



White roofs and 'cool' cars - Obama's US energy secretary gives Prince Charles tips on tackling climate change

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Reflecting sunlight on buildings and cars among dozens of ideas considered by Steven Chu and the US energy department

People should paint their roofs white and drive "cool" cars on pale-coloured roads to avoid devastating climate change, US energy secretary and Nobel prize-winning physicist Steven Chu has advised Prince Charles and a group of 19 other laureates meeting in London today.

The measures, which would reflect sunlight and enable buildings and automobiles to stay cooler and use less energy in summer, are some of dozens that Chu and the US energy department are considering for the "revolution" which he said was needed in the US, Europe and around the world to address global warming.

"Yes, make people paint their roofs white. I think white is pretty. If all vehicles used cool colours then they could cut down the air conditioning and we would have a great reduction in energy," he said at the start of a three-day climate change symposium hosted by Prince Charles and attended by peace, literature, chemistry and physics laureates as well as 40 other senior scientists.

"This is a crisis. It's very serious. The earth will continue to warm up, even if we turned off energy use today. The carbon up there stays there for hundreds of years," said Chu, who has argued that coal is a "nightmare" and that science must be harnessed urgently to save the world from global warming.

"The industrial revolution was a revolution in the use of energy. It offloaded from human and animal power into using fossil fuels. We have to go to a new revolution that can severely decrease the amount of carbon emissions in the generation of energy," he said.

In less than six months Chu has transformed the US energy department from being driven by oil interests asunder President Bush's administration, to one which is now turning dramatically to renewable energy.



But he would not be drawn on the eventual cuts in greenhouse gas emissions which the US will adopt.

"Whether it is 17%, 20% or 25% [is not so important now]. There's an obsession with these percentages. But it's really important ... we get started. The US wants to decarbonise as swiftly as possible. We will go as fast as we can. I will do everything in my power to push the technologies."

He said he expected America to act before China in the run-up to the crucial UN climate change talks in Copenhagen in December. "I remain optimistic. The US should act first. Using China as an excuse not to act is no longer [appropriate]. If the US does act, we hope China will follow. The Chinese leadership knows about the consequences of climate change," he said.

But he warned against expecting too much of the US too soon. "We have to make a transition. If one does this very suddenly then there would be huge disruption. You need a lot of incentives, and some regulation. There is not one single policy that will save us."

Chu proposed that small teams of the best US scientists explore radical ways to reduce carbon in the economy. The targets for research include a new generation of nuclear power stations, a "smart" electricity grid, improved battery technologies, new energy standards, electric cars and highly efficient buildings.

The Obama administration today committed billions of dollars to improve the energy efficiency of homes and government buildings.

But Chu played down suggestions that it was considering large-scale "geo-engineering" technologies like mirrors in space to reduce emissions.

The President of the Royal Society Lord Martin Rees, who was also at the symposium, said: "We need a completely new kind of energy economy that reduces dependency on fossil fuels. One species has the future of the planet in its hands. The best possible science should be employed to find the solutions. In buildings you can reduce energy consumption by 80% in a way that can pay for itself in 15 years — that is free money."