



Discussion Group resource

for Creation Time 2012



Photo: Solar panels on Caloundra
Uniting Church, Queensland, Australia

Introduction

Energy is a gift from God as part of his creation but one we hardly notice... until there's a power cut! But one in five people in the world has no access to electricity at all and two in five rely on burning anything from wood to animal excrement for cooking and heating.

2012 is the United Nations Year of Sustainable Energy for All, with a target of giving the whole world reliable and clean energy by 2030. But this is not just a subject for the developing world. Here we need to make radical changes to move away from electricity generated by climate-change causing and increasingly expensive fossil fuels to renewable options, together with greater efficiency and lower consumption. These alternatives are proving controversial, but we are running out of time to achieve the targets that scientists say are needed.

As Christians, we have responsibilities both to care for the poor and to care for the planet. So we need to be aware of the issues and know what we can do both as individuals and as churches. This discussion group resource will help you think about the issues and what actions you might take.

Note for leaders

These studies have been designed so that you can either use just the first study as an introduction to the topic, or all three if you want to go deeper.

The number of facts in the studies has been kept to a minimum to help you concentrate on the main ideas. More background information is available in the Sustainable Energy Factsheet and through the Further Resources.

Answers to the questions posed in the studies appear on page 5.

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Photo of wind farm: [Chrishna](#) 

www.ctbi.org.uk/creationtime





WEEK 1

Sustainable Energy: Energy as God's gift

It's very easy to take energy for granted. Without thinking about it we'll plug something in, flick a switch, turn on the gas or start the car and expect something to happen. Only on the rare occasions that something goes wrong do we realise just how dependent we are. In this series of studies we hope to encourage you to be more thoughtful, both because of the effects that much of our energy use has on the wider world, and because many in the world are not so fortunate.



Photo: [Joel Duggan](#)

- *Come up with as many different ways as possible that you have used energy today.*

As well as the variety, the amount of energy we use is also considerable.

- *How much energy does the typical Briton use on average? Make an estimate of how much we use, in terms of how many kettles being boiled permanently this is equivalent to, or how many cyclists going flat out would be needed to generate this much power.*

Of course, in previous generations we were restricted to what we or animals could do, plus what we could collect by hand to burn. And in many parts of the world, this is still the reality. 1 in 5 has no access to electricity at all.

- *How would your life be different under such conditions?*

The United Nations have made 2012 Sustainable Energy for All year, with two goals:

- ▲ Everyone in the world should have access to clean electricity and heating. A consequence of all this burning is fumes which damage people's health, and also pollute the wider environment.
- ▲ The developed world should move to sustainable energy: our use of fossil fuels is also polluting and causing climate change.
- *What do you think this might involve practically? (See the factsheet for more details.)*

As Christians, we have an additional insight. All this energy originates ultimately in God's creation of sun, moon and Earth. And he gives us vastly more, in solar radiation hitting the earth, than we can currently use. Our bible passage will help us reflect on this.

Bible reflection - Read Psalm 146

- *God creates everything and provides for us? Can we expect as much energy as we like? Why or why not?*
- *How do we reconcile verses 7-9 with all we've talked about?*
- *Do we have a role in providing the poor with energy, and if so what?*
- *Given that God is the ultimate source of energy, what does that say about how we use it?*

Suggestions for prayer

Thank God for his gift of energy and that we have plenty. Pray for those who are without, and for efforts to give them a better future.

Things to try this week

An electricity fast: Take a day to live using no electricity, or as little as possible. Reflect on how different this day was.

Be thankful: Each time you use energy, whether electricity, gas, driving a car, or using something that has taken energy to produce, take the opportunity to thank God for what his gift of energy has enabled you to do.



WEEK 2

Sustainable Energy in Britain and Ireland

Last week, we looked at energy as God's gift.

- *What did you learn, and if you tried one of the activities, how did it go?*

This time, we'll be looking at energy use in the UK, and focussing on electricity. To get a feel for how we generate electricity currently, try the following exercise as a group:

- *Out of every 100 units of electricity, how many are generated by gas, nuclear power, wind, etc... (This is best done with a jar of coins, buttons or something similar.)*

Compare with the answers in the leaders' notes on page 5. Note that only 10% of this is sustainable. The government's plans to meet our sustainable energy targets require this to rise to nearly 30% by 2020.

- *What challenges are there in meeting these targets?*

The plans involve a substantial increase in wind farms. This is unpopular with many.

- *Why are wind farms unpopular? How do/would you feel about having a wind farm near where you live?*

There's a lot of work to do, and investment is needed. But there's a considerable cost in doing nothing too, both in terms of the effects on the climate, and the increasing costs of fossil fuels. Demand for them is rising, particularly in India and China, and we are having to use harder-to-reach and higher-cost supplies of oil and gas to meet the need.

