

Archdiocese of Birmingham

Environmental Policy.

Appendix A.

Parish Audit. (This can be adapted for Schools and for personal, individual use).

This guide for parishes on undertaking an Audit has been devised by the Diocese of Westminster. We gratefully acknowledge their work in producing this guide and for permission to use it ourselves.



Diocese of Westminster

PROPERTY DEPARTMENT

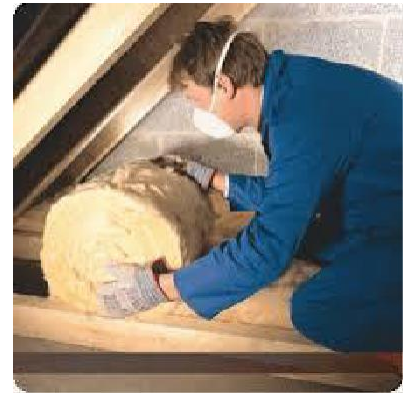


REUSE 
REDUCE
RECYCLE



**PRACTICAL GUIDELINES
TO REDUCE OUR
ENVIRONMENTAL
FOOTPRINT**





Today, the issue of environmental degradation challenges us to examine our lifestyle.
Pope Francis Laudato Si

April 2016

INTRODUCTION

As Christians we recognise that the earth is the gift of a loving Creator and care for the environment is fundamental to the universal 'common' good. A way of life that disregards and damages God's creation threatens the right of future generations to a healthy environment and to their fair share of the earth's wealth and resources, is contrary to the Gospel.

There are moral, theological and financial arguments to encourage the Diocese to take practical steps to reduce its environmental footprint. The moral and theological points have been discussed in specific Papal Encyclicals. These alone should require us to take action. The financial arguments are stark. Currently, energy and water represents a high percentage of the total running cost of a Parish. If no steps are taken, this cost will only increase.

The proactiveness of Parishes managing their footprint varies throughout the Diocese, from no activities or the bare minimum to those considering the installation of Photovoltaic Panels and many Parishes are seeking advice from the Property Office on this topic.

The purpose of this document is to give Parishes guidelines to help them proactively reduce their environmental footprint.

OBJECTIVES

1. To provide practical guidelines for all Parishes to manage their environmental footprint.
2. To help Parishes monitor their gas, electricity and water usage, such that their usage can be reduced and improvements monitored. See '**Annual Carbon Usage Form**' (Appendix A).
3. To help Parishes to reduce their gas, electricity and water usage.

TEN TIPS TO SAVE ENERGY AND MONEY

- Recycle and comply with Local Authority requirements.
- Install low energy light bulbs throughout the parish buildings.
- 'Switch off' appliances and do not leave appliances on 'standby'.
- Turn off lights where rooms are not occupied and provide timing light sensors for all external lighting.
- Provide a power monitoring device (clamp onto incoming electrical main) to monitor electrical usage to both power and lighting.
- Provide good quality insulation to pipes, pumps and hot water cylinders.
- Implement a rolling programme for replacement glazing and install triple glazed windows.
- Provide a proper control system for heating, hot water and lighting.
- Provide cavity wall insulation.
- When possible, replace gas fired boilers more than five years old.

Once the Ten Tips are implemented, the Parish will follow a more detailed review of their facilities for potential areas of improvement using the '**Energy & Recycling Audit**' (Appendix B).



Let ours be a time remembered for the awakening of a new reverence for life, the firm resolve to achieve sustainability, the quickening of the struggle for justice and peace, and the joyful celebration of life. Pope Francis - Laudato Si

ENERGY & RECYCLING AUDIT

This is broken up into 4 parts comprising:

1. **Basic Consumption** (simple low to medium cost improvements)
 - Simple day to day improvements to save small amounts of energy and / or costs.
2. **Slight Alteration** (with a medium cost but could take longer to implement)
 - More financial investment required if proper pay back.
 - Larger improvements to building fabric / building services (mechanical/electrical) requiring a planned approach.
 - Improved carbon reduction and cost savings.
 - Some of the preferred items will require statutory permissions ie Planning Permission, Building Regulations Conservation Area approval or Listed Building Consent. Contact Diocese Property Services for advice prior to undertaking this work.
3. **Larger Investment** (with a higher cost and longer term commitment)
 - Will require significant financial investment.
 - Will require considerable planning as these items will have an impact on the building.
 - All items are likely to require statutory permission (as previously described).
 - Payback and carbon savings will need to be checked against each item specified as this will vary.
 - Contact Diocese Property Services for advice prior to undertaking this work.
4. **Major Projects** (with a substantial cost and longer term to implement)

This level relates to new build, extensions, and major alterations.

