

Guidance Document for Gibraltar's Energy Savings Opportunity Scheme (ESOS)

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1. ESOS and who does it apply to?

The Energy Savings Opportunity Scheme (ESOS) is an energy assessment and energy saving scheme and is established by the Energy Savings Opportunity Scheme Regulations 2016, under the Environmental Protection (Energy End-Use Efficiency) Act 2009. The scheme applies to large undertakings and groups containing large undertakings in Gibraltar.

An undertaking, as defined in the Companies Act 2014, is:

- a corporate body or partnership.
- an unincorporated association carrying on a trade or business, with or without a view to profit.

1.1. Who qualifies for ESOS?

You must take part in ESOS if your organisation qualifies as a large undertaking on the qualification date.

The qualification date for the first compliance period is the 31 **December 2014**.

A large undertaking is any Gibraltar undertaking that meets either one or both of the conditions below:

- it employs 250 or more people;
- it has an annual turnover in excess of 50 million euro (£38,937,777), and an annual balance sheet total in excess of43 million euro (£33,486,489).

You also must take part in ESOS if your undertaking is part of a corporate group which includes another Gibraltar undertaking that meets either of these conditions. Where a corporate group participates in ESOS, unless otherwise agreed the highest Gibraltar parent will act as a 'responsible undertaking' and be responsible for ensuring the group as a whole complies. Read section 1.7 for more detail on corporate groups.

The definition of a large undertaking includes an overseas (non-Gibraltar registered) company with a Gibraltar registered establishment which has 250 or more Gibraltar employees.

The Gibraltar registered establishment of an overseas company will also need to take part in ESOS, regardless of its size, if any other part of its global corporate group activities in Gibraltar meets the ESOS qualifying criteria.

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An 'establishment' is defined as a branch within the meaning of the Eleventh Company Law Directive (89/666/EEC) or a place of business that is not such a branch where there is some degree of physical presence in Gibraltar.

You need to consider your organisation's corporate legal structure when assessing if your organisation qualifies. Your organisation may have several sites owned by one undertaking or each site may be a different legal undertaking owned by a common parent and this may affect whether your organisation qualifies for the scheme.

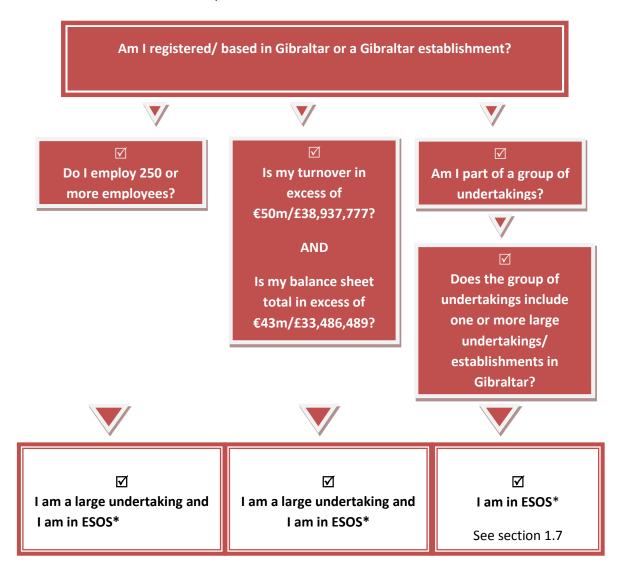
The type of work that your organisation carries out and the amount of energy your organisation uses are irrelevant to whether you qualify for the scheme. If your organisation is an undertaking and the qualification criteria above are met then you will need to participate in ESOS.

The financial qualification thresholds are specified in the ESOS regulations in euros. The equivalent pound sterling figures specified in brackets above were determined for the first compliance period based on the Bank of England daily spot exchange rate on 31 December 2014.

If your undertaking is close to the qualification thresholds, or has grown/shrunk recently, read section 1.6 to help you establish if you qualify.

¹ For a Gibraltar registered undertaking, this includes all employees contracted to the undertaking either in Gibraltar or abroad, irrespective of the number of hours for which they are employed. For ESOS purposes, the definition of an employee for a non-Gibraltar registered undertaking with a Gibraltar registered establishment is someone directly contracted to the undertaking who is subject to income tax in the Gibraltar.

The flow chart below shows the qualification thresholds for ESOS:



^{*}subject to section 1.2

Examples of undertakings that can qualify for ESOS include:

- limited companies.
- public companies.
- Trusts.
- Partnerships.
- private equity companies or limited liability partnerships.
- unincorporated associations
- not-for-profit bodies (please note that most larger charities will be a corporate body and as such are considered to be an undertaking).
- universities which get more than half their funding from private sources.

Please note that tuition fees paid for via student loans are treated as private funding for the purpose of determining the qualification status for a university or other higher education institution. Tuition fee grants should be treated as funding from a contracting authority. All other funding for such institutions should be evaluated to determine its funding origin.

1.2. Who does not qualify for ESOS?

You are not required to participate in ESOS if:

- your organisation is defined as a body governed by public law (previously referred to as a contracting authority) in:
 - o Procurement (Public Sector Contracts) Regulations 2016;
- your undertaking is subject to an insolvency procedure.
- you do not meet the qualification criteria outlined in section 1.1.

Where you are part of a corporate group and only parts of the group fall into the categories above then the rest of the group will be required to participate in ESOS if they qualify.

If an undertaking only voluntarily complies with the Procurement (Public Sector Contracts) Regulations 2016, they will still need to participate in ESOS.

Where a private organisation is undertaking work as a subcontractor for an organisation subject to the public contracting regulations they will still need to assess their qualification in the normal way. If they qualify they will need to participate in the scheme and include energy supplies which are deemed to be their responsibility (see section 3.5 for details).

Even if you do not qualify for ESOS, e.g. if you are an SME, you may wish to undertake an ESOS assessment in order to identify ways to reduce energy consumption and to demonstrate your commitment to energy efficiency. Organisations which wish to do so are able to voluntarily notify that they have complied with the requirements of ESOS through the ESOS notification process, and can then have their details published by the Department of the Environment and Climate Change as part of the list of ESOS compliant organisations.

1.3. Calculating whether you meet the qualification thresholds

To find out if you qualify you will need to use your total employee numbers (calculated in accordance with section 1.4), and your turnover and balance sheet totals (see section 1.5) used in your accounts for the financial year ending either:

- on the qualification date of 31 December 2014.
- in the 12 months immediately preceding the qualification date of 31 December 2014.

If your undertaking is close to the qualification thresholds, or has grown/shrunk recently read section 1.6 which includes additional information to help you establish if you qualify.

1.4. Definition of an employee

A person is employed by an undertaking if they are:

- an employee.
- an owner / manager.
- a partner.

An 'employee' is a person employed under contracts of service. Their contracted hours and status (full time / part time) are irrelevant to their classification as an employee.

The number of employees means the average number of people employed by the undertaking in the year.

To determine whether you meet the employee criteria you need to work out your average number of employees in the relevant accounting period:

- note the number of people employed by the company for each month of the financial year (whether for the whole month or part of it).
- add together the monthly totals.
- divide by the number of months in the financial year.

If you are a Gibraltar undertaking which directly (i.e. not via a foreign subsidiary) employs people who are based overseas, you must still include them in your employee count.

You usually do not have to count agency workers as employees but you should check their contracts with a legal advisor to confirm this.

If you sub-contract work then you should talk to the Income Tax Office to find out if the sub-contractors are considered your employees.

If you're a sub-contractor and you take on work for an organisation that's subject to the Procurement (Public Sector Contracts) Regulations, this does not necessarily mean that the work you do for them is excluded from ESOS.

Under the Companies Act, your organisation is likely to be reporting the number of its employees in its annual reports to Companies House. The rules used to calculate the figures for the annual report should be used for the purpose of determining qualification with ESOS.

If you are an overseas company with a Gibraltar establishment you should determine your qualification based on the number of Gibraltar employees who pay income tax in the Gibraltar.

Example of calculating employees:

Company A's financial year runs from 1 April to 31 March the following year.

At the qualification date (31 December 2014) for the first ESOS compliance period, Company A's most recent set of financial statements are those for the year to 31 March 2014.

This means Company A must calculate the number of employees during that period.

On 1 April 2013, Company A had five directors and 235 employees. On 10 July 2013 Company A hired 20 more employees.

There were no further changes in employee or director numbers before the end of the year. For 3 months in its financial year (April, May and June) Company A had a total of 240 staff (5 directors plus 235 employees).

For 9 months of the year (July 2013 to March 2014) the company had a total 260 staff (5 directors and 255 employees).

For ESOS purposes, Company A's number of employees for the year is: $[(240 \times 3) + (260 \times 9)] / 12 = 255$

Company A exceeds the employee threshold of 250 at the qualification date. (However since they have recently gained staff they would need to look back over previous years' totals to establish if they qualify for ESOS - see section 1.6).

1.5. Meeting the financial conditions

To find out if you meet the financial threshold, you must calculate your turnover and balance sheet total.

You should start by checking your organisation's most recent annual financial statements, ending on or in the 12 months before 31 December 2014.

If you are unsure if your corporate group contains a large undertaking, each entity in a corporate group may need to look at the accounts required under the Companies Act 2014 Section 281 (duty to prepare individual accounts) or 238 (individual accounts: applicable accounting framework). Where an undertaking is not required under the Companies Act 2014 to produce individual accounts they may need to estimate the annual turnover and annual balance sheet total for the undertaking for a 12 month period including the qualification date.

In summary;

"turnover", in relation to an undertaking, means the amounts derived from the provision of goods and services falling within the company's ordinary activities, after deduction of:

- a) trade discounts,
- b) value added tax, and
- c) any other taxes based on the amounts so derived;

"balance sheet total" means the aggregate of the amounts shown as assets in the company's balance sheet (that is before deducting both current and long-term liabilities).

If your undertaking is registered in Gibraltar but directly owns or runs overseas activities (which are not subsidiaries), then you should include the turnover and balance sheet total contributions of these activities as you assess whether that undertaking qualifies in its own right.

If a Gibraltar company owns overseas subsidiaries then the turnover and balance sheet totals of those companies are not included in the assessment of qualification for the Gibraltar undertaking.

1.6. Organisations which are very close to the qualification thresholds or have recently shrunk or grown

If your organisation is very close to the threshold for qualification or has recently grown or shrunk then you may need to look back over several accounting periods to establish if you qualify. This is because the status of an organisation is determined by whether they have maintained their size for at least two consecutive accounting periods. The exact wording from the regulations is as follows: "Where, in any accounting period, an undertaking is a large undertaking (or a small or medium undertaking, as the case may be), it retains that status until it falls within the definition of a small or medium undertaking (or a large undertaking, as the case may be) for two consecutive accounting periods."

So for example:

An organisation that was over the ESOS qualification threshold every year for the last 10 years and then shrunk in the accounts ending in April 2014 would still qualify for ESOS. This is because it has not maintained the smaller size for two consecutive accounting periods, so it is still considered as a large undertaking.

Conversely, if for the last five years a company did not meet the qualification thresholds and then has grown in its accounts ending in December 2014 (and now meets the qualification thresholds) then it would not qualify for ESOS. This is because it has not maintained the large undertaking size for two consecutive accounting periods, so it is still counted as a small or medium undertaking.

The table below provides additional examples:

		2010	2011	2012	2013	2014
Company A	Over	✓	✓			✓
	threshold					
	Under			✓	✓	
	threshold					
Company B	Over	✓	✓		✓	
	threshold					
	Under			✓		✓
	threshold					

Company A is an SME and is not in scope of ESOS - although it meets the criteria of a large undertaking in the 2011 and 2014 accounting periods, it is not in scope of ESOS because it does not meet the large undertaking criteria for two consecutive accounting periods.

Company B is a large undertaking and is in scope of ESOS - although it falls below the criteria of a large undertaking in 2012 and 2014, it is in scope of ESOS because the last time it had two consecutive accounting periods at the same size it met the large undertaking criteria.

If an organisation has been fluctuating above and below the threshold year-on-year then the organisation will have to go back as far as is takes to find two consecutive years where the same status exists. This will then determine the organisational status for the purpose of its ESOS qualification. There is no end date for how far back organisations may have to go to determine this information (i.e. they may have to go back to before the current ESOS compliance period).

If, since the organisation was formed, an organisation has never maintained two consecutive years at the same size then the size in the year it was formed will be what determines its organisational status for the purpose of its ESOS qualification. If an organisation has only been in existence for a few months it will take the average number of employees during that period and consider its finances on a pro-rata basis to determine its qualification status.

Please note, if you are close to the qualification threshold and are looking back at previous years' accounts then the exchange rate on the qualification date for the compliance period is what determines the pound sterling qualification thresholds for all previous years (not the exchange rate at the time of the accounts). Therefore the figures which are relevant for compliance period one are an annual turnover in excess of £38,937,777, and an annual balance sheet total in excess of £33,486,489.

