

Good morning ladies and gentlemen and thank you for the opportunity to offer a CFOA perspective on what many people see as the biggest challenge facing the world today, as well as the biggest threat. Climate change is a political problem, a security issue and an economic problem as well as an environmental one.

The other day I heard global warming described as “the ultimate cross cutting issue,” which I think is a notion borne out in the excellent presentation we have just received about the carbon footprint of fire, four times the embodied carbon value when involved in a fire.

What I think is also helpful for the audience to understand more fully as part of today, though, is the wider impact of global warming on the fire and rescue service and the role it plays, and how that understanding now provides a compelling incentive for the service to play its part in reducing global warming.

And this is not just the outward facing perspective of doing everything we can to prevent fire, and by definition, therefore, prevent millions of tonnes of carbon adding to the problem.

I also want to say something very briefly about the Fire and Rescue service as an organisation and a public agency in it’s own right, accepting greater responsibility for reducing global warming in every way it can, and accepting our community leadership role in this regard.

Let me just say a few things firstly about the problem.

The evidence is now clear, and we can be absolutely certain, that global warming has been, and is being caused by rising greenhouse gas emissions from burning fossil fuels, deforestation and agriculture. Currently, there are 6 billion people on this fragile planet and there will be 9 billion of us in less than 50 years time.

The concentration of carbon dioxide in the earth's atmosphere has risen from its pre-industrial value of about 280ppm to 380ppm last year. Of course, whilst the burning of fossil fuels is in large measure to produce energy, we should also realise the wider impact of other activities, not least of the huge carbon footprint of the fires we attend as a Fire and Rescue Service.

We all have to try to ensure, therefore, that global emissions peak and then decline within the next ten to fifteen years if we are to avoid warming of above 2°C.

Because, above this threshold, the impact on people and nature is very dangerous, but what will rising temperatures actually mean?

They will mean major declines in crop yields, up to one third in Africa, with rising numbers of people at risk from hunger.

Some areas will see water shortages. Sea level rises will threaten major world cities. Whole eco-systems from coral reefs to the rainforests face collapse and many species could face extinction. Storms, droughts, forests fires and flooding will have a major impact on our life and, of course, our focus here, on the role of the Fire and Rescue Service.

The poorest countries and the poorest people – wherever they happen to live – will suffer most, and the costs will fall on the countries which have done least to cause the climate change, and are least able to adapt to its effects.

What are we going to do when people start fighting – not over political ideology or even religious divides, but over water?

What will we do when thousands of people arrive at our shores to seek shelter, fleeing not from persecution but from environmental catastrophe?

What will we do if, as Nick Stern told us, catastrophic climate change has a greater economic impact than two world wars and the Great Depression put together?

The truth is that dealing with the consequences of climate change – after it's happened – will cost between five and twenty times as much as acting now to stop it. That's the choice we face and therefore, the question we have to ask ourselves is, what do we all need to do, and what can we do as a Fire and Rescue Service?

First, we need to understand that we are currently consuming three planets' worth of natural resources, and that we need to move towards what the WWF call 'One-Planet Living' – in other words living within our means.

This is as big a challenge to our generation as the movement for social reform was in the 19th century.

Secondly, according to MORI, in 2002, just 1 person in 36 thought that the environment was one of the most important issues facing our country. Early last year, it was 1 in 10, by the end of the year, it was 1 in 7. This shows how far we have come in people's thinking.

But many of you might have seen other polls by MORI where many people think scientists are still questioning climate change. This also shows how far we have yet to go.

Thirdly, tackling climate change has to be a priority - doing all we can to stop it happening, and adapting to its effects so that each of us is able to cope. The floods last year made that clear to every single one of us, and on this we have to work together.

Fourthly, each of us has to play our part. National government can do a lot, not least getting international agreement to tackle climate change.

But it's also a task for all of us, whether we are political leaders, professional service leaders or business leaders alike – and it's a task for each of us in our everyday lives.

But there are other truths here we have to face up to. Even if national and local government play their part, unless all of us as citizens play our part, we will not succeed. This is a new strand of politics; personal responsibility; not leaving it to others, if you like, the idea that I am my planet's keeper.

So let me now say a little more about the impact of some of this and some of the problems facing the Fire and Rescue Service as a consequence.