 - Will require significant financial investment.
 - Carbon and financial savings will be significant.
 - All items will require statutory permissions (as previously described).
 - Contact Diocese Property Services for advice prior to undertaking this work.

The Diocese may provide financial assistance via a loan facility on larger investments project subject to financial analysis.



The climate is a common good, belonging to all and meant for all.

Pope Francis, Laudato Si

ANNUAL CARBON USAGE FORM

To help to reduce utility costs and monitor energy improvements, Parishes are encouraged to record their gas, electricity and water usage.

This Annual Carbon Usage Form can be used to record utility costs and usage and over time will demonstrate a reduction in costs as energy efficiency improvements are made.

Parish	
Address	
Year	

GAS

	Q1	Q2	Q3	Q4
Bill date				
Cost (£)				
Usage (kWh / hrs)				

ELECTRICITY

	Q1	Q2	Q3	Q4
Bill date				
Cost (£)				
Usage (kWh / hrs)				

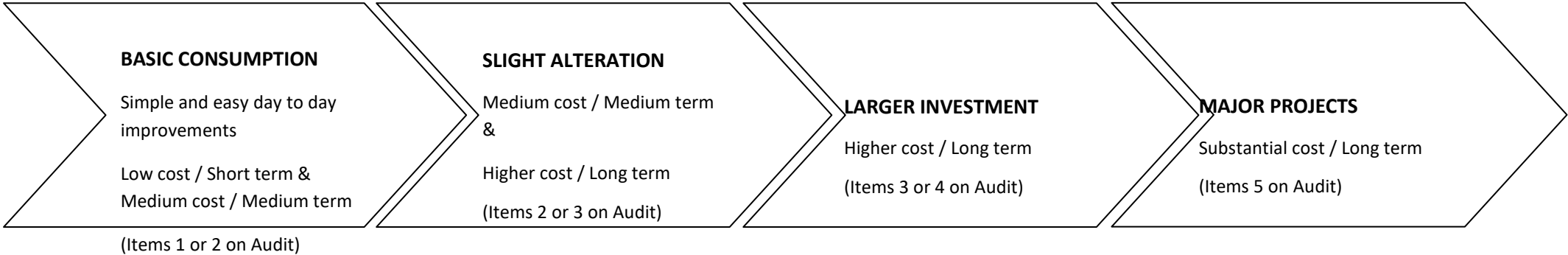
WATER

	Q1	Q2	Q3	Q4
Bill date				
Cost (£)				
Usage (m ³)				

We know that water is a scarce and indispensable resource and a fundamental right which conditions the exercise of other human rights.

Pope Francis Laudato Si

ENERGY & RECYCLING AUDIT



<ul style="list-style-type: none"> • Simple day to day improvements to save small amounts of energy / cost. <p>Some examples:</p> <ul style="list-style-type: none"> ➤ Switching off lights ➤ Changing to low energy light bulbs ➤ Water reducing measures in cisterns ➤ Setting thermostats for heating at 19 degrees or lower ➤ Replacing broken glazing ➤ Providing modern controls for heating and hot water 	<ul style="list-style-type: none"> • More financial investment required if proper pay back. • Larger improvements to building fabric / building services (mechanical/electrical) requiring a planned approach. • Improved carbon reduction and cost savings. • Some of the preferred items are likely require statutory permissions i.e. (Planning Permission, Building Regulations Conservation approval or Listed Building Consent). Contact Diocese Property Services for advice prior to undertaking this work. <p>Some examples:</p> <ul style="list-style-type: none"> ➤ Insulation (lofts and pipework) ➤ Boiler replacement ➤ Carry out programme of double glazing 	<ul style="list-style-type: none"> • Will require significant financial investment. • Will require considerable planning as these items will have an impact on the building. • All items are likely to require statutory permission (as previously described). • Payback and carbon savings will need to be checked against each item specified as this will vary. • Contact Diocese Property Services for advice prior to undertaking this work. <p>Some examples:</p> <ul style="list-style-type: none"> ➤ Photovoltaic Panels (PV – panels) ➤ Ground source heat pumps ➤ Heat recovery 	<ul style="list-style-type: none"> • This level relates to new build, extensions, and major alterations. • Will require significant financial investment. • Carbon and financial savings will be significant. • All items are likely to require statutory permissions (as previously described). • Contact Diocese Property Services for advice prior to undertaking this work. <p>Some examples:</p> <ul style="list-style-type: none"> ➤ Major PV panel installation ➤ Rain water harvesting ➤ Fully insulated buildings
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Energy & Recycling Audit

