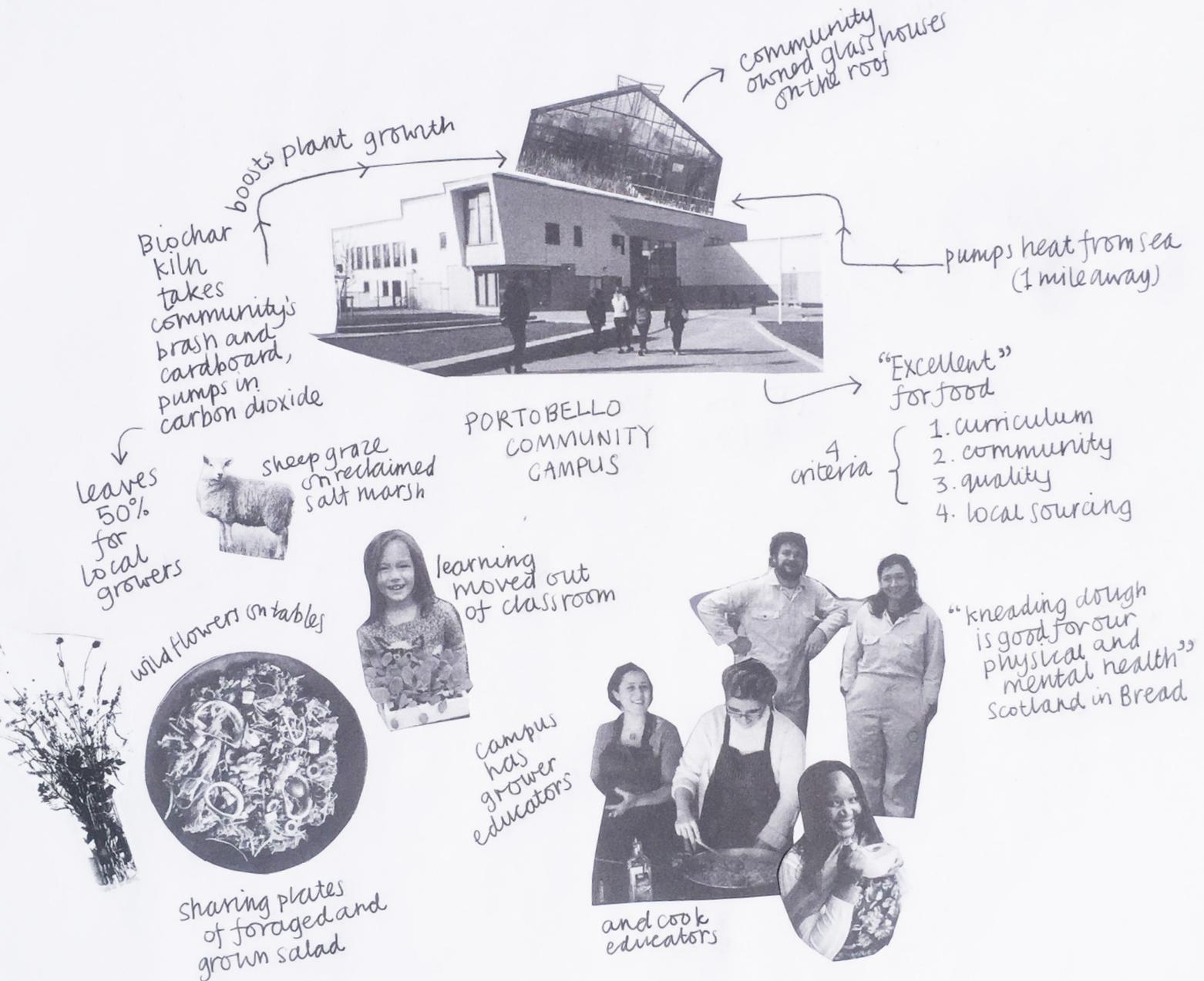


GOOD FOOD NATION

Fully Refined Vision



Portobello Community dining room is looking beautiful. The town's food policy group has been busy for weeks preparing for the Independence Day dinner.

The community campus got an excellent for food at its last inspection, based on the four criteria of curriculum, community, quality of food and local sourcing. As well as hosting a thriving farmers' market every Saturday it's used as a social diner and is packed four nights a week.

The flat roofs are covered with community-owned glasshouses which tap into the district heating system. As well as pumping heat from the sea a mile away, the system draws heat from the biochar kiln. This takes the community's brash and cardboard, pumps the carbon dioxide into the glasshouses to boost plant growth and leaves 50% of the carbon in the biochar for use by local growers.

The campus has three grower-educators and six cook-educators on the staff team, and food studies is one of the most popular courses. It's required for entry to careers in medicine, farming, business and environment.

