

# Pigs

November 2024

Edited by Ciarán Carroll



Welcome to the November edition of the Teagasc Pig Newsletter. Thankfully pig prices have held their own in November with no further price drops happening throughout the month. Hopefully this will continue into Christmas and we can look forward to the new year with anticipation.

In this month's edition, we cover a number of interesting and useful articles. Emer McCrum runs through your energy costs and how to review your bills with suggestions on how you can make changes to reduce costs.

Peadar Lawlor revisits Split Sex Feeding, highlighting the advantages and savings that can be made by moving to split sex pens and feeding.

My own article asks if your farm is winter-ready, with some timely advice on how to get ready for

winter so that you can ensure that pigs remain healthy and productive throughout the winter while minimising risks to pigs and farm staff as well.

And finally, there's a brief item on Eurotier 2024, the world's leading trade fair for animal farming and livestock management which took place at Hannover, Germany earlier in the month and was attended by some of the Pig Development Department staff.

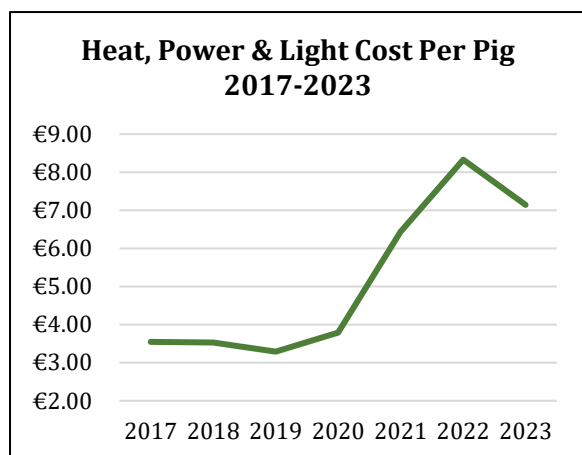
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## Farm Energy Costs – Analysing Your Bills

Emer McCrum

While energy prices have gradually reduced in the last two years, energy costs (including electricity & liquid fuel) on average account for the third largest non-feed input after labour and healthcare costs. The graph below details the national average Heat, Power & Light cost per pig produced in recent years.



Source: Teagasc National Herd Report 2017-2023

The rapid escalation in costs from 2021 was part of the broader industry crisis at the time and because of this, producers were limited in financial terms to act on reducing energy usage and improving efficiency at farm level. Now is an opportune time to review your individual situation and plan measures to reduce this cost and in the process, improve the sustainability of your business. In this article we will look more closely at your electricity bill, in particular the 'other items' tucked away on page two.

Many producers are currently locked into medium to longer-term contracts at competitive rates. Double check however when your contract is due to expire as suppliers may not always give you

advanced warning or notify you once a contract has expired. Shopping around can be time consuming so employing the services of a broker might be a more suitable option as pig farms generally have good purchasing power. Before doing so, gather up a selection of recent bills to give the broker an idea of your annual usage.

When was the last time you sat down and studied your energy bill? With direct debit payments and many service providers having moved to paperless billing, it may be some time since you last went through the additional charges on your bill. A competitive unit price is hugely important but remember to review the second page of your bill at least annually.

### 1. Maximum Import Capacity (MIC) / Capacity Charge

The annual charge per kVA is divided by 365 and charged pro-rated based on the number of days in the billing period. For example, at present a 90kVA allowance costs in the region of 12c per kVA per day or almost €330 per month. If the MIC is too low for your current requirements, you may be incurring excess charges. In the event that peak demand exceeds the MIC, a surcharge of up to six times the capacity charge per kVA will apply. Conversely if the MIC is too high for your requirements, you will be charged for more capacity than you actually require on an ongoing basis.

As a general guideline, the MIC should be set at 5% above your highest electrical load in the

past year. If you are incurring excess costs, analyse a number of recent bills with your electrical contractor to check your recorded use and establish whether a new MIC is required.

## 2. Demand Charge

Demand charges are a feature of certain price plans. It is designed to reflect the high cost of producing electricity during the hours when there is most demand on the electricity network. The charge is applied per kW used above a threshold of 30kW during the hours of 5pm to 7pm from Monday to Friday across the winter months (01/11 to 28/02 inclusive). Outside of these hours and time period there is no demand charge and this item will appear as €0.00 on your bill.

If you are incurring excess charges here, explore options to reduce the electricity demand during these hours. Move to using energy intensive equipment at alternate hours, avoid having large loads operating at the same time and reschedule tasks outside maximum demand periods.

## 3. Wattless Charges

Certain equipment such as motors or fluorescent lights require reactive power or wattless units in order to operate. Wattless energy is measured separately from your general units and if your consumption of

wattless units increases above one-third of your general units per bill, the excess wattless units will incur a charge.

If you are consistently incurring excessive wattless charges, contact your electrical contractor to fit power factor correction equipment. This will reduce the amount of reactive power you consume and help to avoid wattless charges on your bills. If you have had a consistent wattless charge on every bill, the payback period for this work is less than four years.

