

# Torr climate change focus farm meeting



Second discussion group meeting held at Torr Farm, Auchencairn, on Wednesday 2<sup>nd</sup> February 2011 at 10.30.

## Meeting theme – Reducing energy use

The theme for this meeting was reducing energy use and identifying potential cash savings, both at Torr and other farms. Gillian Reid from the SAC Dumfries office is the Farm Facilitator and acted as chair for the meeting.

Item and Speaker	Content	Actions/Outcomes/Additional info?
<b>Introduction</b> Gillian Reid. SAC	Gillian introduced the meeting, welcomed the speakers and gave a brief overview of the Farming for a Better Climate initiative.	See <a href="http://www.farmingforabetterclimate.org">www.farmingforabetterclimate.org</a>
<b>Reminder about Torr</b> Ross Paton, Farmer, Torr.	<p>Ross told the group a bit about the farm for those who hadn't been to Torr before. Ross explained he currently wasn't doing 'anything fancy' in terms of energy use, but after the cold December could do with minimising Torrs electricity bill.</p> <p>Farm staff at Torr had been keeping a record of diesel use by simply writing up on a white board every time they took fuel, how much and what it was for. This gives a starting point to see where the majority of fuel use was going; Ross reckoned the farm was using around £40 diesel per day. There was some discussion within the group about contractors using farm fuel, with the group having different experiences.</p>	<p><i>Read more about Torr at</i> <a href="http://www.sac.ac.uk/climatechange/farmingforabetterclimate/ccfocusfarms/ccdairy/">http://www.sac.ac.uk/climatechange/farmingforabetterclimate/ccfocusfarms/ccdairy/</a></p> <p><i>Farmers Weekly Tips on Farm Fuel Efficiency</i>  <a href="http://www.fwi.co.uk/Articles/2008/06/06/110717/Tips-for-improving-diesel-efficiency-on-your-farm.htm">http://www.fwi.co.uk/Articles/2008/06/06/110717/Tips-for-improving-diesel-efficiency-on-your-farm.htm</a></p>
<b>Topic 1</b> <b>Energy use at Torr</b> Jim Campbell, SAC	Jim noted that energy and fuel use was only a small part of the farms carbon budget, but could give rise to significant cash savings for Torr and other farms. Using national benchmarking figures, Jim showed that Torr was above average in terms of electricity and fuel use. Torr has a smart meter fitted, so you can monitor energy use on a half-hourly basis via the internet; this was useful and Jim compared typical energy usage between a	<p><i>More information on energy auditing is available at</i> <a href="http://www.sac.ac.uk/climatechange/farmingforabetterclimate/fiveactions/keyaction1/">www.sac.ac.uk/climatechange/farmingforabetterclimate/fiveactions/keyaction1/</a> see practical guides on right hand side of page</p>