Back in the dining-room, the wild flowers on the tables have been picked by the intergenerational study group on agrobiodiversity (in the reboot after COVID, Scotland built on its 'Curriculum for Excellence' work to rethink schools, and a lot of learning moved out of the classroom, while at the same time schools became more open to the community).

The flowers come from the park, which hasn't had fertilizer or pesticides for 30 years and has transformed into a stunning meadow. There's a community poll on when to cut the hay for the sheep which graze the salt marsh which has been created a mile away on the coast – and every year it's cut later as people wait for the last flowers to bloom.

The study group did more than pick the flowers. They learned the names, in English, Latin, Scots and Gaelic They learned which pollinators use them, about how they've been used in medicine. They drew them. And then they picked them.

The tables are all from Scottish wood and tablecloths are woven from hemp, now a ubiquitous textile in Scotland and a great carbon sink, though cloth made from trees is common too. But many guests prefer to sit on the floor, which is cosy with the underfloor heating.

Each of the project teams planning the feast has had plenty of debates. The menu team resorted to an AI to help them balance their goals of diversity, localness, environmental footprint, nutrients and taste. Now every public kitchen had a Tracer to test nutrients people talk more about the minerals and phytonutrients in different fruits, vegetables and grains - and also the differences between crop varieties and the effect of different soils and cultivation methods. Crop breeding in turn has refocused on nutrition, taste, nutrient use efficiency and resilience and not just yield.

The hosting team argued about the seating plan – should the one in five guests who still ate meat be on their own table or mix in with others? The vivarians – who only ate plants which hadn't been harmed to feed us – had asked to have their own table, although the vegans who used to call for this were now inclusionists.

The sourcing team couldn't decide between Scottish tea <https://teagardensofscotland.co.uk/> and organic fair trade Assam but used consensus-building tools rather than vote. They spent ages deciding on the cheese – now all dairies kept their calves with the mums it was a tougher choice. The prep team had the annual argument about skins on or skins off the veg.

As each guest comes in, she is welcomed by the hospitality team and shown to her place. There are allergen detectors available so people can scan their food, but they are rarely used now as young people brought up on a more varied diet tend not to develop them. There are some snacks to start – crisps made from broccoli stalks growers-garden.com/our-snacks hazelnuts from local hedges and crickets grown on the school's leftover food www.zerowastescotland.org.uk/content/insect-farming-scotland

There's been a big debate in the food ethics study group about insect sentience and their welfare in farmed systems, and the school's vegan council wants the cricket farm shut down.

Magdalena from the cooking team takes the stage to introduce the menu. She's using Swahili to welcome the newest members of the community, so many of the guests have to use their Bluetooth earworms, read the screen or follow the signer (since BSL became a Highers subject in Scotland, most people under 30 are fluent www.legislation.gov.uk/asp/2015/11/enacted).

“Our bread today is from the school bakery. As you know, unlike many places we don't use robots for kneading as we think the practice of kneading is good for our learners' physical and mental health – and as every batch of grain is different, human hands and eyes are best for sensing how to get the best out of each batch of dough.

The wheat's of course from Scotland the Bread, and this particular batch is a new perennial wheat called Whitley. We're finding that these perennial grains lock up a phenomenal amount of carbon in their root systems. We milled it yesterday in the schools Zentrofan mill, which doesn't heat the flour and gives a really fresh flavour

The shared plates are a mix of grown and foraged salad. We've included about thirty different leaves and edible flowers from within a mile of the school, and for those of you who are old enough to remember diesel engines, don't worry – the roadside verges are much cleaner since fossil fuel switch-off in 2030, and they haven't been sprayed in my lifetime. Some of the grown salad is from the glasshouses just above us, and the rest is from the community aquaponics farm, along with the rainbow trout coming later.

On the subject of dead animals (sorry, Gran) some of you will be pleased to know there's some meat. The school voted against vat-grown meat again last year – partly because of Alibaba's monopoly but mostly because it's a huge opportunity cost to make such an unnecessary product.

Of course we have bean and beetroot burgers (both spicy and mild versions), but we've also got a traditional Shetland dish of reestit mutton <https://www.shetland.org/60n/blogs/posts/reestit-mutton-soup>, from our community flock.

The healthcare study group did the butchery, and she was killed in the microabattoir using reduced oxygen <https://www.ufaw.org.uk/downloads/bouwesema1.pdf> so she literally yawned and went to sleep (you can watch the video if you don't believe me). The textiles group were making dye for the fleece this morning.

There's some smoked eel from the river, mussels from the vertical sea farm down the road ideas.ted.com/vertical-ocean-farms-that-can-feed-us-and-help-our-seas and some mackerel which came close enough inshore to catch last week.