## 4. Public Service Obligation (PSO) Levy

You may have noticed the PSO Levy returning to your bills since October. The levy was reduced to zero in 2023 to September 2024 due to the extremely high wholesale prices at the time. The PSO for all business customers is based on the MIC. The new rates for businesses from 1st of October to 30th September 2025 are as follows:

- MIC < 30kVA : €12.91/kVA/Month
- MIC => 30kVA:€1.57/ kVA/Month

It is advisable to carry out a review of your billing items at regular intervals particularly if there has been a change to the core energy use on your holding. In the next article we will review longer term options in the area of improving energy sustainability but in the meantime, some homework!

## The Case for Split Sex Feeding Gilts and Boars

**Peadar Lawlor**

From ~30kg on male (boar) pigs grow faster and more efficiently than females (gilts). At a given slaughter age, male pigs will be heavier and have eaten less feed to achieve their carcass weight compared to females. I previously discussed this and most recently in a 2020 newsletter piece. But why, when we know this, do so many units work with mixed sex pen groups and even on the units where males and females are penned separately why is the same diet fed to both male and female groups? We are essentially wasting costly feed and nutrients as we are over-supplying the females with nutrients and energy particularly late in the finishing period.

The differential in growth and feed efficiency between males and females means that female pigs could be fed diets that are lower in energy by ~4% and lower in SID amino acids by ~7%. At the recent Teagasc Pig Farmers' conference Elizabeth Ball (AFBI) gave an excellent presentation on 'Lowering Nitrogen Excretion from Pig Production'. This work showed that substituting a 15% with a 13% crude protein diet for gilts from 60kg to slaughter did not negatively affect growth performance but reduced nitrogen excretion, and ammonia emissions by 18.5 and 20%, respectively. Feeding the reduced crude protein diet was also less costly. However, with males reducing the dietary crude protein from ~15% was more challenging as this can impact negatively on animal growth performance thereby negatively impacting economics, N excretion and emissions. Therefore, the take home message was that gilts and boars should be penned separately and fed

diets tailored to their requirements so that growth performance, feed cost, nitrogen excretion and emissions are optimised.

There are also other advantages to split-sex feeding of boars and gilts:

- a. In Germany, where there is increasing production of entire male pigs, there is evidence that a proportion of females from mixed sex pen groups are pregnant at the time of slaughter. They see this as a welfare/ethical concern that could cause negative publicity for their pig industry. No one needs such negative publicity! For this reason entire male and female pigs are always penned separately there.
- b. Penning males and females separately allows pens to be emptied over fewer weeks. It also allows males to be brought to a higher sale weight compared to females at a given slaughter age or alternatively if males and females are produced to the same target slaughter weight it allows male pens to be emptied earlier.
- c. In continental Europe as entire males and females are penned separately they can be marketed separately. In some countries this will be important as meat from entire male pigs is leaner, less tender and has a higher risk of boar taint. Separating the sexes allows male and females to be targeted towards the most suitable products for them.

Penning males and females separately is most easily done at weaning but is especially important during the finishing period as it is only then when the sexes start to really grow differently. Feeding different diets to males and females will reduce

feed cost, nitrogen excretion and gaseous emissions on your farm. Is this something that you should be looking at now to future proof your business?

## Is Your Farm Winter-Ready?

Ciarán Carroll



As I write this article, the weather has changed, it's snowing and getting colder, so I'm prompted to focus on how pig farms can become Winter Ready. As winter approaches, it's important to prepare our farms to ensure that we maintain the productivity, health and welfare of our pigs and to safeguard ourselves and our farm staff. Following these guidelines may help.

### Housing

Proper management of our pig housing is critical at any time, but especially during winter.

- **Ventilation:** check and clean fans, inlets and thermostats regularly to ensure they are working properly. Poor ventilation and draughts will cause problems. Protect inlets and close doors to prevent draughts, which can chill pigs, stress them and result in vices such as tail, ear and flank biting. Use a smoke test to identify where there are draughts and insulation gaps. Repair or

replace poor insulation. Ensure thermostats are wiped clean of fly dirt and are at the correct level – as near to the pigs as possible (but not near enough to get damaged).

- **Temperature:** maintain correct room temperatures for the different categories of pigs. Check heat pads are working in farrowing rooms (ensure not too hot!) and ensure optimal stocking rates throughout the farm. Overstocking can increase stress and disease risks, while understocking can result in chilled pigs or a stuffy atmosphere, especially if the ventilation isn't functioning properly.

Sometimes we close up buildings more in winter time to retain heat, but this can create problems, e.g. increased disease problems due to higher ammonia levels in



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rooms (where ventilation is poor). High ammonia levels can also reduce feed intakes and result in poorer growth. Where rooms are too cold, pigs will eat more but will put it into maintaining body heat rather than growth. If rooms are washed ensure that they are dried with a blast heater before pigs are re-introduced; wet concrete slats are equivalent to a 4°C drop in room temperature

- Biosecurity: good biosecurity goes hand-in-hand with good air quality in minimising cold/temperature-related health risks. If your unit is located adjacent to forestry, ensure it is deer-proof to prevent any risk of TB transmission.

## Water Supply

Winter always brings concern around water supply. Ensuring adequate supply is crucial.

