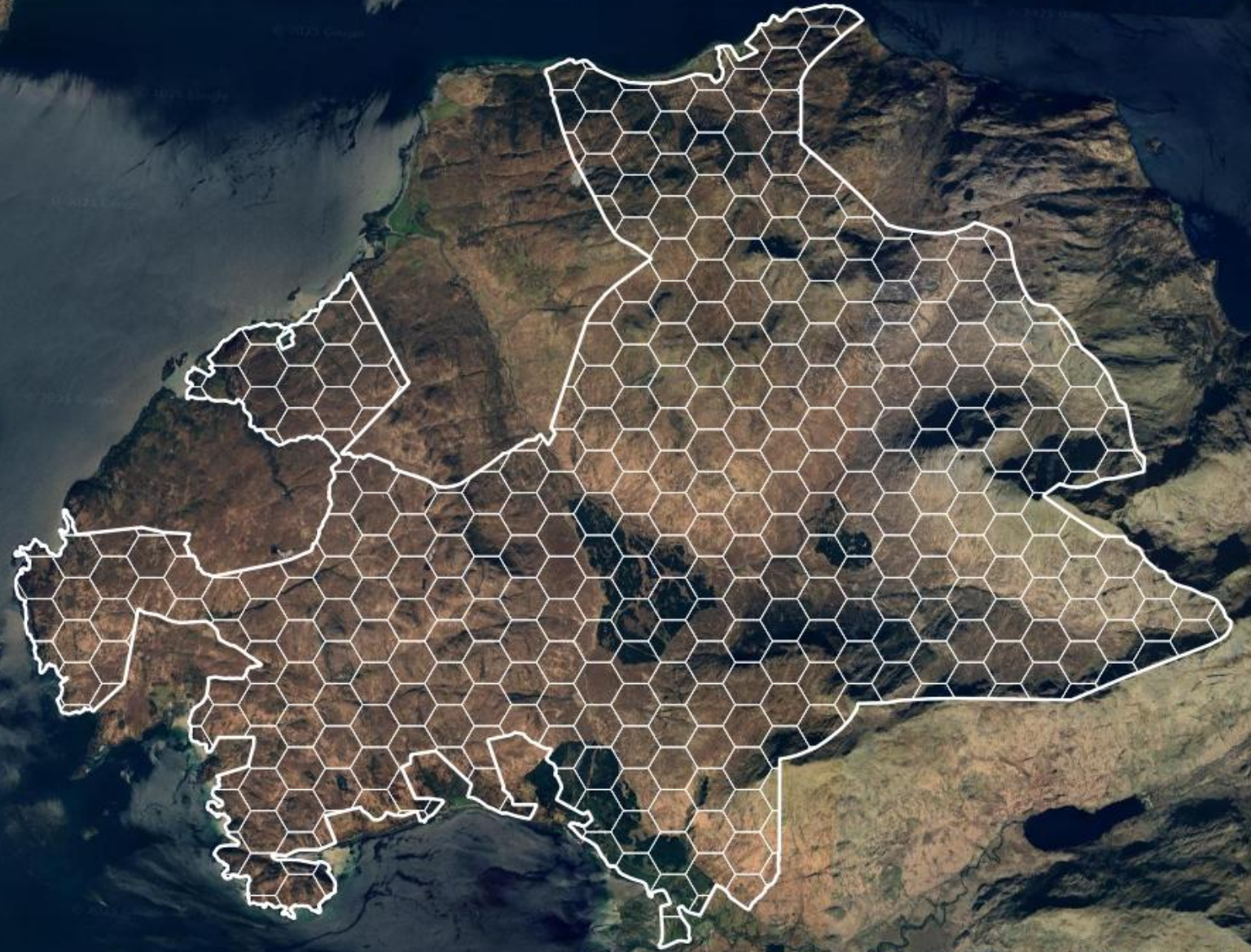


Carbon Units Explainer

Knoydart Foundation

October 2025



Disclaimer

This document is provided for educational and informational purposes only to help the Knoydart community understand potential carbon credit opportunities and funding routes available to landowners.

This document presents market information and general observations about carbon credit mechanisms and funding options. It does not constitute financial, investment, legal, or professional advice of any kind. The information presented is intended to outline options and trade-offs, not to recommend any specific course of action. Market conditions, regulations, and carbon credit prices are subject to change, and the information provided may not reflect the most current circumstances. No reliance should be placed on this information for making financial or investment decisions without independent verification.