1.7. Corporate groupings for qualification and participation

If a corporate group contains at least one undertaking in Gibraltar which meets the qualification conditions, its entire Gibraltar operation must take part in ESOS.

A corporate group is defined in the Companies Act 2014. Sections 2, 277 and 276, of that Act show how to identify if an undertaking is a parent to or subsidiary of another undertaking.

The highest Gibraltar parent of a group is the undertaking which has no parent, or only has parents which are overseas undertakings. All subsidiary undertakings of that highest Gibraltar parent would, by default, be part of the same participant for ESOS.

By default the highest parent acts as the responsible undertaking – this means it will complete the ESOS Assessment and notify the Department of the Environment and Climate Change of compliance for itself and subsidiary undertakings.

Another undertaking within the highest parent group can be chosen to act as the responsible undertaking provided all undertakings in the highest parent group agree this in writing, and keep this agreement.

Undertakings within a highest Gibraltar parent group can disaggregate from one another for the purposes of compliance with ESOS, provided they agree in writing with their highest parent.

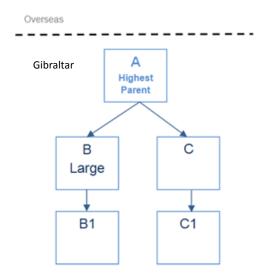
Undertakings that disaggregate will therefore report compliance as two or more separate participants. See section 1.8 for more details.

If a corporate group contains overseas parent undertakings, the corporate group may consist of more than one highest Gibraltar parent group. In this instance, if one highest Gibraltar parent group is in scope of ESOS then every other highest Gibraltar parent group in the same global group must also participate in ESOS. However, the default is that in this circumstance each highest Gibraltar parent group will participate separately.

If the highest Gibraltar parent groups within the same corporate group wish to comply as one participant (to 'aggregate') all highest parents in those highest parent groups must agree in writing which of them is to be the responsible undertaking in relation to the participant's compliance with the scheme. See section 1.9 for more details.

1.7.1. Examples of how to identify the corporate groupings for qualification

Example 1: when all companies are Gibraltar undertakings



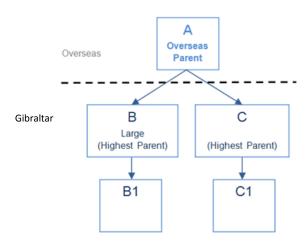
Company A has two subsidiaries: B and C. Company B has one subsidiary, B1, and Company C has one subsidiary, C1.

These companies make up a corporate group. All the companies are Gibraltar undertakings.

B qualifies as a large undertaking and so they must all participate in ESOS.

Here, Company A is the highest parent and the companies jointly make up a highest Gibraltar parent group since they share a common highest Gibraltar parent.

Example 2: corporate group with overseas parent



A is an overseas undertaking. Both B and C are highest Gibraltar parents since neither has a Gibraltar based parent.

In this case there are two highest parent groups in the overall corporate group.

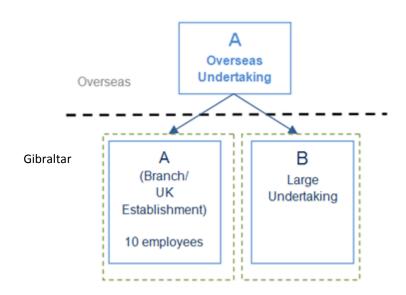
Even though B is the only large undertaking in the group, C and C1 will still need to comply with ESOS since they are part of the same corporate group as B.

The fact they aren't in the same highest Gibraltar parent group as B is irrelevant to their ESOS qualification.

For participation B and B1 would form one participant (highest Gibraltar parent group), while C and C1 would form another unless they agree to aggregate.

A would not be required to participate because it is not an undertaking in Gibraltar.

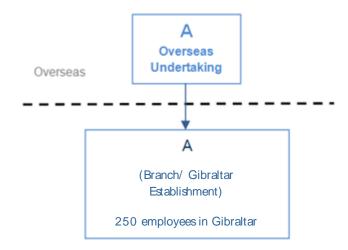
Example 3: corporate group with Gibraltar establishments and Gibraltar large undertakings



A is an overseas undertaking with a branch in Gibraltar which is registered at Companies House as a Gibraltar establishment. As B is a large undertaking both A and B qualify for ESOS and they are both highest Gibraltar parents since neither has a Gibraltar based parent.

In this case there are two highest parent groups in the overall corporate group. They can agree to aggregate or participate separately to meet their obligations under ESOS.

Example 4: corporate group with Gibraltar large establishment



A is an overseas undertaking with a branch in Gibraltar which is registered at Companies House as a Gibraltar establishment. A employs 250 staff in Gibraltar. A therefore must comply with ESOS.

1.7.2. Joint ventures

An undertaking is a parent undertaking in relation to another undertaking (a subsidiary undertaking), if:

- it holds a majority of the voting rights in the undertaking, or
- it is a member of the undertaking and has the right to appoint or remove a majority of its board of directors, or
- it has the right to exercise a dominant influence over the undertaking:
 - (i) by virtue of provisions contained in the undertaking's articles, or
 - (ii) by virtue of a control contract, or
- it is a member of the undertaking and controls alone, pursuant to an agreement with other shareholders or members, a majority of the voting rights in the undertaking.

For the purpose of ESOS qualification assessment and compliance an investor (undertaking) will only be deemed to be in the same corporate group as a company it invests in if it meets one of the points above.

Joint ventures where:

- no organisation holds a majority of the voting rights in the undertaking, or
- no organisation is a member of the undertaking and has the right to appoint or remove a

- majority of its board of directors, or
- no organisation has the right to exercise a dominant influence over the undertaking:
 - (i) by virtue of provisions contained in the undertaking's articles, or
 - (ii) by virtue of a control contract, or
- no organisation is a member of the undertaking and controls alone, pursuant to an agreement with other shareholders or members, a majority of the voting rights in the undertaking.

will need to assess their qualification for ESOS on their own and will participate in the scheme in their own right if they qualify.

1.7.3. Franchises

For the purpose of determining ESOS qualification franchisors are not grouped with their franchisees (unless they are also a parent undertaking of the franchisee undertaking).

If a franchisor and one or more franchisees all individually qualify and wish to comply as one participant this is allowed.

This is subject to a written agreement between all parties, and one undertaking becoming the responsible undertaking.

Please keep all details relating to which organisations are participating together in your evidence pack.

1.7.4. Trusts

Assets held in trust must be included in ESOS if the organisation that's party to the agreement for the supply of energy to the assets qualifies for ESOS.

The qualification of these parties is determined in the normal way.

Where there is no energy supply the trust assets will not need to be included in an ESOS assessment because trust assets only fall into ESOS if an energy supply agreement is held. Please note that the concept of a supply agreement being in place only affects the qualification of trusts for ESOS, all

other types of undertaking which meet the qualification criteria will be required to participate in ESOS if they meet the qualification criteria.

The figure below summarises how responsibility for ESOS compliance for a trust asset is determined.

- A) Qualifying dominant beneficiary arranges the supply of energy to the assets
- The dominant beneficiary is required to include the relevant trust assets in their organisation's ESOS Assessment unless they enter a written agreement (between directors) with another undertaking to take responsibility.
- B) Qualifying alternative investment fund manager (AIFM) or the operator arranges the supply of energy to the assets

or

- C) Qualifying trustee arranges the supply of energy to the assets and there is a qualifying AIFM or operator
- The AIFM/operator is required to comply with ESOS on their own behalf in relation to the energy consumption of the relevant trust assets. They will make one notification for the relevant trust assets and another for their own organisation.
- •The AIFM/operator can not pass responsibility to a third party.
- D) Qualifying trustee arranges the supply of energy to the assets and there is no qualifying AIFM or operator
- The trustee is required to comply with ESOS on their own behalf in relation to the energy consumption of the relevant trust assets unless they enter a written agreement (between directors) with another undertaking to take responsibility.

Where two or more qualifying undertakings (who are an AIFM, operator, trustee or dominant beneficiary) arranges the supply of energy to the assets, they must agree which of them is required to comply with ESOS in relation to the energy consumption of the relevant trust asset.

Trustees, operators/AIFMs and third party undertakings which have a responsibility to undertake an ESOS Assessment in relation to assets held in trust must participate separately in relation to the trust, themselves and any other trust for which they have ESOS responsibilities.

1.7.5. Private equity firms and Private Finance Initiatives (PFI)

Private equity firms and their portfolio companies are treated in the same way as other undertakings. They will need to establish whether they are legally part of the same corporate group in accordance with Sections 2, 277 and 276, of the Companies Act 2014.

If having established the groupings the private equity firm is deemed the parent undertaking and at least one undertaking qualifies then the whole group would need to comply with ESOS. The parent could take responsibility for all the subsidiaries or could choose to disaggregate them if it chose to. Undertakings involved in PFI arrangements will also have to determine whether they are legally part of any corporate group in accordance with the Companies Act 2014 or whether they are a standalone undertaking. If the undertaking qualifies or is part of a qualifying corporate group then they will need to participate in ESOS.

Having established whether an undertaking qualifies the responsibility for energy supplies is determined in the normal manner. See section 3.3 onwards.

1.8. Disaggregation of undertakings from the highest Gibraltar parent group

Undertakings within a highest Gibraltar parent group can disaggregate from the rest of the group if they wish.

This allows them to participate in ESOS individually, or as smaller groupings.

When undertakings choose to disaggregate:

- individual undertakings participating on their own act as their own responsible
- undertaking
- undertakings participating as smaller groups must agree which one will act as the
- responsible undertaking.

To disaggregate, an undertaking must have an agreement in writing with the highest parent.

The agreement in writing should be made between individuals with management control of the undertakings involved (board directors or equivalent).

Disaggregation may help you manage ESOS participation, for example, if parts of your group operate separate energy management processes or company finances.

Disaggregation does not exempt subsidiaries from participating in ESOS. Each resulting participant, after disaggregation has been agreed, will need to fully comply on their own behalf including working out their total energy consumption and ensuring that 90% of their energy is covered by a compliance route.

The answers you provide to the questions in the ESOS notification will show your regulator that disaggregation has occurred.

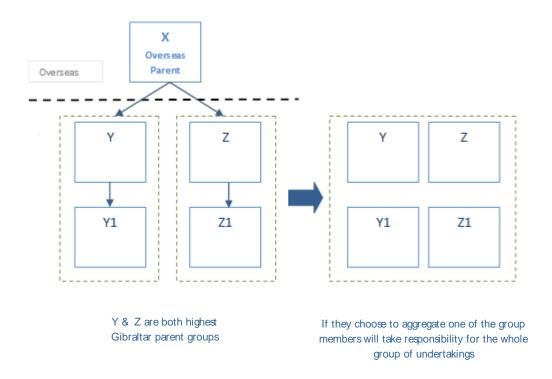
Where there is no agreement in writing from both parties, the liability for compliance will rest with the organisation that has been determined as the responsible undertaking for the participant containing the highest Gibraltar parent in the group (either the highest Gibraltar parent itself or another agreed undertaking).

Where agreement in writing for the disaggregation for both parties can be evidenced and one party has not complied then liability for compliance will rest with the responsible undertaking of the participant that has not complied.

1.9. Aggregation of highest Gibraltar parent groups

If there's more than one highest Gibraltar parent in a corporate group, the highest Gibraltar parent groups can choose to aggregate if they want to comply as one participant. Aggregation between highest Gibraltar parents and their undertakings requires the mutual consent of the highest parents. The aggregation of two or more highest Gibraltar parent groups does not prevent parts of any of those groups from disaggregating from the larger whole for the purposes of compliance – provided all the Gibraltar organisations in the overall corporate group comply.

The diagram below exemplifies aggregation:



1.10. Changes to groups of undertakings

If one or more undertakings leave a qualifying group between the ESOS qualification date (31 December 2014 for the first compliance period) and the compliance date (5 December 2016 for the first compliance period) the undertakings must still comply with ESOS.

An undertaking can comply:

- with its previous group,
- with its new group,
- on its own, in the absence of a written agreement with the previous or new group.

If a qualifying group purchases an undertaking (between the qualification date and the compliance date) from an organisation that did not qualify for ESOS then the energy supplies do not need to be included in your total energy consumption calculation and will not need to be audited or covered by an alternative route to compliance.

If a qualifying group sells an undertaking to an organisation that did not qualify for ESOS then the energy supplies of the purchaser do not need to be included in ESOS. Only the energy supplies of the undertaking that has been purchased will be subject to ESOS.

2. Deadlines

2.1. Compliance periods and compliance dates

Qualification is based on the status of your organisation on 31 December 2014, and every four years after that for each subsequent compliance period.

If your organisation qualifies, you must participate in ESOS and notify compliance to the Department of Environment and Climate Change by the last date of each compliance period ('the compliance date').

The table below shows the qualification dates, compliance periods and compliance dates.