	<p>24hr period in summer and winter, illustrating the extra costs in winter due to additional heating to prevent frost damage. Jim highlighted how water heating, milk cooling, parlour heating and the vacuum pump could all merit further investigation at Torr and ran through some potential options, costs and payback periods. Jim also included some bonus slides on renewable energy, but this will be a topic for future meetings.</p>	<p>University of Bangor have produced a farmers guide to energy audits. Its free to download at <a href="http://www.calu.bangor.ac.uk/energybooklet.php.en">www.calu.bangor.ac.uk/energybooklet.php.en</a></p>
<p><b>Topic 2</b></p> <p><b>Minimising energy use; what have other farmers done?</b> Adrian Jones, SAC</p>	<p>Adrian felt that the steps to better energy use were to meter, measure, record and minimise. Adrian focused on energy costs for spreading slurry as an example, illustrating the additional cost of handling excess rainwater in the slurry store when you cost out the energy use associated with the pumping, mixing, handling and spreading. In an example calculation, this exceeded £650/year dealing with rainwater alone. Adrian also got the group thinking about the maintenance and operational costs of equipment, using slurry mixing equipment as an example. Although there are lots of variables, Adrian went back to meter, measure, record and minimise, advocating the 'kettle concept' of using only the amount of energy needed to boil the required amount of water. Saving a little on a daily on-farm operation soon mounts up if you are doing the same thing 365 days of the year.</p>	<p>Waterwise on the farm gives some good tips for cutting water use that could also reduce energy needs at <a href="http://publications.environment-agency.gov.uk/pdf/GEHO0307BLVH-E-P.pdf">http://publications.environment-agency.gov.uk/pdf/GEHO0307BLVH-E-P.pdf</a></p> <p>The 4 Point Plan also looks at ways to reduce dirty water around the steading <a href="http://www.sac.ac.uk/knowledge/environment/examples/fourpointplan/">www.sac.ac.uk/knowledge/environment/examples/fourpointplan/</a></p> <p>Case study from Devon about managing slurry. Added benefits in terms of reduced energy use <a href="http://www.defra.gov.uk/foodfarm/landmanagement/water/csf/documents/case-study/8-managementofwater.pdf">www.defra.gov.uk/foodfarm/landmanagement/water/csf/documents/case-study/8-managementofwater.pdf</a></p>
<p><b>Topic 3</b></p> <p><b>Looking at energy savings at Torr.</b></p> <p>Jim Campbell, Adrian Jones and Ross Paton</p>	<p>Ross, Adrian and Jim took the group to look at a couple of points of interest on the farm. The group discussed improvements to the current milk cooling system, water use on the farm, the grain dryer, electricity smart meter and some of the slurry handling and dirty yard areas.</p>	
<p><b>Additional Business</b></p> <p><b>Micro Hydro</b></p> <p>Kath Aitken, Farmer</p>	<p>Kath was able to give the group a quick but informative overview of the micro hydro scheme she has installed at her farm.</p> <p>A couple of people commented how they would like to visit Kath's farm to see the micro hydro system in action, which we will try to arrange for a future meeting.</p> <p>Some links have been included opposite containing additional information that may be useful for those considering micro hydro in the meantime.</p>	<p>Micro hydro practical guide at <a href="http://www.sac.ac.uk/climatechange/farmingforabetterclimate/fiveactions/keyaction2/">www.sac.ac.uk/climatechange/farmingforabetterclimate/fiveactions/keyaction2/</a> see practical guides on right hand side of page</p> <p>British Hydro Association micro hydro webpages <a href="http://www.british-hydro.org/mini-hydro/index.html">www.british-hydro.org/mini-hydro/index.html</a></p> <p>SEPA guidance for run of river hydro schemes <a href="http://www.sepa.org.uk/water/hydropower.aspx">www.sepa.org.uk/water/hydropower.aspx</a></p>

<b>Thanks and close of meeting</b> Gillian Reid, SAC	Following questions and discussion, Gillian thanked the speakers and closed the meeting.	
<b>Date and location of next meeting</b>	Provisionally planned for a half day on Torr on 18 <sup>th</sup> March 2011 to cover forage efficiency for both beef and dairy farmers with SAC Specialist Jimmy Goldie	Contact <a href="mailto:Gillian.reid@sac.co.uk">Gillian.reid@sac.co.uk</a> for more information or to book a place

### **Do you farm and would you like come along to future meetings?**

The meetings aim to provide farmers with sensible ideas for their business, from invited speakers and other farmers, to improve business efficiency whilst also reducing the loss of greenhouse gases. It's free to come along and you will be able to influence the topics, speakers or sites to visit for future meetings.

Contact Gillian Reid for details of the next event at [gillian.reid@sac.co.uk](mailto:gillian.reid@sac.co.uk) or telephone the SAC Dumfries office on 01387 261172.

If you want to keep up to speed with what's happening at Torr but don't necessarily want to attend all the meetings, ask to be added to the Torr emailing list; you will receive notification of the next meetings and notes from previous events. Email Gillian as above or [climatechange@sac.co.uk](mailto:climatechange@sac.co.uk)

Notes from previous meetings plus information on the other key action areas are available at the website, see [www.farmingforabetterclimate.org](http://www.farmingforabetterclimate.org)

