

# Interview with Sir John Houghton on the Mall in Washington, DC.

March 11, 2005

*As former Chair of the scientific assessment of the Intergovernmental Panel on Climate Change (IPCC) from 1988-2002, Sir John Houghton is one of the world's most authoritative experts on climate change. He is also a devout evangelical Christian. In March 2005 the Evangelical Environmental Network (EEN) arranged for Sir John to brief the Board of the National Association of Evangelicals near Washington, DC. Footage for an educational DVD featuring Sir John was also shot during Sir John's visit. This DVD includes an interview with Sir John by Jim Ball, Executive Director of EEN. The transcript of that interview is provided below.*

**Rev. Jim Ball:** Sir John, how did you become a Christian?

**Sir John Houghton:** Well, I can't name the time and day for that. But I was brought up in a Christian home with very keen Christian parents, very narrow Christian parents by many standards. I suppose my first real challenge for that issue came when I went up to Oxford as a young school boy, age of 16. Oxford was then just after the war for ex-servicemen, much older than I was. But there was a keen Christian group in the college and they befriended me. I got to know the world and they really challenged me to make up my mind whether I was going to go with them or go somewhere else. And I said I was going to go with them.

**Ball:** What does your Christian faith mean to you?

**Houghton:** It means a great deal to me because first of all one of my first challenges was a scientist, and I was keen to be a scientist - that was I really wanted to do, and there seemed to be some conflict, or some people thought there were conflicts between science and faith. So I've been exploring the relation between my science and my faith for most of my life. And that's been a great search because we have God who's made the creation, we have this book of God's works, as we call it, and then we have the Bible which tells us about Jesus and what he's done for us. You put those two together and that's really wonderful because you get a much bigger picture of your Christian faith and the whole of your life by putting Jesus in the middle there and associating that with creation.

**Ball:** When did you first learn about global warming?

**Houghton:** I gave my first talk about it in 1967 to a meeting of the British Association for the Advancement of Science. But at that time, we didn't realize that global warming was going to be a major danger. We realized the earth might warm up a little bit, by one degrees 'C' [Celsius] or something of that order, but we had no idea how dangerous that might be. That didn't come until later.

**Ball:** When did you start thinking global warming was a real serious problem that needed to be addressed?

**Houghton:** We began to get concerned about it, I suppose, during the 70s. But then in 1983 I became the Director General of the Meteorological Office, which is the UK weather service. As part of the weather service there was a very good group working on climate and climate modeling, one of the best groups in the world at the time. We began very seriously to model the climate and try to discover just what increased greenhouse gases were going to do to the climate. We were developing all that during the early 80s and of course lots of scientists in the world were then saying, "The earth is warming up much faster than we had thought. We are burning much more fossil fuels than we imagined and this is going to be a serious problem." It was in the beginning of the 80s, I suppose, that we began to get concerned as scientists. But it still wasn't a political issue, until about 1988.

**Ball:** And that's when you became head of the scientific assessment, is that right?

**Houghton:** The IPCC was formed in 1987. It had its first meeting in 1988 and I became the chairman of the scientific assessment for the Intergovernmental Panel [on Climate Change].

**Ball:** Why are you concerned as a Christian about global warming?

**Houghton:** Well, as a Christian one is concerned about how well we are looking after the earth and how well we are looking after the atmosphere and the whole climate because the climate affects what happens on the earth and what happens to the vegetation, what happens to the birds, what happens to the oceans. Any change in climate, if it is too rapid, tends to have a big influence on the earth and its ecosystems. Now, I'm not a biologist, but I'm interested in that sort of thing. But I also began to realize, as others did, that the impact on people would be, or could be, enormous if the climate was going to change in very serious ways. The sea level was likely to rise. It took us some time to get estimates of how big that might be. But also, the problem of extremes: floods and droughts and

storms and so on. As the climate warms up, these are likely to become very much more intense, and in some cases, more frequent. So it was that aspect that was very concerning. And as a Christian I am very concerned that we look after the earth, as good stewards of the earth, as we are told in Genesis to be right from the beginning of the Bible. But the theme runs right through the Bible, right through to the New Testament. Jesus had parables about stewards and stewardship. I'm going away, said He, but you're going to look after it and you've got to look after the people in it, and it's your responsibility to do it. That's a very strong responsibility. One is very concerned as a Christian that one is doing a good job looking after the earth, on behalf of the Lord, who is its owner. The impacts on people will be very great, especially disadvantaged people. In a place like here in Washington we've got the infrastructure to cope with it and adapt to whatever we have to adapt to. But if you're in Sub-Saharan Africa or in India, or South East Asia, then that's much harder and the impacts of climate change will be much greater there, and they don't have the infrastructure. So hundreds of millions of people will be affected. They will not be able to grow the food where they are so easily, so hundreds of millions are going to become more hungry. That's a big problem in the world at the moment and [global warming impacts] will make it worse. And then the sea level will rise. Tens of millions of people in Bangladesh will be displaced because they live on very low lying ground; twenty-five million people in China, people in the Indian and Pacific oceans where the lands are very low indeed. Some of those islands will disappear; whole states will disappear. It's a very severe impact on people and we should be very concerned as Christians and realize what we are doing, what each one of us is doing, in emitting carbon dioxide is change the world and its climate. And we should do something about it.

