

## MEDIA RELEASE

Embargo: Monday, 12 August 2019

Media are welcome to attend. Interviews can be prearranged for Monday, 12 August  
Embargoed media releases will be available [here](#) and the full program is [online](#).

### ENERGY EFFICIENCY A PERFECT STORM FOR REQUIRED CHANGES IN AGRICULTURE

**Energy efficiency provides us with the entry point to enable a perfect storm for required changes in agriculture, in wealthy and developing countries, addressing the wellbeing of farmers, water availability and global climate concerns. Farmers, governments and electricity generation companies all need to be on board to ensure acceptance and action.**

This is the key message of Dr Ajay Mathur, Director General of The Energy and Resources Institute (India), Member of the Indian Prime Minister's Council on Climate Change and co-chair of the global Energy Transitions Commission. Dr Mathur has also just been appointed to the International Energy Agency's Commission for Urgent Action on Energy Efficiency to examine how progress on energy efficiency can be rapidly accelerated through new and stronger policy action, composed of government ministers, top business executives and thought leaders from around the world.

Dr Mathur is in Australia to address the 2019 Crawford Fund annual conference, titled *Weathering the 'Perfect Storm': Addressing the Agriculture, Energy, Water, Climate Change Nexus*. He will be joined in Parliament House, Canberra on 13 August by international and Australian specialists discussing strategies to provide water, energy and food in a sustainable and equitable way in the face of climate change.

"We have, over the years, tended to overuse both water and energy in agricultural operations; practices that are now at odds with the challenges due to the emerging changes in hydrology and the increasing global concentration of greenhouse gases (GHGs)," said Dr Mathur, who was responsible for the mainstreaming of energy efficiency in India through initiatives such as the Star Labelling programme for appliances, and the Energy Conservation Building Code.

"Electrification of farm operations, combined with the enhanced share of renewables in electricity, is the only way to eliminate GHG emissions from farm operations. Energy efficiency is the first-step in ensuring that solar-based electrification is cost effective," he said.

"The promotion of energy efficient solar pumps, together with the purchase of excess electricity by the grid, provides an opportunity to install micro-irrigation facilities, to mitigate climate emissions and provides a revenue stream for farmers to invest further in technology while they minimize fertilizer and water use," explained Dr Mathur.

"It has been argued that water-use efficiency and energy efficiency in agriculture are self-regulating phenomena, largely driven by water and energy prices. This is only partially correct now. Climate change requires us to effectively decarbonize our economies by the third quarter of this century which implies that agricultural operations will need to become fossil-fuel free in the next two decades."

"The required interventions to move to energy efficiency in agriculture require policies, incentives, and regulations for their initial acceptance, commercial model development, and large-scale replication. We need buy-in by both farmers, electricity generation companies and governments."

"The major challenge faced by these energy-smart interventions is the creation of demand for the zero-GHG energy-efficient options, so that economies of scale can drive down prices. Such challenges have been successfully overcome in the past – in enabling the green revolution, and more recently in building the market demand for energy-efficient refrigerators and air conditioners in buildings. I am hopeful they can be overcome again," he concluded.