This Audit will help the Parish to assess where carbon usage reductions can be made and save money.

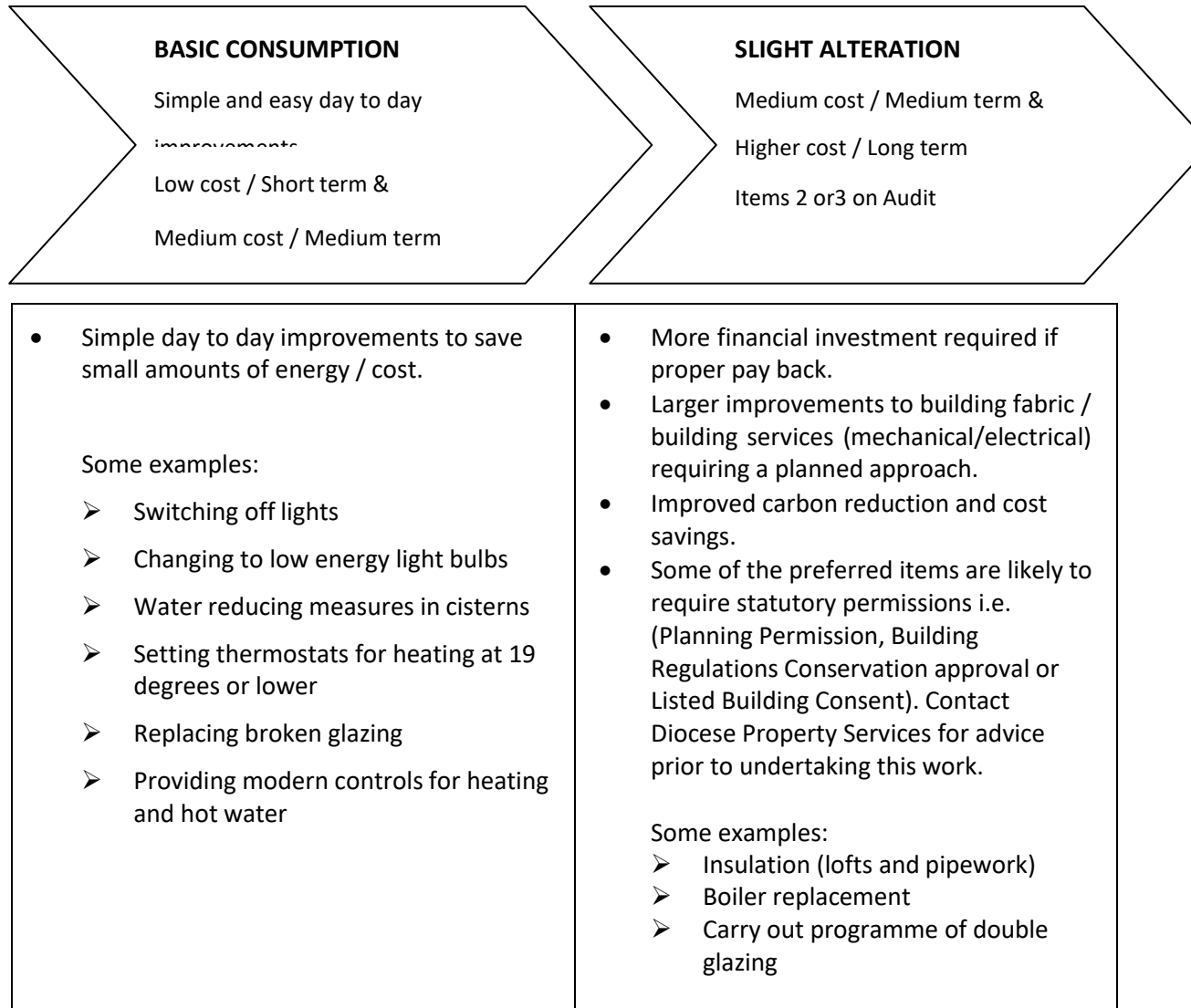
- The following Audit Report requires ‘yes’ and ‘no’ answers and will help you quickly assess where carbon usage reductions can be made and money saved.
- The Audit Report is divided into three sections according to cost and term
 - **Basic Consumption & Slight Alteration (Low & Medium cost / Low & Medium term)**
 - **Larger Investment (Higher cost / Long term)**
 - **Major Projects (Substantial Cost / Long term)**
- This audit should be carried out annually and the completed Report Form retained by the Parish.
- It is essential to keep records of all utility bills (energy and water) including the date, cost and carbon usage. Please use the ‘**Annual Carbon Usage Form**’ (**Appendix B**). The completed form should be retained by the Parish.
- Some of the above mentioned items may require Conservation / Listed Building / Planning Permission and / or Building Regulations Approval. Carry out necessary investigations and complete application forms as required for compliance.

