FOREST FIRES REDUCTION – A CASE HISTORY

CURRENT RELEVANCE

Forest fires emit massive amounts of CO2 and avoiding such fires can help significantly in reducing the global atmospheric CO2 concentration. For example, in 2015 forest fires in Indonesia alone were estimated to have released 1,600 million tonnes of CO2, compared to the 5,000 million tonnes/year emitted by the whole of the USA. Global emissions are around 40,000 million tonnes/year. WWF has identified a huge problem very much worth solving and instigated a process to find potential solutions.

Forest fires and the resulting haze has become an almost annual disaster in Indonesia and Malaysia. The haze that covered much of Southeast Asia in 2015 was the worst in recent years. A total of 2.6 million hectares area of forest, peat, and other land were burnt, and the World Bank estimated the biodiversity cost to be US $295 million.

The current methods of suppressing forest fires including retardants, fire barriers and breaks, re-wetting of peatland, water bombing, and cloud seeding can be dangerous, costly, technologically inaccessible, weather dependent, slow and ineffective.

CLIENT

Worldwide Fund for Nature (WWF) Malaysia, 2019.

BACKGROUND AND CHALLENGE

WWF Malaysia was seeking new scalable technology solutions to suppress forest fires in Southeast Asian inland and peatland tropical forests.

WWF Malaysia organised a local 'XFire Challenge' within Malaysia for inventors to come up with new solutions. The reach of this exercise was limited and correspondingly the results received were small. WWF wanted to increase the number and quality of solutions to choose from.

RESOLUTION

Herculean Climate Solutions introduced the WWF Malaysia XFire innovation challenge team to Xinova, a Seattle, USA, based company that uses a network of several thousand inventors to solve a very broad range of problems.

WWF worked with Xinova to run a challenge through their network which delivered many potential new solutions, several of which were selected by WWF for further development.

Successful implementation of one or more of these potential solutions has the potential to reduce CO2 releases by several tens of millions of tonnes per annum.

CLIENT FEEDBACK

WWF has been very pleased with the quantity and quality of the solutions that have been provided.