Compliance period	Qualification date	Compliance period	Compliance date
1	31 December 2014	From 06 October 2016* to 5 December 2016	5 December 2016
2	31 December 2018	From 6 December 2016 to 5 December 2019	5 December 2019
3	31 December 2022	From 6 December 2019 to 5 December 2023	5 December 2023
4	31 December 2026	From 6 December 2023 to 5 December 2027	5 December 2027

*The ESOS Regulations came into force on the 6th of October 2016. The first compliance period can only be specified as starting from the date of the regulations coming into force. However, energy audits and alternative compliance routes conducted up to 4 years before the first compliance date (i.e. since 6 December 2012) can be used towards compliance for the first compliance period.

If you believe that you will not meet the deadline of 5 December 2016 please read Section 9 on compliance and enforcement which outlines the steps you need to take.

2.2. Organisational status changes after the qualification date

If your status changes after the qualification date for a compliance period, this will not affect your eligibility for ESOS. You will still need to comply by the compliance date for the period if you qualified for the scheme on the qualification date. Therefore if you qualify for the first compliance

period based on your organisational status on 31 December 2014 you will need to comply by 5 December 2016 regardless of any changes to your size or structure during the intervening months.

Your status at the next qualification date, 31 December 2018, will determine whether you qualify for the second compliance period.

3. Carrying out an ESOS assessment

3.1. ISO 50001 certification covering all your energy use or zero energy supplies

If you have an ISO 50001 energy management system that's certified by an accredited certification body and covers all your energy use (for the whole corporate group in Gibraltar), this counts as your ESOS assessment.

To be compliant:

- the certification must remain valid at the compliance date.
- the Energy Management System must cover all of the assets held and activities carried on by your organisation as at the qualification date.

If you take on new assets, undertakings, or activities in the compliance period and your ISO certification covers your entire organisation or group, then these changes will not prompt a requirement for recertification for continuing compliance with ESOS, provided the newly acquired assets/undertakings/activities are within the scope of the certification.

If you are compliant via this route you would not need to calculate your total energy consumption and would not require a lead assessor to comply with ESOS. However you will still need to:

- get a board level director to confirm that they have reviewed findings of your ISO 50001 certification, the organisation is compliant and the information which is going to be entered in the notification is correct.
- make a notification to the Department of the Environment and Climate Change (via email esos.environment@gibraltar.gov.gi) to specify that this is how you are compliant with ESOS.

If only some of your energy use is covered by ISO50001 you will need to continue reading the guidance to ensure you comply fully with ESOS.

If you have zero energy supplies (for example, you exceed the financial thresholds to participate in the scheme but have no physical assets or employees using energy) then you do not need to appoint a lead assessor in order to complete a notification of compliance. However you will need to:

- get a board level director to confirm that although your organisation qualifies for the scheme, they agree that it has no energy responsibility.
- make a notification to the Department of the Environment and Climate Change (via email esos.environment@gibraltar.gov.gi) to specify that this is the case.

3.2. No ISO 50001 certification or it only covers part of your energy use

If you don't have an ISO 50001 energy management system which covers all your energy use, you must carry out an ESOS assessment.

To do this you will need to do all of the following:

- measure your total energy consumption,
- identify areas of significant energy consumption,
- consider available routes to compliance,
- ensure areas of significant energy consumption are covered by a route to compliance,
- appoint a lead assessor (unless you have zero energy see section 6),
- get one or more board level directors to review the findings of the assessment,
- make a notification of ESOS compliance online.

3.3. Measuring your total energy consumption

You must calculate your total energy consumption (unless you are fully covered by ISO 50001 - see section 3.1). This must be calculated in a common unit, which can either be an energy unit (such as kWh) or energy spend in pounds sterling. Please note that CO2 is not an energy unit.

Your total energy consumption includes all input energy use, e.g. buildings, industrial processes and transport. All energy consumed in Gibraltar by a qualifying group needs to be included (regardless of whether the asset is held directly by an overseas undertaking within the qualifying group rather than a Gibraltar undertaking or Gibraltar establishment).

The purpose of this calculation is to help you identify what energy your assets/activities use and which assets/activities you will subsequently need to ensure are covered by a route to compliance.

This figure will not need to be provided in your ESOS notification. However, if you are audited by your regulator you may be required to provide this figure and the evidence used to determine it.

3.4. How energy is defined

Under ESOS, energy is defined as all forms of energy products, including:

- combustible fuels,
- heat (excluding your organisation's surplus heat from industrial processes),
- renewable energy,
- electricity.

There are no fuel type exemptions in ESOS.

3.5. What energy supplies to include in your total energy consumption calculation

Generally, energy that is both supplied to and consumed by an organisation is in the scope of ESOS. For the purposes of calculating your total energy supply, which is done to identify your areas of significant energy consumption, you only need to consider input energy. Therefore where heat is one of your sources of energy you will only include it where you are importing the heat to your site or process. Where the heat is obtained by converting another source of energy such as gas into heat (on site) then exclude the heat produced to avoid double counting. However, please note that all heat must be included in your audits and energy profiles.

'Energy supplied' means any energy that your organisation uses under an agreement with a supplier or third party. This includes energy that's supplied to assets you hold or activities your organisation carries on and includes buildings, installations, transport and construction activities.

Only energy consumed in Gibraltar by a qualifying group needs to be included. Do not include energy which your organisation uses overseas, unless it involves international travel in which case special rules can apply (see section 3.5.4).

3.5.1. Assets you hold and activities you carry on

You only need to include energy consumption in relation to activities that you are carrying on and any assets that you held on the qualification date (31 December 2014) and still hold on the

compliance date (5 December 2016). You may elect to exclude from the total energy consumption calculation energy consumed by any asset which is no longer held by you, or by any activity which is no longer carried on by you on the compliance date. Note that holding an asset does not mean you have to own the asset (e.g. you may be borrowing, using, renting or leasing the asset).

3.5.2. Buildings

All energy use in buildings is included in ESOS.

In relation to multi-tenanted buildings and landlord-tenant relationships, under ESOS the responsibility to include energy within an organisation's total energy consumption calculation is determined by whether the participant is

- (1) supplied with that energy and
- (2) consumes that energy by the assets it holds or by the activities it carries out.

Where that participant supplies energy to another organisation and it is measured or can be reasonably estimated, that energy does not form part of their total energy consumption calculation.

The landlord and tenant should determine between themselves who is responsible for the energy based on the information above and bearing in mind that the organisation with the ability to control the energy use should take responsibility for the energy supply and audit it to identify energy saving opportunities.

Where an ESOS participant moves from one building, or asset, to another during the period between the qualification date (31 December 2014) and the compliance date (5 December 2016) then they will have to include in their total energy consumption calculation, the energy use for the activities that are carried out in the original building and are being moved to the new building (such as use of computers, copiers, manufacturing processes, etc), where measured or able to be reasonably estimated, but not energy uses associated with the buildings themselves (such as heating, ventilation air conditioning, lifts, etc).

You will need to include the energy used in the building in your total energy consumption calculation even if the building is unoccupied on the qualification date.

Where an employee is working from home you do not need to include the energy used by them, in their homes, in your total energy consumption calculation.

3.5.3. Installations (including Combined Heat and Power plants (CHP))

Large installations generating or using energy are included in your total energy consumption calculation.

In a CHP or other power generation process only the incoming fuel and mains electricity, needs to be included in the calculation of your total energy consumption for the purpose of ESOS. You don't need to include the heat created and used and electricity created and used by your organisation in the calculation however you will need to audit these if you choose to include the input fuel in your significant energy consumption, see section 4.

3.5.4. Transport

Energy consumption from transport is included in ESOS. You are only required to include transport where your organisation is supplied with the fuel for business purposes, not where you procure a transportation service that includes an indirect payment for the fuel consumption.

When calculating your energy consumption from transport activities, you may make reasonable estimations based on verifiable data (e.g. expenditure) in cases where you do not have actual usage data (e.g. litres). For instance, you could use the number of expensed miles multiplied by an average fuel consumption factor to estimate the usage (See Appendix A, section A.9 for a worked example). Where estimates are used the reason and method of estimation should be kept in your evidence pack.

Energy consumed for the purposes of transport means energy used by a road going vehicle, a vessel, an aircraft or a train;

- "aircraft" means a self-propelled machine that can move through the air other than against the earth's surface,
- "road going vehicle" means any vehicle in respect of which a vehicle licence is required under the Vehicle Excise and Registration Act 1994(1), or which is an exempt vehicle under that Act,
- "train" has the meaning given in section 83 of the Railways Act 1993(2), and
- "vessel" means any boat or ship which is self-propelled and operates in or under water.

The energy consumption of a participant includes energy which is consumed for the purposes of transport by an aircraft or a vessel during the course of any journey which:

- (a) starts,
- (b) ends, or
- (c) both starts and ends

within Gibraltar. For the purposes of ESOS, the definition of a "journey" for both aircraft and sea vessels is the travel which takes place between the departure from one point, and arrival at the next point.

A participant may elect to include:

- (a) energy consumed for the purposes of transport by an aircraft or a vessel, during the course of a journey which both starts, and ends, outside Gibraltar,
- (b) energy consumed outside Gibraltar for the purposes of transport by a road going vehicle or a train.

The following activities should be included in your calculation of your total energy consumption:

- Fuel used in company cars on business use,
- Fuel used in fleet vehicles which you operate on business use (see Appendix A, A.8),
- Fuel used in personal/hire cars on business use,
- Fuel used in private jets, fleet aircraft, trains, ships, or drilling platforms which you operate.

The following activities should not be included in your calculation of your total energy consumption:

- Fuel associated with train travel of your employees where you do not operate the train,
- Fuel associated with flights your employees take where you do not operate the aircraft,
- Fuel associated with taxi journeys your employees take where you do not operate the taxi firm,
- Fuel associated with transportation of goods where you subcontract a firm or self-employed individual to undertake this work for you (this fuel will be included in the subcontractor's total energy consumption calculation if they qualify).

3.5.5. Construction Activities

Assets which you hold on the qualification date (31 December 2014) and still hold on the compliance date (5 December 2016) should be included in your total energy consumption calculation. Therefore assets which you hold such as portable buildings and machinery (regardless of which site they are on) should still be included in the calculation of total energy consumption because that is still an asset of your organisation on the compliance date.

Items that would not have to be included in the calculation of total energy consumption include show homes or the office building under construction where you use grid electricity in the building during the construction of it but which you will no longer have responsibility for on the compliance date. However if you are using generators on sites then you must include the input fuels in your total energy consumption if you hold them on the qualification date and the compliance date.

The nature of the construction sector is such that the approach to energy audits needs to be done in a way which is going to lead to the most benefit to the participant in terms of identification of energy saving opportunities. This may mean that it is more relevant to look at the overall activities you undertake (rather than target specific sites because construction sites are temporary and energy consumption is directly related to the stage of construction) and identify policies and opportunities that if instigated across the whole of your business would lead to energy efficiency savings. Hence for a range of construction activities such as excavation, site cabin use, on-site generators and so on, where the energy is your responsibility it will need to be audited and where practicable you should identify cost effective opportunities for energy savings.

Please ensure that you record in your evidence pack your rationale for your ESOS assessment.

3.5.6. Energy that isn't in scope

The following types of energy are not in scope of ESOS:

- unconsumed energy that your organisation doesn't use, and supplies to a third party;
- energy consumed outside Gibraltar;
- energy consumed for international travel or shipping where the journey doesn't start or end in Gibraltar (unless the organisation wishes to include their international travel).

You can deduct unconsumed supplies from your total provided:

- the supply is measured (for example with metering),
- the supply can be calculated based on verifiable data, or
- it can be reasonably estimated.

Where a reasonable estimate is made, please keep the details of the assumptions and methodology in your evidence pack.

3.6. Reference period

You must calculate your total energy consumption over a reference period of 12 consecutive months.

The reference period must include the qualification date and end before the compliance date. If you can't use data for a full 12 months, then you should use as close to 12 months as is reasonably practicable and explain why in your evidence pack.

The reference period should be the same 12 month period for all energy supplies. If you don't have data for part of your reference period, you can use estimates to fill in any gaps.

3.7. Using verifiable data

When calculating your total energy consumption, you must use verifiable data where reasonably practicable.

Verifiable data is data you can prove, for example:

- an invoice or delivery note;
- meter reading records and schedules for electricity or natural gas;
- stock records and readings for stored liquid, solid fuels and waste;
- automatic meter reading or smart and half hourly meter data outputs, for electricity and natural gas.

If you can't obtain verifiable data of energy use or spend you should:

- explain why in your evidence pack.
- use a reasonable estimate derived through calculation (based on other verifiable data, if possible), and show how you got this figure.
- keep records in your evidence pack.

ESOS participants may also be part of other energy management/reporting schemes, like:

- the EU Emissions Trading System (EU ETS)
- Voluntary greenhouse gas (GHG) reporting for Gibraltar companies.

