

# Maximise Your Return on Effluent Management Investments



Thinking about upgrading your effluent management system? Discover how you can achieve greater savings on energy costs with minimal to no extra investment.

These practical tips have been developed by the farmer-led Taranaki Catchment Communities (TCC). For more energy-saving strategies or to see how Niaruo Farm successfully reduced their energy consumption, visit [www.taranakicc.nz/taranaki-rural-energy](http://www.taranakicc.nz/taranaki-rural-energy).

Key Areas	Tip	Vendor(s) Addressed
Choosing your effluent pump type	Positive displacement pumps are the most energy efficient in most circumstances. If your vendor has not recommended this, ask them to explain why.	
Pump management	<p>Your vendor should clearly explain the rationale behind their recommended pump management solution.</p> <ul style="list-style-type: none"> <li>⚡ A float (or pond level) based pumping control system is typically optimal for avoiding unnecessary pumping and overflow that reduces savings on fertilisers and the fuel required for spreading.</li> <li>⚡ Running your effluent system during the day when you have solar power, at night when you use night rates or other cheap power times can reduce energy costs and carbon.</li> </ul>	
Stirrer management	Consider installing a controller for the stirrer to operate when the pump runs, enhancing nutrient spreading on the paddocks. This can decrease the need for additional fertiliser applications, resulting in savings on fuel and input costs.	
Piping types	Low loss, high diameter PVC pipes reduce pumping friction and the energy needed to push the effluent to the field.	
Pond sizing	A larger pond offers greater flexibility regarding when you need to pump to your field.	
Pond shape	A pond with high surface area allows more evaporation during the day, reducing the amount of effluent you need to pump.	
Pond bacteria management/additive	Pond bacteria break down the effluent, making the slurry easier to pump while reducing the energy needed for pumping. The bacteria can also help with higher nutrient absorption, and improved odour/sludge management.	
Plant wash/storm water discharge	Explore alternative discharge/management options for water that doesn't require effluent storage. These options are likely to be less energy-intensive by either avoiding pumping or reducing the energy needed to pump.	

## Next Step

Speak to your vendors to get advice for your specific circumstances.