The rest of the veg are from the community farm. You can get all the varieties and nutrient details if you scan the menu but just to say the new variety of okra is brilliant.

Our rice is from Sri Lanka so of course meets all the global stewardship standards which that country led the way on – it's an organic dry system rice so doesn't produce methane and the nitrogen comes from symbiotic bacteria..."

At the back of the hall, a few people had stopped listening and started chatting. Jim wasn't eating as he'd got himself a fish supper down on the beach before coming along because he liked the company. Alec said "I ken you still prefer the food you grew up with Jim, but I mind when we had to go down to the foodbank in the church hall". "Aye, that's true, and it's not as if the country was short of food back then either. It was just a case of look but dinnae touch".

These harvest feasts are happening all across Scotland, and like the much more established Burns Supper have become part of each community's calendar.

But it's not just the special occasions. Scotland's had a food transformation in the last thirty years...

You can see it in the high street. The delivery taxes introduced in 2021 were used to bring life back to town centres, while the broader diversity duty which was part of Scotland's post-COVID Wellbeing Act opened up 20% of the retail market to SMEs and community-owned shops. Of course, everyone could get all their food delivered by a driverless, but they don't.

Many people get a bus, walk or cycle to the shops near them. They chat, they potter, they buy fresh food for that day, which means little or no waste. They take their own containers. They are not in a hurry. They have more time, because even full-time work in Scotland in 2050 is 28 hours a week. On average they spend a bit more of their money on food

because they don't need to run a car and shared mobility is affordable for all, they get a free power allowance since the wind, water and sun are seen as public assets, and rents are low.

Once you get in the local shops, you find diversity in season – four or five different varieties of local apples, six different Scottish tomatoes, three types of organic cows and oat milk, multi-coloured potatoes, bread of all shapes and sizes. But you also find empty shelves: there's more ordering in advance, and there's more of 'when it's gone it's gone'.

Now corner shops have access to smart logistics and stock management systems it's easy for them to get in small quantities of the things they know their customers want. www.thenational.scot/news/18447373.local-heroes-show-way-forward-post-covid-world

Most people are on a contract for food with one of the non-profit intermediaries – it means they can shop or eat out almost anywhere and it goes on their account. 80% of Scotland's food spend now works this way. www.whitmuir.scot/open-a-farm-supporter-account

Transaction costs are down well below 0.5% and the system underpins supply chain collaboration, stabilizes prices to producers and runs a 1% solidarity fund so people who have an unexpected dip in cash can go overdrawn for a while. Having an account gives people lots of features if they want to track their food purchases and match them to their BMI, activity levels and their environmental footprint. But most people don't bother – there's much less food guilt around these days.

You can see it in the way we look. Watch old films of politicians, game shows, vox pops. We were just much tubbier back in 2020. We're not all skinny now, thankfully, but we've lost around 50 million pounds between us and we're feeling better and living longer. Oddly, we're eating just as many calories - but less sugar, more veg and fibre and less ultra-processed food including processed meat. So our gut bacteria are much happier – and that makes us a bit happier too.

You can see it out of the train window from Edinburgh to Aberdeen. There are flowers in the crop, and more crops growing together as our sensors and robots help us manage diversity and to have power with nature, not try to have power over her. There are more trees in the fields, more hedges, ponds, woodlands and wetlands. The coast is more raggedy as saltmarshes have been allowed to reclaim land.

Strangely, although we eat much less meat and have far fewer livestock, we see them more as they are no longer confined to sheds. It's good to see the dairy cows outside with their calves and most of our beef now comes from the dairy herd – but the black and white cows of picture books are now replaced with brownie-red Ayrshires and Swiss Browns.

With smaller numbers, the pigs and chickens can be out foraging under trees, and they eat food waste and by-products rather than human edible feed. Virtual fencing means we can keep the cattle and sheep out of crops and away from growing trees when needed.

You can see it in our cafés. The big chains have gone, even Starbucks, almost as suddenly as they appeared. Nobody liked the robots. Everyone was happy for robots to do the boring jobs – filleting fish, planting cabbages, cleaning floors. But the hospitality sector had forgotten hospitality, had forgotten the roots of the word - host and guest.

The new cafés are more diverse in style, in look, in menu (though all the food is what we used to call organic); but they are all places which make people welcome. We've stopped tipping too. People who work in catering are valued, trained and properly paid. You would no more tip them than tip your teacher.

Back at the school, the guests are having a final toast. They've thanked the chefs and the serving team. They've thanked the suppliers. The whisky (like most whisky now) is from barley grown with peas so needs no extra nitrogen www.hutton.ac.uk/news/intercropping-can-support-greener-farming-hutton-ecologists-say

The dishwashing robots are helping in the kitchen.