Please note that simply being part of these other schemes does not automatically count as ESOS compliance for the energy covered by those regimes. You can use energy data you collect as part of your compliance with these schemes to calculate your total energy consumption for your ESOS Assessment but you are likely to have to do additional work to ensure you are also compliant with ESOS.

The scope of energy you must include in your total energy consumption under ESOS is broader than what's covered by these mandatory and voluntary schemes. This means that it's unlikely you'll be able to calculate your total energy consumption based on what data you collect for these schemes alone.

3.8. How to estimate

If you can't get verifiable data, you can fill in the gaps by estimating data.

To do this, you could use:

- direct comparison,
- pro-rata extrapolation,
- benchmarking.

Direct comparison means using figures from another comparable time period to fill the gap, (for example the same day/week/month in another year).

Pro-rata extrapolation means using figures you have for one period of time to get average consumption figures for a shorter period.

For example, you could use the average day rate of energy use for 1 March 2015 to 25 March 2015 to estimate the energy used between 26 and 30 March 2015.

Benchmarking means using the energy consumption of one asset or activity as a proxy to estimate the consumption of another asset.

For example, you could use the annual energy use of one retail outlet to estimate how much energy another retail outlet uses, particularly if they were similar size, age, or build.

4. Identifying areas of significant energy consumption

After you've calculated your total energy consumption, you must identify assets and activities that amount to at least 90% of your total energy consumption.

These are your areas of significant energy consumption and comprise the assets and activities you will audit or ensure are covered by an alternative route to compliance.

This means you can exclude up to 10% of your total energy consumption from any audit or alternative compliance measures.

This 10% is your "de minimis energy consumption". You can classify whichever activities you choose as de minimis energy consumption.

This means you can exclude energy on:

- a group basis for example excluding the consumption of a one or more undertakings;
- a site basis for example excluding the consumption of a particular site or number of sites;
- an asset/activity basis for example excluding the consumption of an asset or activity, or a defined list of assets or activities
- a fuel basis for example excluding consumption associated with the use of a particular fuel or fuels.

You could also exclude energy using a combination of the above.

If you do not choose to identify your areas of significant energy consumption then you must audit your total energy consumption or cover it under another route to compliance.

Supplies which were not required to be included in the total energy consumption calculation (in accordance with the rules set out in section 3.5) are excluded from all future calculations.

As a result these supplies would not have to be included in your significant energy consumption, would not need to be covered by a route to compliance or included in the de minimis energy use.

5. Considering available routes to compliance

You must choose one or more routes to compliance that cover all your areas of significant energy consumption (see section 4).

You can demonstrate that you've made a compliant ESOS assessment using:

- ISO 50001 certification,
- ESOS compliant energy audits.

If you choose to comply with ESOS using an existing certification or assessment, it must have been issued after 5 December 2012 and be valid at the compliance date – 5 December 2016 for the first compliance period.

Previous audit work, for instance performed as part of other energy audit schemes, can be used towards compliance for ESOS, provided it:

- was conducted within the compliance period, and
- meets the minimum requirements of an ESOS energy audit (see section 5.4.1).

You should keep a record of how your areas of significant energy consumption are covered by your compliance routes, in your ESOS Evidence Pack.

5.1. ISO 50001 certification as a partial compliance route

If you have a certified ISO 50001 energy management system that covers all your energy usage, you don't need to do an assessment or use a lead assessor to review your compliance (see section 3.1). If you are using ISO 50001 as one of your routes to compliance then the energy management system must be certified by one of the following:

- a United Kingdom Accreditation Service (UKAS) accredited certification body;
- a body accredited by another EU member state's national accreditation body;
- a body accredited by a body which is a member of the International Accreditation Forum.

The proportion of the total energy consumption covered by the ISO50001 certification will need to be determined. If it covers over 90% (all your significant energy consumption) no further compliance

routes would be needed for your compliance. However, you would need a lead assessor to review your compliance. If it does not cover 90% of your total energy consumption then you will need to combine the energy covered by the ISO 50001 certification with the energy covered by the other compliance routes to ensure that overall at least 90% is covered.

Energy directly covered by an ISO50001 certification can be considered fully compliant with ESOS and does not need any further review. In order for this to be the case, the ISO50001 certification body must be accredited by an EU national accreditation body or an accreditation body that is a member of the International Accreditation Forum.

5.2. Auditing areas of significant energy consumption

You must audit your areas of significant energy consumption which aren't covered by one of the alternative routes to compliance.

You can do this specifically to comply with ESOS, or you can use previously undertaken energy audits to contribute to ESOS compliance.

Any audits you use must meet the minimum energy audit requirements set out below.

5.2.1. Minimum energy audit requirements

The data used in any ESOS energy audits must:

- detail a period of 12 consecutive months' energy use for the asset or activity.
- begin no earlier than 12 months before the start of the compliance period (for the first compliance period they must begin no earlier than 6 December 2014).
- begin no earlier than 24 months before the start of the ESOS energy audit by the participant in the compliance period (for example, for an ESOS energy audit on say 1 December 2016, data must begin no earlier than 1 December 2014).
- not extend beyond the compliance date (that is, not extend beyond 5 December 2016 for the first compliance period).
- not have been included in energy audits for a previous compliance period.

The energy audit must, so far as reasonably practicable:

- analyse your organisation's energy consumption and energy efficiency.
- identify any way in which you can improve your organisation's energy efficiency

- recommend practical and cost effective energy saving measures for your organisation
- identify the estimated costs and benefits of any energy saving opportunity.

Where you are unable to use 12 months' data for your audits please provide justification in your evidence pack (see section 8.4) and make a reasonable estimate (see section 3.8) of the missing data.

All energy audits must be reviewed by an ESOS lead assessor (see section 6).

While your assessment of total consumption must use data for 12 months including the qualification date and be the same period for all assets and activities, you can use 12 months' data from other periods for the energy audits. The data used for the audits also does not need to cover the same 12 month period for all the assets/activities being audited.

For the purpose of the energy audits energy consumption should be analysed in energy units such as kWh. You can use whichever units of energy are most suitable for the area of energy use being assessed.

Energy cost data cannot be used for ESOS energy audits. The use of cost units when measuring energy consumption is only appropriate for the initial measurement of total energy consumption and identification of areas of significant energy use.

ESOS does not mandate specific energy auditing methodologies that must be used. Further guidance on some potential methodologies you may choose to use, for instance ISO 50002 or BS EN 16247, is included in Appendix A, section A.4.4.

'Energy supplied' means any energy that your organisation uses under an agreement with a supplier or third party. This includes energy that's supplied to assets you hold or activities your organisation carries on and includes buildings, installations, transport and construction activities. It also includes any energy your organisation generates itself, except capturing and consuming surplus heat from an industrial process.

Where a source of energy is used to create heat or electricity you will be expected to audit (and use energy consumption profiles for) both the process of converting the energy to heat and the assets/activities that use the heat and electricity.

5.3. Identifying energy saving opportunities

Your ESOS energy audit must include recommendations for cost-effective energy efficiency improvements in all aspects of your energy consumption (including efficiencies in generation, if you self generate, and the use of the energy), if there are any.

These recommendations could include, for instance:

- installing smart meters and energy monitoring tools.
- changing your service and maintenance strategy to ensure vehicles or machinery operate more efficiently.
- replacing enterprise travel with video conferencing where cost-effective.
- capital investment projects.
- behaviour change projects.

Your ESOS energy audit should calculate how much you could save from improved efficiency.

Where practicable, an ESOS energy audit should use life-cycle cost analysis (LCCA) instead of simple payback period (SPP) for cost-benefit analyses (see Appendix A section A.6 for more details).

5.4. Energy consumption profiles

You must use energy consumption profiling in your analysis of energy use for the ESOS energy audit. Energy consumption profiles are a breakdown of how energy is used by a particular asset or activity and how that energy use varies.

For example, in an office building, the energy consumption profile could include energy used for heating, ventilation, air conditioning, lighting, and appliances.

Your ESOS energy audit should review the energy consumption profile of buildings or groups of buildings, industrial processes and transportation.

ESOS provides flexibility in the use of energy consumption profiles for ESOS energy audits, as it may not always be possible or proportionate to develop energy consumption profiles.

If you do not include an analysis based on energy consumption profiles for an ESOS energy audit, you should outline the justification for this in your ESOS Evidence Pack and make reference to this in your compliance notification to the Department of the Environment and Climate Change.

Different types of profiles that may be useful are:

- Static profiles: these are useful in situations where there are many different energy uses within an asset or activity (e.g. at a manufacturing site) at any given time and the profile of energy use is poorly understood.
- Time profiles: these are useful in situations where there is a cyclical or identifiable pattern of energy use over time within an asset or activity and you want to (further) understand what is driving that pattern e.g. seasonal demand, weather, or human behaviour (e.g. shift patterns).
- Time interval profiles: this is where two or more time profiles are undertaken at intervals to identify any changes in energy use highlighted by the changing profiles (e.g. conducting short time profiles before and after the implementation of an energy saving measure).

5.5. Site visits

You must carry out site visits as part of your ESOS energy audit, but you don't have to visit every site where large undertakings hold more than one site.

You must make sure you've collected and analysed data for all your areas of significant energy consumption regardless of the number of site visits.

Organisations with multiple sites or assets that are identical or very similar can take a proportionate approach and apply the energy saving opportunities identified in their site visits to their wider portfolio.

The lead assessor and participant organisation should determine a suitable site visit sampling approach to reflect the energy consumption patterns of their assets and activities.

This is not prescribed in legislation and as such it is up to your organisation and lead assessor to agree this.

You need to explain in your evidence pack how the approach you took reflects the energy consumption patterns and saving opportunities for your portfolio of assets and activities.

In a compliance audit the regulators will look for well-reasoned and documented justifications for the approach you took and why conclusions from your sample of site visits would be applicable to the other sites covered in the sample.

In a multi-tenanted building where several parties may have responsibilities for ESOS compliance, one site visit and audit could be done for the whole building and all the supplies consumed within it.

This audit could be used as evidence of compliance in relation to a number of participants who had ESOS compliance responsibilities in relation to the building. If this approach were adopted, each participant would just need to record the energy saving opportunities applicable to them in their evidence pack. This arrangement is something that will have to be agreed, as appropriate, between the parties involved. Alternatively, individual participants can carry out their own audits of their specific energy use in the building.

6. Appointing a lead assessor

You will need to appoint a lead assessor to check that your assessment meets ESOS requirements unless 100% of your energy use is covered by ISO 50001 certification or you have zero energy responsibility under the ESOS rules. If you have zero energy you will still need to submit a notification to tell us that this is the case but you will not need to appoint a lead assessor.

You must specify who your lead assessor is when notifying the Department of the Environment and Climate Change that you comply with ESOS.

6.1. Finding a lead assessor

Your lead assessor must be a member of an approved ESOS lead assessor register. You can find a lead assessor on the approved register on the ESOS webpage at https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme

On the webpage of the approved registers there will be information on how to apply to be a lead assessor and lists of contact details and specialisms for approved lead assessors who are willing to act as lead assessors for third parties.

A lead assessor can be an employee of your business ("in-house") or a third party.

If you hire a lead assessor from outside your business, the overall ESOS Assessment, recommendations of any audit or alternative routes to compliance must be checked and signed off by one director.

If your lead assessor works for your business, the overall ESOS Assessment, recommendations of any audit or alternative routes to compliance must be checked and signed off by two directors.

When deciding which lead assessor to use, you may want to consider if they:

- have energy auditing experience in the right sector.
- are familiar with technology and processes in your industry.
- have experience of auditing against particular standards (e.g. ISO standards).

It is your responsibility to choose an individual with appropriate skills for your business.

6.2. What lead assessors do

Your lead assessor must review your ESOS assessment to consider whether it meets the requirements of the scheme.

This will involve:

- reviewing the calculation of total energy consumption.
- reviewing the determination of the assets and activities in your significant energy consumption (90% of the total energy consumption).
- confirming that the necessary certifications and evidence exist for any alternative routes to compliance.
- reviewing that the audits undertaken meet the minimum criteria for ESOS.

Your lead assessor can either:

- carry out your ESOS assessment and audits themselves.
- check that the assessment and audits done by people who aren't lead assessors meet the requirements.

Their role in the ESOS audits could involve undertaking, advising on, or reviewing the following activities:

- determining energy use profiles.
- calculating energy/cost savings of measures identified life-cycle cost analysis (LCCA) or another method like Simple Payback Period (SPP).
- identifying energy saving opportunities.
- presenting audit recommendations.
- developing a process for how new audits should be done.
- developing a sampling approach.
- developing an audit timetable.
- determining the number of site visits required.
- pulling together data for the ESOS evidence pack this is an information pack that shows how you carried out the assessment and audit.

Alternatively, other individuals can undertake these activities and the lead assessor can review them.

You are still solely responsible for:

- compliance with ESOS (your lead assessor will not be held responsible for compliance by the regulators).
- appointing a lead assessor.
- highlighting any audit work that's already been done and which you wish to have reviewed by a lead assessor for the purposes of ESOS compliance.
- agreeing the work that the lead assessor is undertaking.
- getting directors or senior managers to sign off that they have reviewed the audit findings or recommendations.

