

## **Energy management in greenhouse**

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Today, according to increasing cost of any kinds of energy, we have to use this valuable input for the best productivity.

In most Iranian greenhouses this energy is Gasoil which is not used properly. In order to decrease and best using in consumption of fuel in cold season, we should act as follows:

1. Temperature of night should be lower than of day. It differs for each kind of plants.
2. Creating a gentle air flow (max up to 1 m/s) in greenhouses causes, a) Breaking the temperature gradient so the result will be decreasing the temperature differences between internal and external surface of the cover of the greenhouse, decreasing intensity of temperature transfer and also increasing the life of the cover (min up to some months), b) Air flow breaks the temperature gradient, so the rate of fixation of dry material increases in time unit outstandingly.
3. Artificial injection of  $\text{CO}_2$  would be the most useful way in decreasing consumption of energy, so the growth of plants increase about 50%, and also it intensifies the greenhouse effect in the greenhouses.
4. Transferring the heating system outside of greenhouse is another way in increasing efficiency of energy in greenhouse.