- Water Pipes: where possible, water pipes should be buried at least 750mm underground. Where this isn't possible or where there are exposed pipes, make sure that they are properly insulated/lagged to prevent freezing. This also applies to wet feed lines. Ensure feedlines have a scheduled night-time circulation to reduce risk of freezing.
- Storage: it is always good to have an alternative supply, so where possible try ensure sufficient separate water storage for at least 24 hours supply (this can also double as a powerwashing water source of water).

- Pumps/Power Washers: protect pumps and power washers. Where possible use thermostatically controlled heaters in pump houses.

## Safety Measures

Severe weather increases the risk of injuries, especially from slips and falls.

- Farmyards/Walkways: clear tracks and walkways around the farmyard and treat them with grit and salt. Ensure that staff stick to these safe walkways during icy conditions. Similarly, grit and salt access areas for feed and pig trucks.
- Electrical Safety: check wiring around the farm. Repair or replace wiring in poor condition. When using additional heaters and/or lamps, ensure that they are properly wired and protected by a 30mA Residual Current Device (RCD) to prevent electric shock. When did you last test your RCD? Push the RCD button to test and ensure it's not stuck in position. Use equipment with correct IP ratings. Always use Registered Electrical Contractors on your farm.

## Other things to consider

- Power Supply: regularly test your generator (at least monthly!) and keep it fuelled.
- AI Storage: ensure that AI storage boxes are working properly (use a max/min thermometer), so that semen is stored at 17°C. If it gets cold or freezes it loses viability. If your AI delivery storage box at

your unit entrance is getting old then replace it.

- Medicines: follow manufacturer's instructions to store medicines properly. They can be deactivated by too cold/freezing temperatures – have you an external fridge thermostat?
- Rodent Control: winter can drive rodents indoors, so make sure your rodent control programme is in place and working. Check & replace baits regularly. Are you using the correct bait? Is the bait in the correct places? Is there any external rodent hiding places between buildings e.g. rubble, vegetation etc. If so remove it!
- Staff welfare: provide appropriate clothing such as waterproofs, overalls, gloves, hats and boots. Ensure that staff facilities (showers, changing rooms, canteen) are warm. Put heating on a timer switch if necessary. Ensure work boots are not excessively worn – check the soles. Are external yard lights working and do you require extra lighting? Is there 'greening' of external paths and passageways, especially loading ramps? If so powerwash these with an appropriate disinfectant to remove it, as this is a very significant slip hazard.

By following these guidelines you can ensure that pigs remain healthy and productive throughout the winter while minimising risks to pigs and farm staff. If you haven't already, start your preparations now to face the colder months with confidence!

## REMINDER: Survey of the status of PRRS on pig farms

Porcine Reproductive and Respiratory Syndrome (PRRS) – Blue Ear - is a viral disease infecting sows and pigs leading to reproductive failure (abortions, weak and stillborn piglets, infertility), and causes pneumonia and increased mortality in young animals. It is one of the most economically important diseases for the global pig industry. To explore the possibility of developing a control programme for PRRS at national level in conjunction with Northern Ireland, the first step is to pinpoint all pig farms on a map including their current status for PRRS.

We are asking for your collaboration in completing this very short survey <https://www.surveymonkey.com/r/6S965BQ>

When presenting the map to stakeholders the exact locations of the farms will be anonymised so no individual farm can be identifiable.

## EuroTier 2024

Pig Development Department staff recently attended EuroTier, the world's leading trade fair for animal farming and livestock management <https://www.eurotier.com/en/> which took place from 12<sup>th</sup> to 15<sup>th</sup> November in Hannover Germany and as always there was plenty to see in the latest innovations for equipment, services, feed and farm management.

One of the most obvious observations was the number of companies showing their prototypes for loose farrowing housing options and these sections of the trade stands were busy throughout the week. There were various different options on display, with some of the commonalities being: floor area 6.0 – 6.5m<sup>2</sup> floor area per pen including the piglet lying area; some floors were fully slatted/drained while others had a combination of solid and slatted/drained; the percentage and type of solid/slatted floors varied according to the type of system.

Labour is a big issue on farms throughout the EU and with this in mind, many of the trade stands had equipment on display that would reduce the labour input required on farm. A number of companies have developed digital weighing systems for groups of pigs in their pens; some of these relied on in-pen scales that pigs walk over while others used scanning technology to estimate the weight of pigs. Another development which will reduce labour input is robotic pressure washers and there were plenty of these on display. While robotic washers reportedly clean farrowing and weaner pens with 80-85% efficacy, thereby requiring supplemental manual cleaning afterwards, they will reduce the labour input required.

Our next newsletter will go into more detail on these and some of the other innovations seen at the show.

## Welcome Francesca!



This month we welcome Francesca Johansen, originally from Norway and more recently County Clare. Francesca will be working with Keelin O'Driscoll and Laura Boyle on the European Partnership on Animal Health and Welfare (EUPAHW) project, which aims to promote animal health and welfare across the EU through a One Health and One Welfare approach. Francesca carried out her PhD on Dairy cow welfare at the Agri-food & biosciences Institute and Queens University Belfast.