On this basis you should ensure that someone from the organisation understands the ESOS requirements and works together with the lead assessor to agree the approach your organisation is taking to its ESOS compliance.

Overall the lead assessor will need to review your assessment and consider whether it meets the requirements of the scheme regardless of the level of their involvement in the work undertaken for the ESOS assessment.

If your lead assessor reviews your ESOS assessment and does not believe that your organisation is compliant, you may still choose to submit your notification. In this case you should confirm that the assessment has been reviewed by a lead assessor and indicate that they do not believe you are compliant. Organisations that do not carry out a compliant audit where required will be in breach of the Regulations and liable to potential enforcement action.

6.3. Templates for collating ESOS data and reporting findings

The Department of the Environment and Climate Change will not be requiring data to be collated or recorded in particular formats, and so are not providing standard templates for these activities or the presentation of findings to directors. As long as the ESOS assessment has been conducted, 90% of the total energy consumption is compliant via ESOS audits or an alternative route to compliance, and the data to evidence this work and its findings is recorded, this will be sufficient.

This is to reduce the administrative burden on organisations who have existing data management procedures and tools which may be able to be used in or referenced from their evidence pack.

The only standardised element is the notification of compliance. This is available on the ESOS webpage https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme

You will also need to maintain additional information in your evidence pack, such as copies of ESOS audits, to demonstrate compliance if you are asked to do so by the scheme regulators.

7. Director Sign off

Having completed the ESOS Assessment, board level director(s) from one of the undertakings in the participant group will need to confirm that they:

- have reviewed the recommendations of your organisation's ESOS assessment or alternative routes to compliance.
- are satisfied, to the best of their knowledge, that the organisation is within the scope of the scheme.
- are satisfied, to the best of their knowledge, that the organisation is compliant with the scheme
- are satisfied, to the best of their knowledge, that the information provided in the organisation's notification is correct.

Where your lead assessor is external, one director will need to provide this confirmation in writing (to be kept in your evidence pack). Where your lead assessor is internal, two directors will need to provide this confirmation in writing (to be kept in your evidence pack).

There is no prescribed format for how you need to present the findings of your assessment to your director(s). As long as you have confirmation in writing to confirm the four points above and keep this in your evidence pack then that is sufficient.

8. Notifying compliance

8.1. Confirming your compliance with the Department of the Environment and Climate Change

Use the notification form, available for download from the ESOS webpage at https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme to notify the Department of the Environment and Climate Change that you are ESOS compliant. There is no charge for submitting your ESOS notification.

Anyone can submit the notification on behalf of a participant (therefore you could instruct a consultant or lead assessor to do this on your behalf) but remember that the responsible undertaking is liable for the compliance of the participant so they should be happy with the accuracy of the information being submitted.

If you later discover the information you submitted was inaccurate, you must email esos.environment@gibraltar.gov.gi to explain the inaccuracy in your original submission. You will need to quote the date of the original notification and the name of the organisation. Do not just resubmit the information.

To minimise the risk of late submission we recommend you submit your notification as soon as possible before the compliance date of each compliance period.

If you believe that you will not meet the deadline of 5 December 2016 please read Section 9 on compliance and enforcement which outlines the steps you need to take.

8.2. Details you need

In your online notification, you will be asked for basic details about:

- the participant (including contact details for the responsible undertaking, individual(s) who can be contacted about your ESOS compliance and directors who reviewed the ESOS assessment findings).
- any aggregation or disaggregation of group members.
- the lead assessor.

what proportion of your total energy consumption is covered by each compliance route.

Unless you are audited by your compliance body, you won't be asked for:

- energy consumption details.
- the results of any audits.
- the energy saving opportunities you've identified.

Details of exactly what you are required to provide in your notification are given in Appendix B.

8.3. After you've submitted

You should keep the email in your evidence pack as a record of your submission.

The Department of the Environment and Climate Change will publish the information provided in your notification, apart from personal or commercially sensitive details and feedback. The Department of the Environment and Climate Change will not publish any information on organisations we believe qualify for ESOS prior to the compliance date for a compliance period.

The information will be published on the ESOS web page https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme in 2017.

You may be selected by your organisation's regulator to have your compliance with the scheme checked. In the event of a compliance check you will be required to provide evidence of how you have complied with the scheme.

8.4. Keeping records

You must keep an ESOS evidence pack that includes:

- contact details of the participating undertakings and the responsible undertaking.
- details of any board level directors or equivalents who've reviewed the ESOS assessment findings.
- written confirmation from the director(s) to evidence that they reviewed the ESOS assessment.

- contact details of your lead assessor and the name of the approved register which they are a member of.
- written confirmation from the lead assessor to evidence that they reviewed the ESOS assessment.
- the calculation for your total energy consumption.
- a list of your identified areas of significant energy consumption.
- details of the energy audits undertaken including the audit methodology used in your ESOS energy audits.
- details of the energy saving opportunities identified.
- details of the routes to compliance used to cover each area of significant energy consumption and where applicable evidence (e.g. certificates) of the alternative routes to compliance.
- written agreements to support any disaggregation or aggregation of group members.
- written agreements to support any alternative responsible undertaking chosen (other than the default highest Gibraltar parent).
- reasons for using less than 12 months of data for the measurement of total energy consumption, if you could not do this.
- reasons for using less than 12 months of data to support an ESOS energy audit, if you could not do this.
- reasons for being unable to use verifiable data on energy use or energy expenditure to support your calculation of total energy use.
- the methodology you used for any estimates you've made for energy use or energy expenditure.
- justification, where applicable, where your lead assessor has not used an energy consumption profile in your audit of an area of significant energy use.

You must keep the evidence pack for the compliance period to which it relates and the two subsequent compliance periods.

9. Compliance, Enforcement and Appeals

9.1. Compliance and Enforcement

Organisations that are subject to ESOS, but do not meet the requirements, may be liable to compliance and enforcement activities. Three types of notice are available under the ESOS Regulations.

These are:

- A compliance notice this is an information request from the regulator to the participant.
 The compliance notice asks for information so the regulator can determine if the participant is complying with its obligations under ESOS.
- An enforcement notice this tells you what you must do to comply with a requirement of ESOS.
- A penalty notice this imposes civil penalties for breaches of the ESOS regulations.

Further information on civil penalties and breaches can be found in Part 8 of the ESOS regulations.

The regulator is aware that there may be instances where organisations which qualify for ESOS are unable to complete an ESOS compliant assessment by 5 December 2016. There may also be cases where lead assessors are asked to take on work which they do not believe they can deliver by this date.

The deadline for compliance is set in the EU Energy Efficiency Directive and the Energy Savings Opportunity Scheme Regulations 2016. The scheme regulators cannot amend this deadline. Qualifying organisations that do not complete a compliant ESOS assessment and notification by 5 December 2016 will be at risk of enforcement action including the possibility of civil penalties.

However, under the regulations the regulator is able to waive or modify enforcement action and penalties relating to non-compliance. The Department of the Environment and Climate Change's

enforcement approach includes details on specific penalties and the intended application for the first compliance period. This approach includes: ¹

- Not normally expecting to take enforcement action for late notification provided it is received by 30th June 2017. This is not an extension to the legal deadline. Rather, it reflects the ability to exercise discretion when taking enforcement action.
- Giving until 31st October 2017 to achieve ISO 50001 (international energy management standard) certification as a form of compliance.
- A focus on bringing bodies into compliance using enforcement notices where necessary (normally allowing up to 3 months for organisations to remedy the outstanding compliance actions), serving civil penalties only in the most serious cases.
- In cases where the participant's energy use is at a domestic level not normally enforcing the requirements for fully-compliant ESOS audits or alternative routes to compliance and lead assessor review. But the organisation concerned would need to make a notification, confirm their energy use falls below the domestic threshold, consider and document opportunities for reducing their energy consumption and record their compliance approach in their evidence packs.
- Organisations that qualify but have zero energy consumption will only need to declare this.
 In such cases other elements of the scheme will not normally be enforced.

Where you are not going to be able to make a notification of compliance by 5 December 2016 you will need to inform the Department of the Environment and Climate Change of this by the same date, giving information on why you have been unable to comply and when you expect to submit your notification of compliance.

You will be able to do this via email at esos.environment@gibraltar.gov.gi. If an organisation makes a late notification the regulator will expect them to keep records in their evidence pack of their efforts towards ESOS compliance, including appointment of a lead assessor, prior to the deadline. Any breaches against which your regulator is considering imposing penalties will be reviewed on a case-by-case basis. Such organisations should do as much as they can before the deadline. Evidence of efforts made towards compliance prior to the deadline will be taken into account in considering any enforcement action.

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¹ 'Domestic level' energy use is defined for the first compliance period as 40,000kWh/yr or below.

In cases where the regulator takes enforcement action against non-compliance they would do so in relation to the 'responsible undertaking' within the participant group not against lead assessors whose clients are non-compliant. Participants and lead assessors should ensure they are both satisfied with the terms and conditions of their contracts dealing with any issues of liability and compliance.

The civil penalties which can (at the discretion of the regulator) be applied are listed in the table below.

Non-compliance	ESOS Regulation	Penalties
Failure to notify	Regulation 43	A fixed penalty of up to £5,000 An additional £500 for each working day starting on the day after service of the penalty notice until the notification is completed, subject to a maximum of 80 days Publication
Failure to maintain records	Regulation 44	A fixed penalty of up to £5,000 The cost to the compliance body for undertaking sufficient auditing activity to confirm that an organisation has complied with ESOS Publication The penalty notice may specify steps to remedy the breach.
Failure to undertake an energy audit	Regulation 45	A fixed penalty of up to £50,000 An additional £500 for each working day starting on the day after service of the compliance notice, until the breach is remedied, subject to a maximum of 80 days Publication The penalty notice may specify a requirement to undertake an ESOS Assessment.
Failure to comply with a compliance notice, an enforcement notice or a penalty notice	Regulation 46	A fixed penalty of up to £5,000 An additional £500 for each working day starting on the day after service of the penalty notice, until the breach is remedied, subject to a maximum of 80 days Publication
False or misleading statement	Regulation 47	A fixed penalty of up to £50,000 Publication

If you're subject to the publication penalty, the regulator will publish details on their webpages of:

- the person on whom the penalty was imposed.
- the legal requirement that was not complied with.
- the amount of any financial penalty imposed.

9.2. Appeals

You can appeal against enforcement actions by the regulator. You have the right to appeal any determination, enforcement notice or penalty notice that you consider to be based on an error of fact, wrong in law or unreasonable.

If the registered office of the responsible undertaking for the participant is based in Gibraltar, you can appeal to the Magistrates Court.

If enforcement action is taken the relevant notice will include details on how you can appeal as appropriate.

Appendix A: Advice for complying with the Energy Saving Opportunity Scheme (ESOS)

A.1 Introduction

This Appendix provides additional information for participants on the approaches they might take to comply with ESOS in order to help them maximise the benefit to their organisation. ESOS energy audits have the potential to increase your business profitability and competitiveness by identifying cost-effective savings which, if implemented, will improve energy efficiency.

Optimising energy use leads to improved profitability and increased competitiveness. It also constitutes an integral part of the Gibraltar's climate change mitigation effort, as demonstrated by committing to the Compact of Mayors and the EU ETS. There is significant potential to decrease energy consumption across all sectors, and yet opportunities to improve energy efficiency are often under-exploited.

However, ESOS participants and Gibraltar as a whole will only realise benefits (which more than offsets the cost of complying with ESOS) if they implement the cost-effective recommendations identified in ESOS audits and engage with their lead assessor to ensure that they have access to the information and staff they need to develop meaningful recommendations.

A.2 Identifying areas of significant energy consumption

One of the key decisions that organisations will need to take is in determining their areas of significant energy consumption. Businesses have flexibility to determine this. For instance they could exclude particular assets, types of fuel, or activities. In determining which energy consumption to deem "de minimis", businesses will want to consider where ESOS can have maximum potential for their organisation. Some businesses may opt to audit more than 90% of their total energy consumption in order to get the most benefits from the scheme.

A.2.1 Worked example of identifying areas of significant energy consumption

Group A is a registered corporate group in the transport industry. The group consists of A Ltd, the holding company, and its two subsidiaries: A Transport Logistics Ltd and A Services Ltd.

