Janet Yellen has spoken out in support of a carbon tax as the most effective and efficient way to reduce US greenhouse gas emissions.

Ms Yellen, who chaired the US Federal Reserve until February, has joined the Climate Leadership Council, a bipartisan group pushing for the US to address the threat of global warming by introducing a carbon tax, with revenues returned to the public in dividend payments.

The group is backed by large companies including ExxonMobil, BP, General Motors and Johnson & Johnson.

“Climate change is a very critical problem that we need to address,” Ms Yellen told the Financial Times. “When the central problem is the damage caused by greenhouse gas emissions, the cleanest and most efficient way to address it is to tax those emissions.”

She was speaking as the council published estimates that indicated its plan to abolish climate regulations and replace them with a carbon tax could cut US greenhouse gas emissions by substantially more than all the policies put in place by President Barack Obama.

It also issued poll results suggesting that 56 per cent of respondents backed its idea of “taxing fossil fuel companies on their carbon emissions and rebating all the money directly to all Americans through a monthly cheque”, with 26 per cent opposed.
The proposal for the carbon tax and dividends is known as the “Baker-Shultz plan” after being drawn up by a group including James Baker and George Shultz, respectively secretaries of state under presidents George HW Bush and Ronald Reagan.

Its supporters acknowledge that it stands little chance of becoming law under President Donald Trump, who has in the past described global warming as a hoax, but are working to win support for the 2020 elections and beyond.

Ms Yellen said she had joined the Climate Leadership Council because it was trying to build a political consensus for action on climate change. “Is this going to be politically acceptable? I really don’t know,” she said. “But I think it is worthwhile to show there can be broad agreement on a policy that is environmentally enlightened.”

The former Fed chief’s involvement in climate policy dates back to her time as chair of President Bill Clinton’s Council of Economic Advisers, when she argued the case for the 1997 Kyoto protocol, saying the cost of the 7 per cent emissions reduction sought by the administration would be “modest”.

“I learnt a lot about the seriousness of the issue,” she said last week. At the time, the administration backed a cap-and-trade programme to reduce emissions. Ms Yellen was willing to support it, she said, but most economists would argue that a carbon tax was a more effective policy.

A carbon tax would be more efficient than controlling greenhouse gases by regulating businesses, she added: “Some of these command and control regulations are very expensive from their point of view.”

The Kyoto protocol was signed by the Clinton administration, but a resolution in effect rejecting it was passed in the Senate on a 95-0 vote and the US never ratified it.

Ms Yellen said it was “very concerning” that “it has been very difficult to get congressional buy-in to any kind of measure to address climate change”.

Christine Todd Whitman, a Republican former governor of New Jersey and head of the Environmental Protection Agency under President George W Bush, is another founding member of the Climate Leadership Council. She said the broad support for the campaign from a range of companies, which also include Royal Dutch Shell, AT&T, PepsiCo and Procter & Gamble, showed that the plan to combine a carbon tax with deregulation would be good for businesses.

“We can sweep away some of the regulation and inspection that industry finds burdensome,” she said. “When you look at the business opportunity here, it’s impressive.”

It was essential to take action on emissions to prevent catastrophic climate change decades in the future, she said. “I have grandchildren, and some of them are going to live to be 100. I don’t want to leave them a world where they can’t live on this planet any more,” she added.