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## Climate Change - Implications for the Fire and Rescue Service

### Summary

This paper informs members of the activities that Fire and Rescue Authorities have been undertaking in reducing the impact of fires and other emergencies on the environment, how they have been conducting all of their activities in an environmentally sustainable way and how they are strengthening further their resilience capacity and strategic capability to respond to large scale incidents caused by climate change.

### Recommendations

Members are asked:

1. To take note of the current activities of the Fire and Rescue Authorities with regard to climate change
2. To provide the political leadership to promote the contribution that the Fire and Rescue Authorities can provide to reduce the effects of climate change
3. To agree to develop a statement through the Fire Forum that clearly sets out the objectives for the Fire and Rescue Authorities.

### Action

LGA officers to action as necessary.

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### Background

1. The UK government has placed an emphasis on local authorities setting a leading example on Climate Change. Actions by local authorities are seen as critical to the achievement of the Government's climate change objectives. Avoiding dangerous climate change will require a 60-80 per cent cut in greenhouse gas emissions by 2050.
2. The LGA's own report "*Be aware, Be prepared, Take action - How to integrate climate change adaptation strategies into local government*" recognises that every region and local authority will be affected by climate change. The 2007 summer floods, the 2004-2006 drought and the 2003 heatwave, have shown how climatic events can have a major impact on households (including people's health), business, critical infrastructure (such as roads, railways, water treatment works or electricity generation) and vulnerable sections of society (such as the poor or elderly) as well as having a major economic impact.
3. The LGA also recognises that councils are uniquely placed to tackle climate change and are the link between national aspirations and individual action. Through their Local Area Agreements, over 90% of councils have adopted targets to reduce emissions in their own operations or across their local area or targets to adapt to the effects of climate change.
4. We know that the Fire and Rescue Authorities have a key role to play in taking positive action to tackle climate change, which is not always fully understood or recognised by other authorities. Fire and Rescue Authorities' core function has an impact on the environment; a reduction in fires has a positive impact on the environment, decreases water utilisation and building design, incorporating fire engineering, can reduce the carbon footprint of a building. By quantifying the reduction in incidents it is possible to map the contribution FRAs can make more effectively. The day to day activities Fire and Rescue Authorities undertake also have an impact on the environment and it is important that they take appropriate action to reduce our carbon emissions wherever possible.

### Progress to date

5. The majority of English authorities (including most English Fire and Rescue Authorities) have now signed the Nottingham Declaration which recognises the central role of local authorities in leading society's response to the challenge of climate change. All Scottish and Welsh authorities have signed their own version. By signing the Declaration councils pledge to systematically address the causes of climate change and to prepare their community for its impact.

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6. Over the last 24 months Fire and Rescue Authorities have been independently, or across regions, working to develop sustainability strategies, capacity building through investment and development to raise awareness across the LAA partnerships.
7. Activities have included working with the Carbon Trust and educational establishments to embed sustainability into the core business of the Fire and Rescue Authority, setting demanding targets through the LAAs or local indicators to reduce CO<sub>2</sub> emissions linking in to NI 185 (CO<sub>2</sub> reduction from Local Authority operations), NI 186 (Per capita reduction in CO<sub>2</sub> emissions in the LA area), NI 189 (Planning to adapt to climate change) and NI 194 (Air quality), working towards achievement of BS 8555 and ISO 14001 and altering existing or building new assets that meet the requirements of the British Research Establishment Environmental Assessment Methodology (BREEAM) for sustainability.
8. Nationally CFOA is forming a Sustainability Group to help coordinate the Fire and Rescue Service's activities and to share better practice. It is hoped that once fully established this forum will mark a step change in the sharing of innovative solutions to tackle climate change. What it will be missing is strong political influence at a national, regional and local level.

## **How can we contribute?**

9. There are currently four areas of activity that Fire and Rescue Authorities can and are making a difference to climate change; these are
  - reducing the number fires thus reducing water consumption - our prevention role,
  - designing safe buildings with engineered solutions (sprinklers) that reduce the chance of the buildings being lost due to fire – our protection role,
  - protecting the critical infrastructure – our response role and planning role under the Civil Contingencies Act, and
  - by undertaking its activities in a sustainable way – our corporate social responsibility role.