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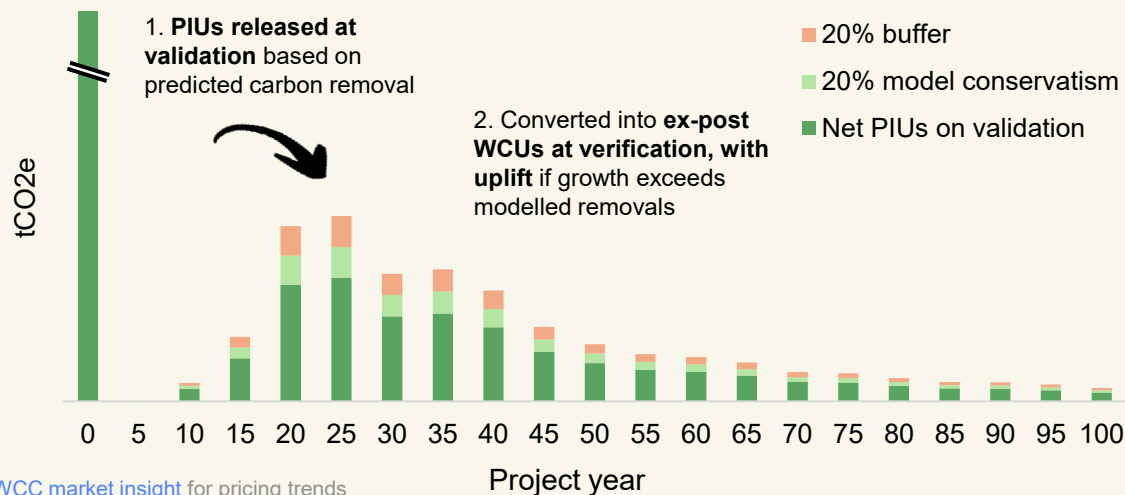
Woodland Code, PIU pricing history and PIUs versus WCUs

What are PIUs versus WCUs?

- ✓ Pending Issuance Units – **PIUs**. A promise to deliver one tonne of carbon removal.
- ✓ Forward offtake agreement allowing buyer to plan for long term removals
- ✓ Woodland Carbon Units – **WCUs**. Units independently verified, converting every 5-10yrs.
- ✓ PIUs can be **bought** and **traded**
- ✓ WCUs can be **retired** and **used to offset** emissions

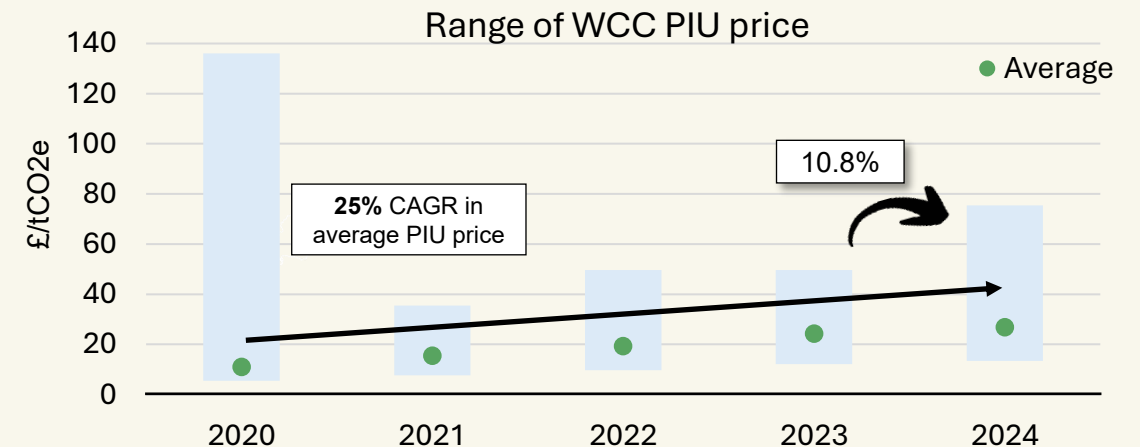
PIU pricing history

- ✓ Pricing models use today's PIU price, but the WCC market has grown 25% CAGR over the last 5 years.
- ✓ Average **WCC** PIU price was **~£26/tCO₂e**, (significant spread up to £62/tCO₂e depending on project quality).
- ✓ This spread has been increasing as buyers place greater value on higher-quality projects.
- ✓ Given the project's location and strong co-benefits, it should command prices towards the higher end of the range.