**Ball:** How did your Christian values guide you as the Chair of the IPCC's Scientific Assessment?

**Houghton:** The Intergovernmental panel -- we were a scientific body. What we had to do was access the science as honestly and as thoroughly and as balanced a way as possible. So, only scientific arguments were allowed. No political agendas, no personal agendas, and so on. It was very important to maintain that. Those are Christian values; those are values which are shared by others who are not Christians, but they are particularly Christian values. And the discipline of science is a marvelous area to operate in. Why? Because it's God's science and we're looking for truth, and it must be truth in a very balanced way. That was very important to me. But then, of course, some of those meetings were very tough, because people tried to introduce political agendas. And people would try to introduce their own personal agendas. And how did one cope with that. Sometimes that was a tough thing to do. But I was very conscious that I wasn't doing this on my own. I was also conscious that I had God's help in doing it. And I knew that people were praying for me and for the whole process. Because it was felt to be a really important process, and that God could really help us with that. One of the stories, or pictures in Genesis I really love, is that of the Garden when God was walking in the garden with Adam and Eve in the cool of the day, every day. Obviously a regular thing that he did. And what did they talk about on those walks? They must have been talking about creation. "How are you getting on Adam? How are you getting on with the animals, and the plants? How's the garden going?" Because God is really interested. He cares. He cares about everything we do and he cared about how I was trying to run those meetings and trying to run them in a way that was not only good for everyone there but also in some sense pleasing to him.

**Ball:** Global warming is a long term problem. What is the urgency? Why do we need to start addressing it now?

**Houghton:** It's happening now. We can see a bit of it now. But it's a slow process. The earth only warms up slowly because the oceans take a long time to warm. Thirty to forty years until we see what we've committed to already. We are already committed to a lot of global warming because of what we've done so far. We won't see a lot of that for thirty to forty years. So why we should take action now is because we are doing things now, like building power stations and energy infrastructure that will last for 50 years. We don't want to suddenly tear those down and have the build something new. We want to phase it in in a way that is sensible and economic and cost effective. If we have to do that in a hurry in 50 years times, then the cost of that will be enormous. So, the cost of doing it now is small. We have the technology to do it now so we should get on with it now.

**Ball:** Some say that the science isn't certain enough yet for us to do anything about it. What are your thoughts about the certainty of the knowledge that humans are in fact causing global warming and creating a problem by causing global warming.

**Houghton:** I would just say I've worked with hundreds of the world's scientists and the vast majority of the world's scientists know that it is happening and understand the science. The basic science after all is very old science; it's been known for two hundred years, that the greenhouse effect works, that we are as warm as we are at the moment because of greenhouse gases. If you put up more of those gases, the world becomes warmer. There is no doubt about that from a physics point of view or from a basic science point of view. No scientist who knows anything will dispute that. What some people are disputing is the detail and how big it will be, and how damaging it will be. I would just refer them to the Intergovernmental Panel [on Climate Change] and its volumes; four volumes,

thousand pages each, up to ten thousand scientific references in those volumes, the best refereed, the best worked on piece of science almost ever, in any part of science. Very authoritative indeed. I would also refer them to the Framework convention on Climate Change, where every nation in the world, essentially, except for some of the very small ones, 160 nations, signed up to the Framework Convention in 1992 in Rio. President Bush the first signed for the United States. The United States ratified it unanimously. What does that convention say? It says that although we haven't got absolute certainty, we have enough information, enough knowledge with which to act and we should be acting now. And that was in 1992. The science has gotten much further since 1992. The science has all been confirmed to a large extent. We know more than we did and the thing seems more severe than in was in 1992. So if that was true then, it's even more true now that we're required to take action even though we don't know everything. And after all, if I was a commercial company, a company like British Petroleum, the chairman of British Petroleum, like the chief executive, Lord John Brown, he gives lectures on climate change like I do. And that company is really taking it on board. They are beginning to cut their own emissions through their own internal activities and they've saved 400 million dollars already by doing that and there is no doubt at all that action has to begin now.

**Ball:** Some people say, "Ok, there's a problem. But it's going to cost too much to fix this problem and there are lots of other problems in the world, and this is just too costly. We're just going to have to live with it." What do you think about that?

**Houghton:** Well, not to do it, not to act, is going to be very much more costly than acting. The cost of acting is not large. The cost of acting, if we phase it in sensibly, if we do things slowly, if we develop the technology we need to develop, that would be very good for industry, we'll become more efficient, we'll actually save money. In fact, the simple things we do will be negatively costly; they'll cost less than what we're spending at the moment. And the estimate costs of even changing the whole of our energy system in 50 years that people have made, the cost is not large. It's a small proportion of the growth of our GDP. But if we don't do it, our GDP will go down in many places because of the dangers and the problems of climate change. So, all the people saying it will be terribly costs and costly in jobs are quite wrong. Jobs will be created because of the new industries that will need to follow in order to change what we do. And just imagine what we can do in 50 years time, actually, through 50 years. Imagine what we've done since 1950; we can do a great deal before 2050. And we've got to get on with it now.

**Ball:** What can Christians in the United States do to address this issue? And what is the role of the United States in addressing the issue of global warming?

**Houghton:** The United States is a very important country and it has a very big responsibility. First of all you are the biggest part of the problem. 20-35% of emissions of greenhouse gases come from the US. Much more per capita than any other country in the world. Secondly, you are the country with the biggest potential for contributing to the solution. So not only are you the biggest part of the problem, but you can be the biggest part of the solution because of your capabilities, your technology, things you can do, and the leadership you can provide. You are the most powerful nation in the world. You should be providing leadership in this issue above all issues, because you really can help the rest of the world to do something about it. In order to do that, you have to begin to do things yourselves, in very substantial ways. You've got to cut your own greenhouse gas emissions, on the fastest timescale you can possibly do. You've got to help China and India develop in ways that are environmentally friendly, and don't emit too much, but allowing them to develop at the same time. There are lots of things you can do here. And Christians, you are a Christian country, known as a Christian country, you have a Christian President. And you should be seen as a country that is listening to the rest of the world and also taking on board the needs particularly of the poor in the world in a way that probably no other country really has the capacity of doing. So let me appeal to the Christians of America: take this problem seriously, starting now.