### Prevention role

10. CLG published statistics show that the number of fires is falling each year with the latest published figures for 2006 showing that the total number of primary fires for the UK was 159,800 down 6 per cent from the previous year. This year on year reduction has a lot to do with the partnership work of the Fire and Rescue Authorities within the districts. There is no reason why this trend cannot continue.
11. Initial research has indicated that the total emission from preventable fires is in the region of 2 million tonnes of CO<sub>2</sub> per annum nationally. By investing in preventing more fires from happening we can not only save more lives but contribute to the Government's target of reducing greenhouse gases.

## Protection role

12. Through engineering solutions within building designs, like the fitting of sprinklers, the embodied energy within a building can be preserved. Embodied energy is the energy used to acquire raw materials, manufacture, transport and install building products in the initial construction of the building. Buildings fitted with engineered solutions, like sprinklers, control fires in the early stages, reducing the likelihood of the building being destroyed. This has the effect of:
- Safeguarding the amount of CO<sub>2</sub> produced from the construction materials used
  - Stopping the embedded carbon being released during a fire
  - Stopping more CO<sub>2</sub> being produced in the construction of a replacement building
  - Stopping the CO<sub>2</sub> produced in recycling the damaged materials.

## Response role

13. The Fire and Rescue Authorities will be impacted by climate change in at least five key areas over the next 50 years. These are;
- High summer temperatures
  - Floods
  - Drought
  - Storms
  - Social impact – migration
14. The Department for Communities and Local Government published a Fire Research Technical Report 1/2006 in December 2006 titled “*Effects of Climate Change on Fire and Rescue Services in the UK*”. This report investigates possible climate change scenarios and the challenges for Fire and Rescue Services in the UK that would be associated with them.
15. The Department of Environment, Food and Rural Affairs (Defra) commissioned the UK Climate Impacts Programme (UKCIP) to work with several organisations to produce the UK Climate Projections. These projections cover the period up to the end of the century and show different scenarios representing high, medium and low greenhouse gas scenarios.
16. In summary, these scenarios advocate that in the future there may be an increase in the number and severity of grassland and forest fires combined with water shortages in the summer months in the UK and an increase in the frequency of flooding events during the winter months. All these would have an impact on, not just the workload of fire and rescue services, but also on several other areas like training, appliance design, operational planning, equipment design, etc.

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17. Under the Civil Contingences Act 2004 the Fire & Rescue Service are defined as Category 1 Responders for the purpose of maintaining civil protection in the UK. The Civil Contingencies Act specifies statutory legislation with which the Fire and Rescue Service must comply, working in conjunction with other key stakeholders, both on a national and a local basis.
18. Specific duties include undertaking risk assessments, cooperation with other responders, joint emergency planning and information sharing across the responders, developing arrangement for warning and informing the public and to have strong business continuity management process in place. It in this area of preparing for potential climate change impacts that the Fire and Rescue Authorities have a key role to play.

## Social responsibility role

19. We have mentioned earlier in this report the activities currently being undertaken by most Fire and Rescue Authorities in conducting its business in a sustainable way. We are not alone in developing policies, processes and guidance to reduce the impact on the environment. A more joined up approach is now needed across all local authorities and across the Fire and Rescue Authorities.
20. The Fire and Rescue Service has a '*strong brand*' and is well respected within businesses and the community. If it was seen to be proactive in dealing with this as an important issue, for the wider good of society, then others (Public sector, private sector and individuals) might be more inclined to follow.

## **What's needed?**

21. A more joined up approach across all the Fire and Rescue Authorities; this will be addressed with the formation of the CFOA group. Political leadership is also needed to promote awareness of the Fire and Rescue Authorities' role across all local authorities, as is the development of a joint strategy (statement) by the LGA fire forum to set clear objectives for the Fire and Rescue Authorities.

## **Financial Implications**

22. All proposals for LGA work are to be met from existing LGA Budget and resources.

## **Implications for Wales**

23. Officers will discuss with the WLGA as appropriate.

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