Audit Team

The Parish could establish an audit team to undertake the inspection / audit and reporting mechanism.

Parish	
Completed by	
Date	

Energy & Recycling Audit

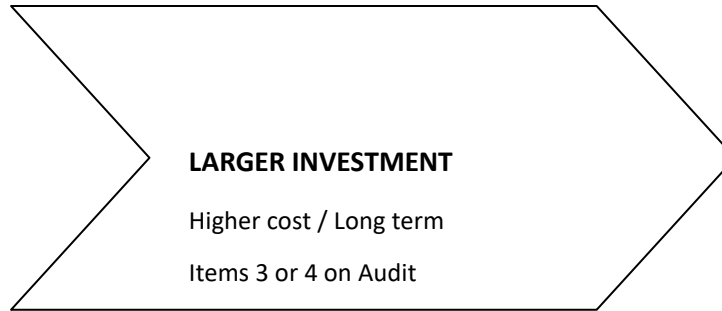


ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION PLAN
Recycling and food waste - allocate responsibility to a team / one person. Do you conform to Local Authority requirement?					
Items that should be recycled include the following (waste paper, printer cartridges, plastics, aluminium foil, cardboard, glass, green waste and food waste).	1				
Are boxes used to recycle various wastes and are the recycling bins in convenient locations?	1				
If recycling boxes are not used, have you requested boxes from your Local Authority? There may be a cost.	1				
Are all users aware that a recycling scheme is available – if not implement programme of implementation (Carbon Trust have notices etc) www.carbontrust	1				
Are all PCs and printers set to print double sided and in black and white print to reduce the amount of paper and ink used?	1				
Lighting (internal)					
Replace all light bulbs with low energy light bulbs	1				
Can light fittings take low energy light bulbs and if not can they be upgraded?	1 or 2				
Are lights turned off when not required?	1				
Are lights turned off when leaving the building?	1				

ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION PLAN
Is there a programme for upgrading light fittings on a planned basis?	1				
Where appropriate are there sensors fitted in appropriate locations	1				
Lighting (External)					
Are low energy light bulbs installed?	1				
Can the fittings take a low energy light bulb or do they need to be upgraded?	1 or 2				
Are light sensors fitted that are adjustable and are sensitive to dark / dusk settings?	1				
Power					
Are all computers and monitors turned off when not in use?	1				
Are all unused electrical items switched off at the power source?	1				
Are all electrical items that have a standby switched off at the source?	1				
If immersion heaters are provided are they on time clocks.	1				
Power & Lighting					
Consider installing smart metering.	1				
Are all recommended works carried out further to the five year electrical test and report?	1 or 3				
Water					
Is leaking pipework always repaired? (Check meter readings – if fitted).	1				
Are leaking hot & cold water taps (specifically percussion taps) repaired?	1				
Are there water reducing measures to toilet cisterns in place?	1				
Is rainwater stored and reused in gardens?	1 or 2				