There was an intergovernmental panel on climate change a couple of years ago that made a number of predictions about the impact of climate change – and though it makes for sober reading, it's worth thinking about the implications of those predictions.

I've mentioned already we are now seeing rising temperatures (a probable rise between 1.8°C and 4°C – possibly even up to 6.4°C!)

But these temperature change figures need putting in context; they mean we are going to see:

- Wetter winters (as well as summers!)
- But at the same time drier summers (and winters!)
- We could see sea level rises by up to 43cm – and this is considered as a conservative estimate; with a massive increase in flooding. I have mentioned the floods last summer but we all held our breaths towards the end of last year, over the tidal surge down the East coast – what else will we see?

- Arctic summer, sea ice will disappear in the second half of the century – though recent evidence suggests this could happen more quickly, and
- There will be a major increase in the number and intensity of heat waves and an increase in extreme weather events.

We have already seen the shocking impact of Hurricane Katrina a couple of years ago in the US as well as the devastating effects of the floods much closer to home.

When we consider some of these predictions of the effects of climate change, it's clear there is a major and changing role for the Fire and Rescue Service and a major challenge because the changes will touch every facet of our organisation.

In relation to flooding for example we saw last year just how big a role the fire and rescue service played, and later this week we will be discussing these issues with Sir Michael Pitt who is undertaking a major review.

The impact of drier weather is likely to see more drought conditions – more summers like 1976 with heat waves and huge grass, heath, woodland and forest fires, but these could be followed, in the same year, by major floods. This will place an enormous demand on our resources but also the way we deploy our resources but also the way we deploy our resources, and the need for our operational policies and procedures to operate across borders.

We are having to completely rethink our emergency plans for these events, as well as our whole approach as a service and the idea that we can operate within nice, neat, Fire Authority boundaries is really gone.

During the Toll Bar incident in South Yorkshire last year, for example, 31 of the country's Fire and Rescue Services had a presence on the scene at some time.

During the Gloucestershire and Hereford & Worcester floods, Search and Rescue Teams from around 20 Fire and Rescue Services were involved, following working patterns that looked nothing like anything we use for our "normal" role of firefighting back in home authorities.

My own search and rescue team in just the last two years has been deployed to Cumbria, Yorkshire, Humberside, Gloucestershire and Suffolk purely in response to the kind of global warming issues mentioned.

And we cannot assume that events we have historically only seen in other parts of the world will not happen here.

We have recently seen tornadoes in Kent and the West Midlands, and earthquakes in Manchester and Kent.

Believe it or not, there have been Tsunamis in England – the last one recorded was in 1607¹, it swamped the Bristol Channel area, covered 190sq miles and killed 2000 people. For some reason, we seem to assume that there is no possibility of this happening again, but why do we make that assumption? And if it did happen again, how many people are at risk in Bristol today?

What this all means therefore is that we in the Fire and Rescue Service need to adapt and to play our part.

We need to adapt the way we deliver our services so we can mobilise and operate across arbitrary local authority boundaries, and we must operate to well practised and understood emergency plans, in addition to national command systems and operational policies. We have high hopes for the new Centre of Excellence to support the Service in this national context, though of course we also need to carry on being very local at the same time.

We need to continue to invest in the technology and equipment to operate in this new strategic way, and we will need to continue to see the underpinning investment, legal authorities and governance arrangements to do so. We look forward to the outcome of the Flood Review to help clarify some of current ambiguities around flooding and water reserves.

¹ National Geographic News - Tsunami Swamped England 400 Years Ago

We clearly need to continue to play our part in reducing fire, and thereby reducing the carbon footprint of fire, by the way we act as an enforcing authority and by our community safety and fire protection work. Sprinklers are an important weapon in our armoury as I am sure we will hear more of today.

Like everyone else, though, we in the Fire and Rescue Service need to act as responsible corporate citizens and, as an organisation, be better at using renewable energy sources, recycling and thinking about how we change our corporate lifestyle as well as our personal lifestyle to make our contribution, and to play our part as public figures in local communities to lead the way for others.

It's very difficult not to sound quite gloomy when talking about climate change – I make no apologies for that as it is a very serious problem and, as I said at the start - it's the ultimate cross utility issue of our time. I very much look forward to learning more from the other speakers here today so we can all work together in the community to sustain what we are coming to realise is a very small planet.

Thank you.