

C. O beth mae'r pelenni/bricedi'n cael eu gwneud?

A. Maent yn cael eu gwneud o flawd llif heb unrhyw ychwanegion. Mae'r lignin yn y coed yn gweithredu fel cyfrwng naturiol i ddal y pelenni wrth ei gilydd. (Gellir defnyddio amrywiaeth o ddeunyddiau eraill hefyd i wneud pelenni – weithiau gall ychwanegion, megis olew llysiau, gael eu defnyddio yn y broses o'u gwneud.)

C. Faint o ynni'n mae'n ei gymryd i wneud y pelenni/bricedi?

A. Mae hynny'n dibynnu ar ddeunydd y pelenni. Os mai blawd llif sych ydyw, defnyddir tua 2% o werth ynni'n pelenni/bricedi wrth eu cynhyrchu. Os oes angen sychu'r deunydd cyn ei wneud yn belenni, gall cyfran yr ynni a ddefnyddir yn y broses gynhyrchu godi i tua 20%.

C. Ydi pelenni/bricedi coed yn garbon niwtral?

A. Nac ydynt, nid ydynt yn garbon niwtral yn eu hanfod. Mae hyn oherwydd y prosesau sy'n gysylltiedig â chynaeafu, cludo a chynhyrchu'r pelenni/bricedi. Nid yw logiau hyd yn oed yn garbon niwtral yng ngwir ystyr y gair, am yr un rheswm. Fodd bynnag, mae gan belenni/bricedi coed ollyngiadau carbon isel (gweler y siart).

C. Oes angen offer arbennig i losgi pelenni ac bricedi coed?

A. Mae angen bwylar arbennig ar gyfer pelenni coed – oherwydd eu bod mor fychan byddent yn tagu stôf/grât arferol. Mae stofiau/bwylari pelenni coed yn bwydo nifer fechan o belenni i'r bocs tân fel bo'r angen. Anfantais hyn yw bod angen trydan i weithio'r system fwydo; ar gyfer ffan; ac yn aml ar gyfer y system reoli gyfrifiadurol).

Gellir llosgi bricedi coed mewn unrhyw fath o stôf, bwylar neu dân sy'n llosgi logiau fel rheol.

C. Ydi pelenni/bricedi coed yn gyfeillgar i'r amgylchedd ac yn gynaliadwy?

A. Nid oes unrhyw ateb pendant i hyn, gan ei fod yn dibynnu o lle mae'r coed wedi dod. Fodd bynnag, a chymryd bod y coed a ddefnyddir i gynhyrchu'r pelenni neu'r bricedi wedi dod o goedlan neu goedwig sy'n cael ei rheoli'n gynaliadwy, yr ateb yw ydi.

Drwodd a thro, gwneir pelenni a bricedi coed o flawd llif sy'n sgîl-gynnyrch proses gynhyrchu arall – e.e. gwaith llifio mewn melin goed. Trwy ddefnyddio'r sgîl-gynnyrch hwn fel hyn osgoir gorfod ei yrru i domen sbwriel.

Un o fanteision pelenni/bricedi coed yw eu bod wedi eu cywasgu'n galed; mae hyn yn golygu eu bod yn fwy cost effeithiol i'w cludo na sglodion coed, er enghraifft.

C. Faint o ynni sydd mewn un cilogram o bellenni neu fricedi coed?

A. Ynni potensial un cilogram o belenni coed neu fricedi yw tua 4.6kWh. Fodd bynnag, mae'r ynni a geir mewn gwirionedd o'r pelenni/bricedi yn dibynnu ar yr offer a ddefnyddir i'w llosgi. Dylai stofiau/bwylari modern ac effeithlon roi 90% o'r ynni potensial hwn; ar y llaw arall gall tân agored roi dim ond tua thraean ohono – bydd y gweddill yn mynd i fyny'r simnai.

Q. A oes yna safon ansawdd gydnabyddedig ar gyfer pelenni a bricedi coed?

A. Mae Safon Ewropeaidd CEN / TS 14961 yn benodol ar gyfer biodanwyddau solid. Mae'n pennu gwahanol feini prawf ar gyfer y tanwydd e.e. maint gronynnau, cynnwys lleithder, % lludw. Pennir y meini prawf hyn ar gyfer gwahanol raddfeydd o danwyddau biomas. Mae'n rhoi'r dewis hefyd i gynnwys gwybodaeth ar gynnwys ynni yn fras a pharmedrau eraill. Mae cyfres o fethodolegau safonol i fesur y paramedrau yn rhan o'r safon gyffredinol. Nid yw'n orfodol cydymffurfio â'r safon hon.



WOOD PELLETS and BRIQUETTES

FREQUENTLY ASKED QUESTIONS



Q. What are the pellets/briquettes made from?

A. They are made from saw dust, with no additives. The lignin in the wood acts as a natural binding agent to hold the pellets together. (A range of other materials can also be used for making pellets, sometimes additives such as vegetable oils may be used in their manufacture.)

Q. How much energy does it take to make the pellets/briquettes

A. This depends on the material the pellets are made from. If this is dry saw dust, around 2% of the energy value of the pellets/briquettes would be used in their manufacture. If the feedstock material needed drying before pelleting, the percentage of energy used in manufacture could increase to around 20%.

Q. Are wood pellets / briquettes carbon neutral

A. No, they are not intrinsically carbon neutral. This is due to the processes involved in harvesting, transporting and manufacture of the pellets/briquettes. Even logs are not really carbon neutral in the true sense of the word, for the same reason. However, wood pellets/briquettes have low carbon emissions (see chart).

Q. Is special equipment required for burning wood pellets and briquettes?

A. Wood pellets do need a special boiler – their small size means that they would clog up a normal stove / grate. Wood pellet stoves/boilers feed a small quantity of pellets into the firebox at a time. The downside of this is that they require electricity (to power the auger / feed; for a fan; and often for the computerised management system).

Wood briquettes can be burnt in any type of stove, boiler or fire that usually burns logs.

Q. Are wood pellets/briquettes environmentally friendly and sustainable?

A. There is no definitive answer to this, as it depends on where the wood has originated from. However, in general, provided that the wood that is used to manufacture the pellets or briquettes has been sourced from a sustainably managed woodland or forest, the answer is yes.

In general, wood pellets and briquettes are made from saw dust that is a by-product of another manufacturing process – e.g. saw milling. By making use of this by-product, better value is obtained from the original wood, and it avoids sending material to landfill.

One advantage of pellets/briquettes is that they are energy dense (because they are so compressed), this means they are more cost effective to transport than, for example, wood chips.

Q. How much energy is in one kilogramme of wood pellets or briquettes?

A. The potential energy in one kilogramme of wood pellets or briquettes is around 4.6kWh. However, the actual energy the pellets or briquettes deliver is dependent on the appliance in which they are used. Efficient modern stoves/boilers should achieve 90% of this potential energy; an open fire might only achieve around one-third of it – the rest will go up the chimney.

Q. Is there a recognised quality standard for wood pellets & briquettes?

A. The European Standard CEN / TS 14961 is specific to solid biofuels. It stipulates various criteria that the fuel must conform to – e.g. particle sizes, moisture content, % ash. These criteria are specified for various grades of biomass fuels. It also provides the option to include information on approximate energy content and other parameters. A suite of standard methodologies to measure the parameters form part of the overall standard. Conformance to this standard is not compulsory.