

choices about how to use the available energy sources also affect whether you can achieve the desired yields and crop quality. However, it can be difficult to fully optimize the use of all your systems and find the right settings in your climate computer. Priva's consultant Peter Mos is keen to lend a helping hand by sharing these three tips for saving energy.

Be more selective with lighting

One quick and easy way to save energy is to be more selective in your artificial lighting strategy by paying closer attention to the amount of natural light. The growth of each crop is based on an optimal light sum per day. Once that has been reached, you can turn off the artificial lighting to save energy.

It also pays to take the weather forecast into account. If bright sunshine is predicted in an hour's time, you can already turn off the lighting. If you need to keep the CHP unit running for the heat, you face another decision: should you sell the electricity back to the grid, or to keep the lighting on anyway, albeit with little benefit?

Check that everything is working

It is important to check carefully that all your equipment is actually doing what you have programmed it to do. If you've set the minimum pipe temperature at 35°C, is it maintaining that temperature constantly, or does it keep fluctuating between 30°C and 40°C due to a dysfunctional sensor? What about the motor that keeps opening and closing the vents? Are all the vent mechanisms in good working order? You can save a substantial amount of money by performing regular maintenance, keeping a close eye on statistical data and simply taking a good look around the greenhouse.

The minimum pipe temperature deserves special attention. In practice, growers often tend to work with just a handful of settings: 35, 40, 45 and 50°C. However, there's no logical reason to always choose a nice 'round' number. Setting it at 42° or 43°C instead of 45°C, for example, will probably achieve the same effect while reducing your energy consumption at the same time. Every little bit helps!



Critically assess your buffer

The buffer level is another important consideration. Storing energy is a way of buying time in the winter; it's a kind of insurance policy in case a piece of equipment fails or the weather changes dramatically. But a full buffer loses heat in the winter. Perhaps it doesn't need to be quite so full; an extra reserve of 30% might be sufficient instead. This enables you to reduce the heat losses and save energy.

Many companies have changed their production approach in recent years, which has often given them significant energy savings as an added bonus. Even so, it can still be wise to take a critical look at your habits to help you make subtle adjustments in your greenhouse operation and save even more energy. The savings might be relatively small at an individual level, but every little bit helps to further optimize the sustainability of your business.

Interested to know more?

Don't hesitate to contact me!



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