[WCC market insight](#) for pricing trends
[WCC registry](#) for data on units traded

Illustrative example of woodland yield



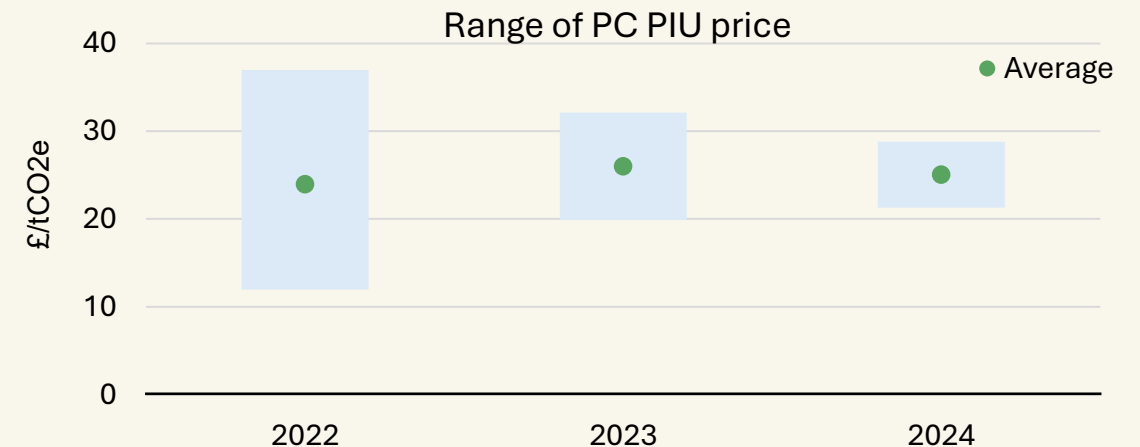
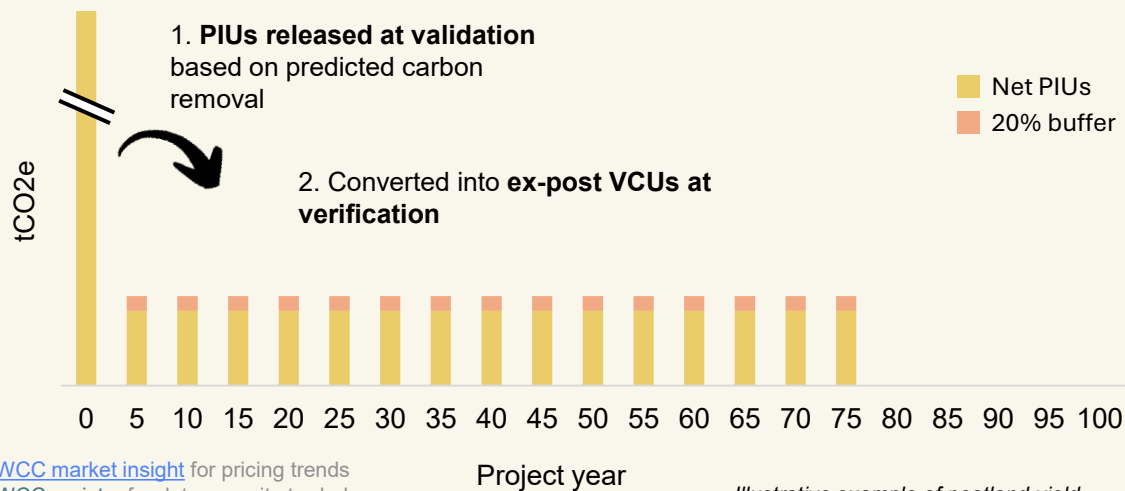
Peatland Code, PIU pricing history and PIUs versus VCUs

What are PIUs versus VCUs?

- ✓ Pending Issuance Units – **PIUs**. A promise to deliver one tonne of carbon removal.
- ✓ Forward offtake agreement allowing buyer to plan for long term removals
- ✓ Verified Carbon Units – **VCUs**. Units independently verified, converting every 5-10yrs.
- ✓ PIUs can be **bought** and **traded**
- ✓ VCUs can be **retired** and **used to offset** emissions

PIU pricing history

- ✓ Pricing models use today's PIU price, but the PC market has remained consistently strong over over the last 3 years (limited data on transactions prior to this).
- ✓ The average **PC** PIU price was ~**£25/tCO₂e** with a smaller spread of ~£8/tCO₂e.
- ✓ The spread comes down to the variability in project type and quality for peatland restoration
- ✓ Given the project's scale, location, and strong co-benefits, it should command prices towards the higher end of the range.