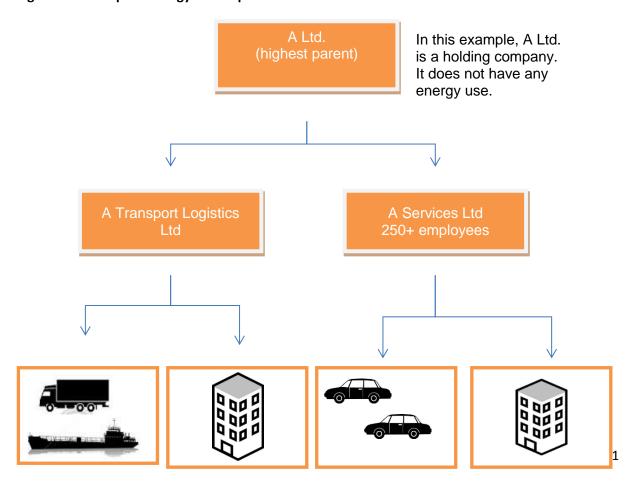
A Services Ltd has more than 250 employees and as such meets the definition of a large undertaking. As a result, the other members of the group, A Ltd and A Transport Logistics Ltd, both also qualify for ESOS through the group (see section 1.7 for details).

The default is that all three members of the group will participate as one participant (see section 1.7 for details of group participation and disaggregation/aggregation). To do so, the group must first select a reference period (see section 3.6) and determine its total energy consumption (in either energy units or energy expenditure) in this period.

Group A has mapped its organisational structure and the energy consuming activities of each group company, as presented in Figure A.1 and Table A.1.

The principal business activity of Group A is the shipping and transportation of goods by road and sea. Group A knows (prior to calculation) that the energy associated with fuel consumption in its freight operations will be the largest single item of significant energy consumption. As such, Group A decides to convert all energy use into Gigajoules (GJ) as a standard unit of energy use for all its activities.

Figure A.1: Group A's energy use map



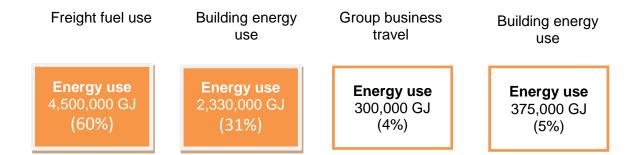


Table A.1: Group A's summary of energy using activities

Activity	Fuel used	Fuel use	Density (litres/ tonne)	Energy conversion*	Energy (GJ)	Percentage of total energy consumption
Freight	Diesel	125,244,755 litres	1,194	42.90 GJ/tonne	4,500,000	60%
Buildings	Electricity and gas	647,222 MWh	N/A	3.6 GJ/MWh	2,330,000	31%
Buildings	Electricity and gas	104,166 MWh	N/A	3.6 GJ/MWh	375,000	5%
Company vehicle travel	Diesel	8,349,650 litres	1,194	42.90 GJ/tonne	300,000	4%

^{*} Government conversion factors for company reporting

After assessing total energy consumption, Group A decides its areas of significant energy consumption are:

- the energy used in its freight operations.
- the energy used in the buildings of A Transport Logistics Ltd.

A.3 Choosing compliance routes

ESOS participants have flexibility to choose from a number of different compliance routes. Each route has its own advantages and disadvantages, and some of these are considered in the table below. Participants will want to decide which routes are most appropriate for their type of business and will help maximise the value they get from ESOS energy assessment.

Route to	Advantage	Disadvantage
compliance		
ESOS energy audits	Covers all energy uses – buildings, industrial processes and transport. Can draw on data from existing energy efficiency compliance activities such as under the CRC Energy Efficiency Scheme and Climate Change Agreements to the extent that these support compliance. Organisations can use existing energy auditing/measurement activity to support compliance such as the Carbon Trust Standard or the Certified Emissions Measurement and Reduction Scheme (CEMARS) provided that these are carried out in a way which meets the minimum requirements for ESOS audits.	May duplicate work or assessments already carried out under other schemes.
ISO 50001	Part of an overall energy management system for effective management of energy consumption. ISO 50001 could be employed by a multinational company across its operations. This is likely to mean that, for operations qualifying for audits under other European mandatory auditing schemes, the requirements would be met through the energy management system.	Additional effort, above minimum ESOS requirements, may be required to maintain a certified ISO 50001 energy management system.

A.3.1 Additional information on ISO50001

ISO 50001:2011 provides a framework of requirements for organisations to:

- develop a policy for more efficient use of energy.
- fix targets and objectives to meet the policy.
- use data to better understand and make decisions about energy use.
- measure the results.
- review how well the policy works.
- continually improve energy management.

If you are considering an ISO 50001 certified energy management system as a route to comply with ESOS, there is guidance available online. For instance, the British Standards Institute (BSI) has a series of explanatory videos on YouTube:

- Getting Started ISO 50001 Energy Management Part 1(http://youtu.be/MCPL3qk2qKI)
- Important Terms ISO 50001 Energy Management Part 2(http://youtu.be/g_kQve_-D3g)

- Measuring Performance ISO 50001 Energy Management Part 3 (http://youtu.be/OPgyrYit3qM)
- Top 10 Tips ISO 50001 Energy Management Part 4(http://youtu.be/PDlp9AFvXyY)
- Case studies are available from major certification bodies. For example you can download case studies from the BSI website(http://shop.bsigroup.com/Browse-By-Subject/EnergyManagement/BS-ISO-50001-case-studies/).

A.3.2 Additional information on ISO14001

Many organisations operate a certified ISO14001 environmental management system.

The ISO 14001:2004 (Environmental management systems, EMS) certification does not expressly require energy audits that would meet the minimum requirements of ESOS. However, ISO 14001 certified organisations may wish to use their ISO 14001 management system to support ESOS compliance.

One of the requirements of ISO 14001 is that organisations establish, implement and maintain procedures to ensure that legal requirements are taken into account in establishing, implementing and maintaining their environmental management systems. Therefore, organisations which operate a certified ISO 14001 environmental management system should either

- already be managing and auditing their energy and fuel use to some extent, as part of their existing environmental management system; or
- 2. be driven by legal compliance requirements of ISO 14001 to engage in a process to integrate the requirements of ESOS into their EMS.

Integrating ESOS and an ISO 14001 certified Environmental Management System

Participants may be able to integrate ESOS compliance with their ISO 14001 environmental management system through some of the following steps:

- Establish energy efficiency targets or energy auditing programmes as part of complying with the requirement of ISO 14001 to establish objectives and targets and implement programmes to achieve these.
- Consider the qualification of in-house energy managers under the ISO 14001 provisions relating to resources and roles, and competence, training and awareness.
- Using EMS documentation to support ESOS data collection and maintain the ESOS Evidence Pack in line with EMS documentation procedures.
- Using a suitable qualified ESOS lead assessor to conduct ISO14001 internal audits as well as considering an organisation's ESOS compliance.
- Incorporating sharing audit findings with top management through the management review processes established under the EMS.

ESOS participants may also wish to extend their existing ISO 14001 EMS in order to gain ISO 50001 certification.

A.4 Additional guidance on conducting energy audits

A.4.1 Benefits of energy audits

Energy audits are a valuable tool in understanding and improving the energy performance of your organisation.

Conducting energy audits allows you to:

- measure and understand the energy consumption of your assets and activities.
- build an energy consumption profile showing where and how your organisation consumes energy – this can also be used to identify any variations in your energy use between areas and over time.
- identify patterns, build explanations for these and identify any opportunities to reduce your overall energy use through increased levels of efficiency.

This information could allow you to make long-term savings or reduce the impact of energy price increases on your organisation.

Improved energy efficiency could also boost your productivity and growth.

A.4.2 Measuring energy consumption

To make it easier to carry out an energy audit, it's helpful to have systems in place to collect, collate and analyse your energy data as often as possible.

It's also a good idea to make sure that you can 'drill down' into your data to identify trends and inform detailed analysis.

The following are some generic methods you could use to help you measure data:

- meter readings,
- energy bills,
- fuel or waste delivery notes,
- transport receipts,
- vehicle/shipping/aviation routes and average fuel consumption rates,
- mileage claims (expense claims),

heat imports.

You can use this data to find patterns that may show you how you can save money. If your organisation's accounting system already includes this data, define a report that incorporates all energy use and cost information.

This will mean you can easily retrieve the data in future. If the data isn't included in your accounting system, nominate a person to record energy use and costs.

A.4.3 Validating data

You should validate and cross-check data which you use for auditing purposes.

You can do this by:

- previous period checks comparing the data between two periods e.g. March 2015 and March 2016.
- sample checks checking a data point against another independent source, e.g. checking invoice totals against meter reads.
- sense checks comparing data points against reasonable expectations based on your knowledge of how your organisation has used energy in the past.
- identifying data gaps and finding the missing information, or using an estimate.
- making sure meter readings and equipment you use for them are as accurate as possible metering any energy you generate on-site.

A.4.4 Choosing an auditing methodology

ESOS does not mandate a particular auditing methodology that must be followed.

Businesses may have their own preferred methodology developed in-house, or there are a range of European and International Standards that set out internationally recognised energy auditing practices. For example:

- ISO 50002 and BS EN 16247 energy audits set out a good practice method for identifying energy savings opportunities. These are useful for in-house managers or external consultants carrying out an energy audit, or as a guideline for organisations who want to understand what a good energy audit looks like.
- The EN16247 series of standards also includes more detailed standards setting out possible auditing approaches to buildings, transport and industrial processes.
- ISO 15099:2003 Thermal performance of windows, doors and shading devices -- Detailed calculations. This standard specifies detailed calculation procedures for determining the

thermal and optical transmission properties (e.g. thermal transmittance and total solar energy transmittance) of window and door systems. This standard may be applicable as an auditing methodology when seeking to determine the energy saving potential associated with an organisation upgrading the windows (including glazing) and/or doors in its buildings.

- ISO 16346:2013 Energy performance of buildings -- Assessment of overall energy performance. This standard defines the general procedures to assess the energy performance of buildings, including technical building systems. This standard may be an applicable auditing methodology for the assessment of energy saving potential from buildings.
- ISO 15686-3:2002 Buildings and constructed assets, Service life planning, Part 3: Performance audits and reviews. The standard outlines the approach and procedures to be applied to planning, briefing, design, construction and, where required, the life care management and disposal of buildings and constructed assets. This standard may be applicable as an auditing methodology when seeking to determine the whole-life energy saving potential related to the replacement or retrofitting of a building and its likely performance over time.
- ISO 11011:2013 Compressed air -- Energy efficiency Assessment. This standard sets out requirements for conducting and reporting the results of a compressed air system assessment from the energy input through the work performed by the compressed air system. This standard may be applicable as an auditing methodology when seeking to determine the energy saving potential associated with an upgrade/change to a compressed air system as part of an industrial process.
- ISO/DIS 14414 Pump system energy assessment. This Standard sets the requirements for conducting and reporting the results of a pumping system assessment. This standard may be applicable as an auditing methodology when seeking to determine the energy saving potential associated with an upgrade/change to a pump system as part of an industrial process.

A.4.5 Using voluntary energy management and energy auditing schemes to support ESOS compliance.

ESOS is designed to allow companies to include activities, or other business as usual reviews of energy efficiency opportunities, to contribute to compliance. Where an organisation wishes to use such activities to support ESOS compliance, they will need to ensure that these meet the minimum requirements of ESOS. This includes ensuring that a lead assessor reviews records of the activities to

confirm that they have been conducted to a satisfactory standard, in line with the requirements of ESOS.

A.4.6 How to make an energy audit timetable

It's for you to determine your energy auditing timetable in each compliance period. You're not required to have the same timetable for each compliance period. Audit work undertaken at any point within a four year compliance phase can be used to support compliance provided it is completed by the compliance date.

For instance, you might choose to look at:

- All buildings in one year, all industrial processes in the next, and transport in the third; or
- Undertake a rolling assessment of different buildings/assets over the course of the compliance period.

The flexibility of undertaking a staged audit may be particularly useful if you have a large number of assets and activities in Gibraltar and auditing all the assets/activities at once would either put a significant strain on internal resources or simply not be feasible.

It may be timely to conduct audits before and/or after:

- significant group acquisitions or disposals.
- significant alterations to the layout and internal/external appearance of your building(s).
- upgrading of a building's HVAC (heating, ventilating, and air conditioning) or lighting.
- an upgrade to your IT equipment.
- a major replacement of process machinery or purchase of additional process equipment.
- replacement of a fleet of owned or leased company vehicles.
- implementation of a new working procedure for staff.

Conducting audits before such changes may inform investment or operational decisions.

Conducting them after these changes may help to identify how effective they have been from an energy efficiency perspective and if further changes are necessary.

Alternatively, conducting audits before and after a 'pilot' measure has been implemented (within a defined area of your organisation or group) may help to inform your procurement processes in terms of the cost savings and benefits the measure has realised for your organisation.

ESOS requires organisations as a whole to be audited once every four years. Some areas of significant energy consumption could be audited more frequently or less frequently depending on how an organisation manages its audit of different assets. However, on average, each area will need to be audited once in each compliance period.

Example of a participant's audit timetable

2016	2017	2018	2019	2020	2021	2022	2023	
Compliand	ce period 2			Compliance period 3				
Buildings	Industrial processes	Transport	Sign off & Notify	Transport	Industrial processes	Buildings	Sign off & Notify	
_	2 years							
			6 year	`S				

In this example, transport energy audits are conducted two years apart and the building energy audits are conducted six years apart.

