPWA provides grant funding and technical assistance for the promotion investments, coordination, policy coherence, capacity building and knowledge management.	ECOWAS member states
Private Financing Advisory Network (PFAN)	PFAN has launched a call for proposals for climate and clean energy projects and businesses in Sub-Saharan Africa and Asia. Selected projects will receive no-cost coaching by professional consultants and, once they are investment-ready, benefit from PFAN's Investment Facilitation services . Entrepreneurs looking to initiate or scale-up clean energy or other climate change-related projects and seeking an investment of up to \$50 million are invited to apply.	Sub-Saharan Africa







Financing programmes in some countries in WA

Programme	Service offered	Countries Included
Off-Grid Clean Energy Facility (OFED)	Focus on supporting business models for the deployment of energy efficiency measures for the benefit of public institutions, households and users in the commercial and industrial sectors. The goal is to support the distribution of energy-efficient appliances and equipment that not only reduces the overall costs for electricity consumers but also the demand for electricity from the grid.	Benin
GroFin	GroFin provides Small and Medium Enterprise (SME) finance / business loans	Senegal, Ivory Coast, Ghana, Nigeria
SUNREF	SUNREF provides solutions to enable energy and environmental transitions by helping private actors to seize its opportunities and encouraging local financial institutions to finance it. Energy efficiency projects are financed using loans from local banks that have partnered with SUNREF.	Senegal, Togo, Benin, Cdl







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General online trainings/workshops

Source	Type of training(s) available	Cost
Energy Institute	Short courses for a varied number of subjects related with energy efficiency	For a fee (>\$100)
High Speed Train	ning Energy Efficiency Training	For a fee (<\$100)
Carbon Trust	Webinars with a varied number of subjects including ones focused on specific technologies	Free
Econoler	Webinars related with energy efficiency financing	Free
Schneider Electri (Energy Universi	processing and the second seco	Free
bsi	Courses covering the main subjects related with Energy Management	Free







Standards-specific trainings

		Source	Type of training available	Cost
	ASHRAE	ASHRAE	eLearning courses in varied areas from Energy conservation to courses dedicated to specific technologies	For a fee (<\$100)
01	01	bsi	Online training course providing an overview of ISO 50001 Energy Management	Free
	180 50001	Udemy	Online course related with the implementation and audit of an energy management system as per ISO 50001:2011	For a fee (<\$100)







Software trainings

RETScreen

RETS

Source	Type of training available	Cost
CIET Canada	Face-to-face certified 3-day course on RETScreen. Most of the sessions are delivered in Canada but there is the possibility for training to be provided in other countries	For a fee
Various	Some tutorial videos online	Free
Energy Models	eLearning course that provides an in-depth look into the software. It also covers ASHRAE Standard 90.1 modeling	For a fee/ subscription
Various	Some tutorial videos online	Various







Q&A Session

OPEN TO QUESTIONS!

(now or later)







Thank you for your attention

Carbon Trust

Benjamin Curnier

Director, Southern Africa

benjamin.curnier@carbontrust.com

www.carbontrust.com

ECONOLER

Luc Kevo Tossou, Ing- M.Sc

Chargé de projet à l'international

ltossou@econoler.com

www.econoler.com