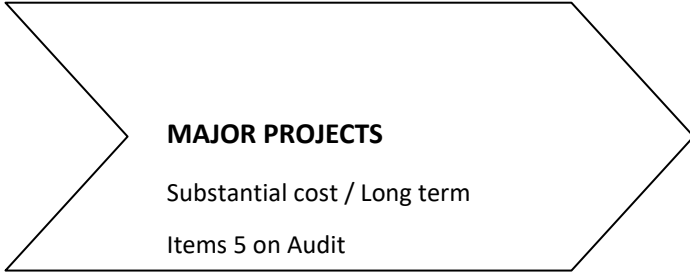
ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION PLAN
Hot Water & Heating					
Is any broken glazing repaired or replaced? (Potential heat loss.)	1				
Are boilers serviced on a regular basis? (ie every 12 months or sooner.) Implement programme of planned servicing.	1				
Are circulating systems checked to confirm they are operating satisfactory and radiators bled as required?	1 or 2				
Are heating & hot water programmed to come on only when required? Do they work as programmed?	1				
If electric immersion heaters are used, have you considered an alternative way to heat the water? When not in use switch off immersion heaters (time clock / programme).	2				
If you have wall mounted thermostats and / or radiator control valves do you turn them down?	1				
Are hot water thermostats set to not exceed 60°C? Consider water temperature valves.	1				
Are heating thermostats set at 19°C?	1				
Are thermostatic radiator valves (TRV's) fitted to all radiators and are they tested? (Locking types are preferable.)	1				
Lag / insulate all pipes, hot water cylinders and pumps.	1				
Lag / insulate cold water tanks.	1				
Can heating and hot water be isolated in vacant parts of the building?	1 or 2				
Can services be held in a smaller separately heated part of the Church?	1				

ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION PLAN
Are curtains fitted to all windows? (Presbytery only.)	1				
Are the curtains opened during the day and shut at night?	1				
Do you know the age of the boiler? (If more than 5 years old it is likely to be less efficient.)	1 or 3				
If windows do not close properly have you considered repairing or replacing them? Confirm frame material (metal / wood / aluminium etc)	1 or 3				
Insulation					
Has draft proofing been installed to doors and windows?	1				
If there is no draft proofing is there a programme to install?	1 or 2				
Is there any loft insulation in the Presbytery? If yes, confirm depth of insulation (min 200mm to comply with current building regulations.)	1				
If possible implement programme of cavity wall insulation.	2 or 3				
Are the windows triple glazed sealed units? Carry out a programme of replacement.	3				
Resource Usage					
Do you record the cost and volume of your energy consumption?	1				
Do you record the cost and volume of your water consumption?	1				



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 - All items will require statutory permission (as previously described).
 - Payback and carbon savings will need to be checked against each item specified as this will vary.
 - Contact Diocese Property Services for advice prior to undertaking this work.
- Some examples:
- Photovoltaic (PV) Panels
 - Ground source heat pumps
 - Heat recovery

ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION PLAN
Larger Investments / Green footprint					
If you are undertaking any larger works that may include PV panels, solar panels, ground source, heat pumps etc, please consult with Property Services Office to help carry out a Feasibility Study.	3 – 4				



- This level relates to new build, extensions, and major alterations.
- This will require significant financial investment.
- Carbon and financial savings will be significant.
- All items will require statutory permissions (as previously described).
- Contact Diocese Property Services for advice prior to undertaking this work.
Some examples:
 - Major PV panel installation
 - Rain water harvesting
 - Fully insulated buildings

ITEM	COST / TERM	CHURCH	PRESBYTERY	HALL	ACTION
Larger Projects					
When carrying out larger maintenance projects, refurbishment works, extensions etc please ensure that the highest standards of Building Regulations are achieved which will lead to cost savings and carbon reductions.	5				

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