Market research: UK Market and WCC

UK Afforestation, Reforestation and Revegetation (ARR)

- ✓ Natural regeneration and active planting
- ✓ Rare temperate rainforest habitat
- ✓ Native, diverse climate resilient species
- ✓ Planting to replicate natural woodland

Woodland Carbon Code: High quality, low risk

- ✓ **Decades** of UK-specific forestry research
- ✓ Government carbon **price guarantee**
- ✓ 20% **buffer** pool & 20% **model conservatism**
- ✓ Legal protection
- ✓ UKAS accredited validators on-site
- ✓ **>2,400 projects** on the registry

Public-sector backed



Corporate demand

>400 companies buying WCC units



Market research: UK Market and PC

UK Peatland restoration

- ✓ Severely degraded habitat type (80% of peat in UK)
- ✓ Sensitive and important for endemic species
- ✓ Large source of national emissions (~4%)
- ✓ Supported with very targeted national grants

Peatland Code: High quality, low risk

- ✓ **Decades** of UK peatland research and strategy
- ✓ UK peat code and restoration created by **IUCN**
- ✓ 20% **buffer** pool & 10% **model conservatism**
- ✓ Legal protection
- ✓ UKAS accredited validators on-site
- ✓ **>360 projects** on the registry

Public-sector backed



Corporate demand

>60 companies buying PC units



Considerations

Projects under the Woodland Carbon Code (WCC) are typically 100 years, and Peatland Code (PC) 30–60 years.

Projects need to be maintained throughout this period (with a focus on the early years on woodland, where there is generally a higher risk as the trees establish). Woodland Carbon Units (WCUs) and Peatland Carbon Units (PCUs) will typically command a premium (over PIUs) due to the fact that they are established, audited and can be retired immediately.

PIUs can be traded forward before they convert to WCUs or PCUs. If the PIUs, which are a promise to deliver units in the future, are traded then the seller will need to ensure that the project meets the deliverables under the WCC and PC. If sold the risk of delivery usually rests with the landowner to ensure the PIUs convert at their vintages. In some circumstances a project developer and investor(s) may be exposed to this same risk.

A 20% risk buffer exists to compensate a project for unavoidable loss. Following an incident resulting in a loss at verification the buffer units availability would come down to an investigation's determination as to whether the loss is deemed avoidable or not. More details about the buffer can be found overleaf or on the [WCC](#) and [PCC](#) websites.

Insurance for carbon is new and not common place. Some companies like [Kita](#) are offering insurance solutions. Standard insurance has usually been to cover reinstatement costs in the event of a loss to a specific outcome, like fire or drought. It is usually over a short period of time, often the first few years of a project or can sometimes be rolled year to year. The latter is more common in commercial forestry operations.

Considerations – buffer pool

Taken directly from the WCC website, included here for clarity

Buffer pool definition and purpose

The [Woodland Carbon Code buffer](#) safeguards the investment made by carbon buyers and maintains and protects the integrity of verified Woodland Carbon Units. One tonne of carbon dioxide sold to a company is a permanent emission reduction and would never have to be cancelled or ‘paid back’ should that project fail.

We will ensure there are always sufficient units in the pooled buffer to cover any unanticipated losses from individual project failures.

The buffer is a single account held in the UK Land Carbon Registry and managed by Scottish Forestry. It contains the contributions from all verified projects.

Replenishing the buffer

In certain situations the [buffer pool needs to be replenished](#).

An unavoidable reversal relates to a loss due to natural disaster (e.g. severe storms, flooding, drought, fire, pest and disease attacks) or man-made events over which the project has no control (e.g. terrorism, war). If a reversal has occurred, then:

- If the reversal was avoidable (e.g. poor management or early/over-harvesting of timber) the project reimburses the buffer for all credits cancelled to compensate for the loss before further Woodland Carbon Units are issued to the project.
- If the reversal was unavoidable, the project repays the buffer for carbon units cancelled in excess of the contribution their project had previously made (e.g. if a project had contributed 50 units but 60 were cancelled to cover their loss, the project would only have to repay 10 units). Further Woodland Carbon Units can then be issued.

The project would then continue to contribute a proportion of verified carbon units into the buffer at each subsequent verification.

At the end of a project’s duration, all remaining buffer units which were contributed by that project will be cancelled and there is no further requirement to monitor the project.

More information about the definition of units, over or under delivery and the registry [can be found here](#).