- *Given all this, what benefits are there in using less electricity, or with greater efficiency? How practical a strategy is this?*
- *What can we do as individuals?*

Bible reflection - Read Genesis 1:26-30

- *This well-known passage doesn't mention energy directly, but what conclusions can we draw?*
- *The earth is given to all of humanity, past, present and future. But ... "Humanity always wants a free lunch, but isn't prepared to do the washing up so that someone else can have a meal later." Is this true, why is it true, and can we do anything about it?*
- *Can it ever be right to use our increasingly scarce resources for unnecessary things? (e.g. TV, entertainment, electronic devices for that do things we could do by hand, etc.)*

Suggestions for prayer

Thank God for what we can do with electricity. Pray for wisdom for our leaders and those in energy companies as they try to meet the challenging sustainability targets.

Things to try this week

Energy efficiency and consumption: Think about how you can cut your electricity usage. The WhatYouCanDo website www.whatyoucando.co.uk/electricity_reduce gives a list of suggestions.

Energy generation: Find out what renewable electricity schemes exist in your area and what is proposed or possible. Could you or your church get involved? Or, at least, consider switching to a green energy supplier. Find out more at www.christianaid.org.uk/give/other/ecotricity.aspx



Photo: [Dave Rogers](#)

WEEK 3

Sustainable Energy for All

In the last session, we looked at our energy usage and considered amongst other things the options for using less. This time, we will consider those who have no choice.

The UN's Sustainable Energy for All¹ campaign this year is for those who don't have access to much energy, sustainable or not. One in five people on Earth lives without access to electricity at all, and many more have unreliable service. Two in five use wood, coal, charcoal or animal waste for cooking and heating, and the fumes damage their health: two million a year die as a result. Without addressing these two issues, it will not be possible to achieve many of the Millennium Development Goals².



Photo: [Prato](#)

- *What opportunities would these people have if they had modern clean energy of this sort?*
- *Why do we need a UN initiative for this? (It happened by itself in the UK.)*

Of course, cost is an obstacle. The UN estimates that \$4-5Bn per year over the next 20 would get everyone clean cooking facilities, and \$45Bn could give all access to electricity. This is a tiny proportion of the world's current investment in energy of about \$1500Bn per year. It would be invested primarily in small-scale solutions which locals could mostly keep running themselves. These vary round the world: for instance in parts of India they are developing electricity made from burning rice-husks. In many places solar generation is appropriate.

- *Why encourage this sort of approach as opposed to the large-scale power station model we have in the UK?*

Bible reflection - Read Isaiah 58

This chapter is often quoted when talking about helping the poor and social injustice issues generally, but in the original context it is as much about wider lack of community.

- *What three things are the Israelites called to do? (See verses 6, 7, 9a.)*
- *How might these apply to the issue of sustainable energy and the reasons why many still live in energy poverty?*
- *Are there any limits to our obligations? What is "poor" and do we need to help everyone who has less energy access than us? What would be the practical consequences if we did succeed in getting them all to our own level of consumption?*
- *Does this passage advocate that we should "fast from energy use", whatever that might mean in practice?*

Summing up and prayer

- *What have you learnt from these studies and what has it encouraged you to do?*

Pray that we will be motivated to continue thinking about these issues.

Things to try this week

If you have a missionary contact in the developing world, ask them how these issues affect people they are in contact with.

Write to your MP or local politicians and encourage them to support the kind of actions you feel we should be taking.

¹ <http://www.sustainableenergyforall.org/>

² <http://www.un.org/millenniumgoals/>



Answers and additional notes for leaders

Session 1

First question: Don't overlook energy both in manufacturing daily items, or transporting them (and food) to us.

Amount of energy use by a typical person: 3 kettles being permanently boiled or 80 cyclists going flat out, which equals 5.5 kilowatts. (Averaged over the day and the year; we use more during the day and during the winter.)

Session 2

Answers to the electricity generation exercise:

Non-renewables (90%):

Gas 39

Coal 30

Nuclear 19

Oil 1

Others 1

Renewables (10%):

Wind 4

Hydro-electric 2

Solar 1

Waste-burning 3

The question on challenges could elicit some strong views, so it might be wise to just note the points of issue rather than argue them through. The point of the question is to demonstrate that getting where we need to be isn't easy, and will involve some compromises. Nuclear power is deliberately not mentioned as that's even more controversial. If it comes up, it's worth noting that under UN/UK definitions it isn't sustainable and, like fossil fuels, the amount of uranium (etc) fuel is limited.

The final question in the Bible reflection isn't as obvious as it might seem at first glance: God *has* given us the world to enjoy, rather than just survive on. It's more a question of degree.

Session 3

The second question is again controversial: you will get people raising the issues of both global injustice and poor governance/corruption in the developing world. Both are factors.

In thinking through Isaiah, it's worth bearing that our situation is different from the one being written about, in two ways:

- Looking at the world through the eyes of those in Biblical times, the poor aren't *that* poor, and some are reasonably well off. But most in the developed world today would be seen as unimaginably rich.
- There is no sense in the passage that the total amount of consumption is a problem: in fact the "true fast" being called for would probably end up being a *feast* for all, particularly if other related passages are taken into account. But we face environmental and resource limitations which require us to cut back. It may be worth pointing out that God promises to meet our *need* in verse 11, not our *desire*.