However, the organisation as a whole is audited once every four years, with sign off of the overall compliance by directors and the lead assessor and notification to the scheme administrator for the second and third compliance periods in 2019 and 2023, respectively.

You may choose to plan an audit timeline like this, staging audits before and after the implementation of an energy saving measure to best capture the effect of the measure compared with the anticipated impacts.

Planning an audit of transport energy in 2018 before implementing a new transport policy in 2019, and subsequently auditing transport energy again in 2020, may best capture the impact of the new policy and allow you to make amendments as part of continual improvement, as well as meet your ESOS requirements.

For compliance period one, all auditing and compliance activity needs to have taken place between 6 December 2012 and 5 December 2016.

A.5 How to find energy saving opportunities

A.5.1 Examine your data

Look at your energy patterns to identify:

- minimum usage levels (base load);
- maximum usage levels (peak load);
- fluctuations in energy use (e.g. per unit output).

This can help you to help you identify any areas you can make more efficient.

You should also try to identify potential areas of waste, like unnecessary base load energy use.

A.5.2 Engage with your energy users

You should find out how employee behaviour or processes affect energy use in your organisation.

Talk to energy consumers (stakeholders) across your organisation about where they think savings could be made.

You should think about whether it's better to do this before, or after any analysis of energy data or physical auditing work.

You could also engage with stakeholders by setting up a system of more structured energy governance.

For example, you could set up an energy management committee to oversee energy measurement and performance reporting.

Feedback the results of any subsequent energy analysis or physical auditing work to stakeholders to obtain their views on:

- the practicality of any energy saving measures identified.
- the magnitude of the estimated energy and cost savings highlighted.

Engaging stakeholders and listening to feedback will help you to gain support to implement any new measures across your organisation, and maximise the benefits.

A.5.3 Examples of common energy saving opportunities

As part of carrying out or reviewing and approving your energy audit, your lead assessor may present you with recommendations on the most cost-effective and applicable energy saving opportunities specific to the organisation, sector, site or activity.

The table below presents some common examples of energy saving opportunities that you may find when conducting your energy audit.

Area	Energy saving opportunities
Buildings	Heating – turn heating down, replace inefficient boilers, install de-stratification fans (fans used in commercial and industrial buildings with high ceilings), shorten hours of operation. Ventilation – specify higher efficiency motors, consider variable speed fans, review time settings and turn off when not in use. Air-conditioning – review temperature controls, consider variable speed drives, free cooling (using external air as a source of cooling). Lighting – install occupancy sensors, install daylight sensors, review and improve the maintenance plan (more regular maintenance), replace inefficient incandescent bulbs with high efficiency LED lighting or energy saving fluorescent lighting (for example, T5 lighting). Building fabric – install cavity wall and roof insulation, install high efficiency windows and glazing, draught proofing. Building control – install a computer-based building management system,
Industrial	ensure control systems are set correctly for different weather conditions and occupancy levels, install variable speed drives. Refrigeration — reduce the heat loads on systems through reduced air
processes	infiltration, free cooling, raise process temperatures, improve control of auxiliary equipment (pumps/fans), install better temperature control, keep doors closed, don't overfill units, ensure lights are off inside units when not in use, clean condensers regularly. Motors and drives – install high efficiency motors, install variable speed drives, implement automatic switch off controls and procedures, install time switches, interlocks or sensors, monitor motor output to identify energy wastage.
Transport	Fuel consumption – monitor fuel consumption, monitor driver fuel performance, conduct fuel efficiency driver training, invest in telematics systems that can identify areas for improvement. Driver fuel performance – can be enhanced by switching off the engine when safe to do so, minimising idling, shifting to higher gears earlier, accelerating and braking gently and smoothly, avoiding excessive speeds, use of cruise controls and closing windows at higher speeds. (Could be supported by linking to driver incentives.) Routing and scheduling – review logistics routes, reduce empty running, maximise loads. Maintenance and vehicle improvements – tyre management, implement fleet renewal programme, aerodynamic improvements, improved maintenance schedules.
Employees	Awareness campaigns – employee engagement, communications on energy efficiency, targeted incentives.

Further information and guidance on energy efficiency saving opportunities in buildings, industrial processes and transport, and through employee engagement is available from a range of sources including:

- Carbon Trust guides (www.carbontrust.com/resources/guides)
- Freight Transport Association's web page on its Logistics Carbon Reduction Scheme (LCRS)(www.fta.co.uk/lcrs)

A.6 Measuring the benefits of energy saving opportunities

A.6.1 Using a life-cycle cost analysis (LCCA) or simple payback period (SPP)

You should usually assess the costs and benefits from energy saving measures you identify using a life-cycle cost analysis (LCCA).

For some organisations, it might not be practical to undertake an LCCA for all identified energy saving measures.

In this case, you can use simple payback period (SPP) calculations

These two methods are common ways that accountants assess financial investments.

For more costly measures and measures that might be more complicated to implement, an LCCA may be necessary to make a sound decision. LCCAs are financial decision making methods that consider all costs and benefits over the lifetime of the project.

A.6.2 Advantages and disadvantages of LCCAs

Advantages of LCCAs	Disadvantages of LCCAs
Helps you compare measures like-for-like, financially even if they have different timings and magnitudes of costs and savings.	Is a more complex and time consuming methodology to apply.
Provides you with a more complete financial picture by considering all costs and benefits over the lifetime of the measure.	Getting accurate input data (costs, timeframes) can be more challenging.
Enables you to compare different combinations of measures and choose the one that will maximise your savings and financial return.	
Allows you to present the financial benefits of your proposal in terms used by your directors/chief financial officer — for example, net present value (NPV), internal rate of return (IRR), and cash flows.	
Reduces your investment risk by projecting a more complete picture of the future.	

It may be more appropriate to apply an LCCA where the energy saving measure identified has, for example:

- a long asset life.
- a high upfront capital cost.
- an initial downtime period (that is, a process has to be shutdown to implement the measure).
- additional quantifiable benefits other than reduced energy consumption.
- associated maintenance costs.
- a usage profile of the process/equipment that is likely to change (for example, increased usage of a new production line).

LCCAs are a way to consider if an investment will be economical over its entire life by predicting how much it will ultimately cost. LCCAs are particularly useful when implementing an identified energy saving measure that involves significant capital investment.

The ultimate aim is to calculate the net present value (NPV). An acceptable NPV will be specific to your organisation.

A.6.3 Example: a life-cycle cost analysis (LCCA)

In this illustration below of an LCCA, a company operates a boiler that is 10 years into a nominal 20year life but which is inefficient compared with modern standards.

In scenario 1, the company continues with the current boiler for a further 20 years, incurring significantly increased maintenance costs to keep it operational over that period.

In scenario 2, the company installs a new more efficient boiler with a 20-year life and with lower fuel and energy tax costs and lower maintenance costs.

The new boiler would be installed in Year 0 during which time the current boiler would operate. For simplicity, no operational or maintenance costs for the current boiler are assumed in Year 0 as these would be the same in both scenarios. Again, for simplicity no consideration is given to decisions or resulting cash flows after Year 20.

The illustration attributes residual value as if the unused equipment were sold. Thus in scenario 2 there is residual value from sale of the current boiler at the end of Year 0 and sale of the new boiler at the end of Year 20. The current boiler is assumed to have no value at the end of Year 20.

Costs are assumed to be incurred at the end of each year. The discount rate is a typical commercial rate of 6%, although in practice the range of discount rates employed by companies varies widely. Indirect impacts, such as wider societal impacts, are excluded from the assessment.

This analysis shows that, in this scenario, the NPV for installation of the new boiler is lower than that for retention of the old boiler. In other words, although it initially costs more money to install the new boiler, when all the costs are considered over the full life cycle this option will actually save money.

Example of LCCA

200kW boiler	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Scenario 1: continue w	ith current l	ooiler									
Capital cost	_	-	-	-	-	-	-	-	-	-	-
Installation cost	-	-	-	-	-	-	-	-	-	-	-
Maintenance cost (1)	-	£3,000	£3,000	£3,000	£3,000	£3,000	£3,000	£3,000	£3,000	£3,000	£3,000
Fuel cost (2)	-	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215
Energy tax (CCL) (3)	-	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348
Residual value (4)	-	-	-	-	-	-	-	-	-	-	1-
Total	£0	£24,563	£24,563	£24,563	£24,563	£24,563	£24,563	£24,563	£24,563	£24,563	£24,563
Scenario 2: invest in no	ew boiler	•			•	•	•	'	'	'	
Capital cost (5)	£18,000	-	_	-	_	_	-	-	_	-	-
Installation cost	£4,000	-	-	-	-	-	-	-	-	-	-
Maintenance cost6	-	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000
Fuel cost (7)	-	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774
Energy tax (CCL) (8)	-	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118
Residual value (9)	£4,000	-	-	-	-	-	-	-	-	-	-
Total	£18,000	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893

200kW boiler	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20
Scenario 1: continue wit	Scenario 1: continue with current boiler									
Capital cost	-	-	-	-	-	-	-	-	-	_
Installation cost	-	-	-	-	_	_	-	-	-	_
Maintenance cost (1)	£3,150	£3,308	£3,473	£3,647	£3,829	£4,020	£4,221	£4,432	£4,654	£4,887
Fuel cost (2)	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215	£20,215
Energy tax (CCL) (3)	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348	£1,348

Residual value (4)	-	_	-	-	-	_	_	_	_	_
Total	£24,713	£24,871	£25,036	£25,210	£25,392	£25,583	£25,784	£25,995	£26,217	£26,450
Scenario 2: invest in nev	v boiler				•					
Capital cost (5)	-	-	-	-	-	_	-	-	-	_
Installation cost	-	-	-	-	-	-	-	-	-	-
Maintenance cost (6)	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000	£2,000
Fuel cost (7)	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774	£16,774
Energy tax (CCL) (8)	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118	£1,118
Residual value (9)	-	-	-	-	-	-	-	-	-	£500
Total	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,893	£19,393

Net present value	
Discount rate	6%
Current boiler	£285,314
New boiler	£246,013
Net discounted benefit of new boiler versus current boiler	£39,301

Assumptions:

- 1. £15 per kW boiler in Years 1–10, increasing by 5% year on year thereafter
- 2. 78% boiler efficiency, 30% utilisation, fuel charged @ 3p/kWh
- 3. 78% boiler efficiency, 30% utilisation, tax charged @ 0.2p/kWh
- 4. No residual value costs of decommissioning equal scrap value of components
- 5. 200 kW @ £90/kW
- 6. £10 per kW boiler
- 7. 94% boiler efficiency, 30% utilisation, fuel charged @ 3p/kWh
- 8. 94% boiler efficiency, 30% utilisation, tax charged @ 0.2p/kWh
- 9. Residual value of old boiler realised at start of replacement scenario is £4,000; residual value of new boiler after 20 years' life is £500.

A.6.4 Advantages and disadvantages of simple payback periods (SPP)

For relatively inexpensive, simpler measures, calculating the SPP can be enough to make a sound decision on investment. SPP is a method for determining how long it will take for the cumulative energy savings and other benefits to equal, or payback, your initial investment. The table below summarises the advantages and disadvantages of SPPs.

Advantages of SPPs	Disadvantages of SPPs
A simple way to screen relatively low-	Can't compare complex measures where costs and savings
cost measures based on payback	vary in magnitude and timing
Easier to communicate to a non-	Doesn't account for benefits and costs after equipment has
technical audience	paid for itself, so can disadvantage projects with long useful
	lives
	Doesn't account for: maintenance costs, interest on any
	loans and disposal costs; and volatility of utility costs
	It can make economically sound improvements to efficiency
	look economically unviable

It may be more appropriate to apply a SPP where the energy saving measure identified has, for example:

- a low asset life
- no or low associated capital and maintenance costs

A.7 Implementing energy efficiency opportunities

ESOS is intended to provide high quality and targeted advice to large enterprises on cost-effective energy efficiency opportunities, which will ultimately lead to financial savings.

If you invest more time and effort into your ESOS energy audit, you are more likely to identify ways that you can save money through reducing energy consumption.

A.7.1 Board level engagement

Large investment projects may require authorisation from your board of directors. In addition, your

ESOS Assessment will need to be signed off by at least one director.

Engaging with the board at the most appropriate time and presenting the correct data will be essential in ensuring projects are authorised.

To enable this, it is important that your cost-appraisal methodology can stand up to financial scrutiny, is consistent and not biased.

ESOS audits will identify cost-effective recommendations, including the payback period for proposed measures.

Your board level director, or equivalent senior manager, will be responsible for reviewing these findings as part of the ESOS compliance process.

For organisations that don't already do so as a matter of routine, this provides an important opportunity to engage with board level managers on energy expenditure and potential savings.

Senior management buy-in is crucial to establishing a successful energy use reduction programme. You may wish to propose that your board discusses the findings of the audit to ensure that all the directors are aware of the expenditure on energy and the potential savings that could be made.

A.7.2 Presenting findings and recommendations effectively

ESOS assessments will have a greater impact if the findings are presented in an accessible manner for directors or your board and others across your organisation.

To engage the board in particular when presenting recommendations, it will be important to make clear:

- the financial cost of energy to the organisation
- the financial benefits and payback periods from investing in recommended measures to improve energy efficiency

The table below provides an example of how you could present ESOS assessment findings. This is not a standard template and does not need to be used. It is just an example of how you may wish to present the recommendations for review by the board.

Example: presenting ESOS Assessment findings for sign-off

Energy Savings Opportunity Scheme Assessment Report						
Name of organisation:	GIB Company					
ESOS compliance deadline:	5 December 2016					
Total organisational energy consumption:						
Total energy consumption assessed (that is, minimum 90%):						
Total cost-effective energy saving potential identified (in energy):						
Total cost-effective financial saving identified:						

Assessment findings						
	Detail of measure identified:	Assessed via:	Applicability:	Identified energy savings:	LCCA or SPP? *	Identified cost savings:
Measure 1	LED lighting	ESOS energy audit	Building 1	8,000 kWh/year	SPP	£1,040
Measure 2	Boiler replacement	ESOS energy audit	Manufacturing site 3	20,000 kWh/year	LCCA	£30,000
Measure 3						

Sign-off	
Director/senior manager (1):	
Director/senior manager (2):	

Lead assessor Details	
Lead assessor (name) for each assessment (as applicable):	Mr Smith
Lead assessor (organisation) for each assessment (as applicable):	GIB Company

^{*} LCCA = life-cycle cost analysis, SPP = simple payback period

A.7.3 Overcoming potential barriers to implementation

In addition to the need to secure financing for investment in energy efficiency opportunities, a range of potential barriers to the implementation of recommendations can exist within organisations.

These could include:

Split financial incentives – in larger organisations, the team responsible for paying utility bills may not be responsible for selecting and replacing plant or other equipment. It is helpful to ensure that investment decisions and equipment replacement or maintenance decisions consider the full cost to the organisation. One option that a number of organisations are increasingly adopting is ensuring that energy budgets are delegated appropriately.

Undervaluing energy efficiency opportunities – it may be helpful to present financial savings that can arise from energy efficiency in terms familiar to the board – such as equivalents in increased turnover. Your energy audits should also ensure that all the potential costs and benefits of recommendations are captured (for example, reduced tax liabilities, reduced waste, greater energy security and reduced exposure to future price shifts).

Lack of access to trusted information – ESOS is intended to overcome this barrier by ensuring that audits are undertaken or approved by a suitably qualified lead assessor. To get the best for your organisation, you'll need to ensure that the lead assessor has the right technical skills for your sector

A.7.4 Government support for implementing energy saving opportunities

Although the implementation of energy saving measures will be case- and organisation-specific, some sources of information and financial support are available to organisations looking to implement such measures.

Sources of financial support for implementing audit recommendations

The below outlines some sources of possible Government financial support to help cover the costs of implementing ESOS energy audit recommendations.

- Government has removed the import duty on renewable technologies and LED lighting.
- Tax allowance if EPC rating of premises is significantly improved.

A.7.5 Energy performance contracting

Energy performance contracting is a way for organisations to:

- reduce the cost of investing in energy efficiency measures
- mitigate the risk that can arise from uncertainty about the benefits that will be realised

Energy performance contracts are typically delivered by energy service companies (ESCOs).

An ESCO typically conducts an energy audit for a client. They then identify and implement energy efficiency opportunities and guarantees that these will be self-funding through the energy savings generated. In the event that the savings are not realised, the ESCO generally makes up the difference. The ESCO will realise any energy savings for the duration of the contract, with the client receiving any benefits once the contract ends.

A.8 Recording energy usage in freight transport

For participants operating commercial vehicle fleets (for example, heavy goods vehicles and vans), fuel data should be captured and collated to establish the amount of energy consumed.

As a freight transportation organisation you may operate a fleet of vehicles and trailers ranging in size and consuming different input fuels. As the energy use profiles of these vehicles will vary significantly, it is valuable to have detailed information to allow you to categorise your fleet, including the vehicle numbers in each category.

It may also be useful to monitor the number of trailers in use and to categorise these as applicable. For example, the categories could be:

- single-decked trailers up to 4.3 m.
- single-decked trailers over 4.3 m.
- multi-decked trailers (all heights).

You may also wish to consider monitoring your fleet's fuel use using telematics systems. Fleet telematics systems use global positioning system (GPS) transmitters in each vehicle to collate information about a vehicle's position at any given time. The collated information is often then presented to the user using software installed onto a computer (for example, at your head office).

Telematics systems can provide real-time data on the fuel consumption and routing/scheduling of your fleet, helping to identify fuel saving opportunities linked to better routing/scheduling and/or improved driver fuel efficiency performance. Real-time, actual data may be more useful in identifying fuel saving opportunities.

Other considerations in relation to identifying and implementing energy saving opportunities in freight transport are:

Vehicle operations and maintenance:

- o structure of your distribution network;
- routing and scheduling planning;
- o vehicle records and maintenance schedules;
- criteria for fleet renewal.

Data collation, flow and checking:

- O What system is in place for recording total fuel quantity purchased for the fleet?
- O How do you ensure that data from each depot is collected?
- O What checks are in place to ensure the accuracy of the data?

A.9 Converting expensed mileage into energy usage

When calculating total energy consumption from transport activities, you may estimate energy consumption from other verifiable data (e.g. expenditure) where you do not have actual usage data (e.g. litres).

For instance, you could use the number of expensed miles multiplied by an average fuel consumption factor to estimate the usage.

Expensed mileage can be converted into energy use by applying standard conversion factors, such as those included in the UK Government conversion factors for Company Reporting http://www.ukconversionfactorscarbonsmart.co.uk/.

Below is an example of calculating energy use in kilowatt hours (kWh) from an expensed mileage figure, using some reasonable and permissible assumptions.

Company X needs to determine the energy use associated with employee transport in company cars. Available data: The only data that Company X has is a total mileage figure of 4,500,000 miles.

Company X also knows that all company cars are diesel fuelled.

Step 1: Obtain conversion factors

Refer to a reputable source of conversion factors such as the latest UK Government conversion factors for Company Reporting:

Company X finds the following factors for its company cars:

Company X does not keep centralised records of the size or engine capacity of its company cars so it assumes an 'average car' to obtain an emission conversion factor.

Emission conversion factors for different types of cars, on the 'Passenger vehicles' sheet show the conversion factor is 0.298469 kg CO2e per mile for an average diesel car.

Emission conversion factors for diesel, on the 'Fuels' sheet show the conversion factor is 0.251355 kg CO2e per kWh, on a gross CV basis.

Company X is determining its total energy consumption on a gross calorific value (gross CV) basis. N.B. The company could have chosen to measure total energy consumption using a different unit, including net calorific value, if it so wished.

Step 2: Calculate energy consumption in kWh

Company X converts the mileage into an emissions figure using an activity-based (mileage) emission conversion factor:

4,500,000 miles x 0.298469 kg CO2e per mile = 1,343,110 kg CO2e;

Then converts the emissions into energy (in kWh) using a fuel-property emission conversion factor:

1,343,110 kg CO2e/0.251355 kg CO2e per kWh = 5,343,478 kWh

Company X has estimated its energy use from expensed miles using authoritative conversion factors where information on actual fuel consumption was not available.

A.10 Links between ESOS and other climate change policies

Other climate change policies also require organisations to measure and manage energy consumption accurately. These include the EU Emissions Trading System (EU ETS) and mandatory

company reporting. However, the eligibility requirements and scope of energy and emission reporting vary across these mechanisms. ESOS is different in placing a greater emphasis on the identification of energy saving opportunities.

The requirements of ESOS have been designed to align, as far as is possible, with those of other schemes. For example, if you are a participant in other schemes, then you will already be gathering energy data and you are encouraged to draw on this to comply with ESOS. This will avoid the duplication of compliance efforts and reduce your administrative costs.

To assist with this, ESOS allows participants flexibility in when they set their reference period, the window in which they measure their energy use.

The following information describes how you can use data reporting under existing systems to support your ESOS compliance.

EU ETS

The EU ETS requires the measurement and reporting of direct emissions from eligible installations on an annual basis with a calendar year monitoring, reporting and verification cycle. ESOS will allow participants to align their data measurement period with that of the EU ETS; therefore, data reported under EU ETS could be used. For ESOS Assessments you would need to consider data collection processes for other sites and activities not included in EU ETS and also for the inclusion of electricity.

Environmental reporting

The geographical scope of environmental reporting, including mandatory greenhouse gas (GHG) emission reporting, is much wider than ESOS and it requires energy to be accounted for internationally. However, mandatory GHG reporting is likely to include a lot of the energy data required for an ESOS Assessment, including energy usage in buildings, industrial processes and transport.

Pollution Prevention and Control Regulations

The Pollution Prevention and Control Regulations 2013 require all prescribed installations to apply best available techniques for energy efficiency and to be operated in an energy efficient manner.

Permits issued under the Pollution Prevention and Control Regulations also include a requirement to provide information on energy consumed or generated by the activities falling within the permit.

Information collated as part of compliance for these permits may, in part, be useful in the development of energy data for an ESOS reference period.

Appendix B: How to fill in the notification form

The notification form can be downloaded from the Department of the Environment and Climate Change' webpage at: https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme

Mandatory questions are marked with an asterisk *. Anyone can submit the notification on behalf of a participant (therefore you could instruct a consultant or lead assessor to do this on your behalf) but remember that the responsible undertaking is liable for the compliance of the participant so they should be happy with accuracy of the information being submitted.

Notification form is to be submitted via email to esos.environment@gibraltar.gov.gi. Please do not send a printed or PDF version of the notification form as your submission – it will not be accepted. The deadline for submitting your notification form is **5 December 2016**. We recommend submitting your notification before the deadline.

B.2 How to fill in the notification on behalf of a trust

How to fill in the notification on behalf of a trust asset will depend on which scenario you fit into as described in section 1.7.4 of this guidance.

Scenario A:

If the dominant beneficiary is making the notification then:

Do not put the trust's name in question 7. As the dominant beneficiary organisation you will fill in the notification of compliance in your name and should ensure that the trust assets energy have been covered by your compliance. The trust assets will be treated as part of the company that is the dominant beneficiary. You do not need to give specific details of the trust assets in the notification. However please keep details in the evidence pack to verify that you have included the energy in your overall compliance.

If the dominant beneficiary appoints another undertaking to make the notification on behalf of the trust assets then the notification should be filled in as per Scenario B,C,D below.

Scenario B, C, D:

A notification will be required for each trust that the AIFM/Operator/Trustee/appointed undertaking (as appropriate) is responsible for under this provision. The notification should be filled in with the details of the AIFM/Operator/Trustee/appointed undertaking in answering questions:

1, 2, 3, 8, 9, 10, 11, 12, 17, 26, 27, 28, 29, 41, 42, 43, 44, 45, 46, 47, 48, 49

Answer the following questions in relation to the trust itself:

4, 5, 6, 7, 18, 19, 20, 21, 22, 23, 24, 25, 30, 34, 35, 36, 37, 38, 39, 40, 50, 51, 52, 53, 54, 55, 56

Answer the following questions in relation to the notification of compliance for the trust.

13, 14, 15, 16, 31, 32, 33, S1, S2, S3, S4

Please note that the qualifying AIFM/Operator/Trustee/appointed undertaking will need to provide a separate notification for its own compliance with the scheme. If the AIFM/Operator/Trustee/appointed undertaking has responsibility for several qualifying trust assets and its own compliance they will have to submit separate notifications on the system.

Appendix C: Useful contacts

Helpdesk support

Email: esos.environment@gibraltar.gov.gi

Web link: https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme

Scheme administrator & Regulator

HM Government of Gibraltar, Department of the Environment and Climate Change

https://www.gibraltar.gov.gi/new/energy-saving-opportunity-scheme

More information and advice

British Standards Institute (BSI) - for ISO 50001 case studies

Carbon Trust – for low carbon guides and carbon reduction advice

Climate Change Agreement operations manual

Measuring and reporting Greenhouse Gas (GHG) emissions from freight transport operations

Energy Saving Trust

Transport guidance and advice

Freight Transport Association's Logistics Carbon Reduction Scheme

Shipping Industry energy efficiency advice

Legislation behind ESOS

The Government established ESOS to implement Article 8(4–6) of the <u>EU Energy Efficiency Directive</u> 2012/27/EU (http://ec.europa.eu/energy/efficiency/eed/eed_en.htm).

ESOS came into force in September 2016 under the Energy Savings Opportunity Scheme Regulations 2016 (http://www.gibraltarlaws.gov.gi/) – referred to in this guidance as "the ESOS Regulations"