

Fashioning Wales's Future

Our path to sustainable fashion and textiles

Sustainable Clothing and Textiles Cymru

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About us

Sustainable Clothing and Textiles Cymru (SCTC) is a coalition of charities, local businesses, education providers and passionate individuals. Our mission is to showcase the brilliant and varied work that is making fashion and textiles more sustainable in Wales, and to inspire changemakers to make this industry better supported, better connected and more mainstream throughout the nation.

SCTC came together for the first time in 2020. Our initial idea was to join up people in Wales who are working to make fashion more sustainable. Little did we know the depth of work already going on, and how much was going to be achieved in the following months.

We brought together educational providers, individuals, NGOs, and businesses - and our efforts have already yielded results! Students from University of South Wales, for example, had the opportunity to start paid apprenticeships with sustainable fashion business Onesta, who won the award for the Best Sustainable Small Business at the Marie Clare Sustainability Awards 2021.

With the incredible expertise of Sustainable Fashion Wales' Helen O'Sullivan, and Keep Wales Tidy, teaching material on the textile industry has been made available on the Welsh Governments 'Hwb' service and the SustFashWales website. Alongside this, Helen has been working for years on leading campaigns around sustainable fashion. Most memorable was 'turning the red carpet green' at BAFTA Cymru's award ceremony in 2019. Celebrities such as Michael Sheen, Matthew Rhys, Ruth Jones and Jodie Whittaker supported the pledge.

Repair Cafe Wales has been setting up pop up events around Wales to educate people on how to mend clothing instead of throwing it away or buying more. This simultaneously gives people

both valuable new skills and tackles the mentality of needing to buy something new instead of repairing it.

In the autumn of 2021 SCTC ran an online awareness campaign called [Green Friday](#) to highlight the issue of unsustainable consumerism and especially how it relates to the clothing and textiles industry.



In the autumn of 2021, SustFashWales, Repair Cafe Wales and Onesta teamed up for Sustainable Fashion Week and hosted The Green Catwalk and a sustainable fashion exhibition, bringing together sustainable brands from across Wales to showcase how clothing can be made more sustainably.

These are just some of our achievements so far, and we hope with this report there will be plenty more to come, as people realise how easy it is to be more sustainable when it comes to clothing, and the stark reality of how bad fashion and textiles can be for our planet.



About this report

Given the cost-of-living crisis and the climate emergency, we must explore what we can do in Wales to ensure fashion is more affordable for people and does not cost the Earth. Aimed at decision-makers working in Wales, this report contains a series of recommendations to guide us in our journey towards a future of sustainable fashion.

Key objectives

This report endeavours to address these two questions:

1. What can we do here in Wales to make fashion more sustainable, using the levers we have available to us and without waiting for global fashion brands and retailers, or the UK Government to act?
2. How can we join all the different fashion and textile sectors together to come up with a plan that is not only good for helping tackle the environmental problems associated with this industry but also for good for families, communities, and small businesses in Wales?

There are already many fantastic small businesses in Wales which aim to highlight the benefits of sustainable fashion. Numerous community events and enterprises all around Wales promote clothes swapping and there are also lots of campaigns by NGOs and individuals and a good deal of media, press and social media coverage of the issues.

These enterprises, ideas and events showcase the creativity and dedication of people all around Wales and point a way forward for us as a small nation.

When it comes to ideas and innovation, Wales has the potential to be a world leader in sustainable fashion.

Of course, we have a limited influence on the global fashion industry, and many of the policy interventions that would help make a difference here are still reserved to Westminster.

This report collates ideas, experience and knowledge from coalition members and others with a very specific brief of what we **can do** in Wales quickly around the issues of fashion, clothing, and textile use.

We thank members of the coalition for their hard work in drawing this report together and of course the great many other people and communities working hard to raise awareness and promote solutions around Wales.

Key recommendations

With the climate crisis, nature crisis and cost of living crisis converging to place horrendous stress on the planet, people, and nature, we must do everything we can across every different sector. We must think our way around the issues rather than look for reasons not to act.

The worldwide fashion industry is estimated to reach a value of \$1.7trillion in 2022 and quite clearly, as a small country, there are limits to what we can achieve in Wales when we talk about trying to address the problems of fast fashion and unsustainable textile use.

But there are a number of interventions which would help reduce our share of fast fashion's worldwide resource use and help hard pressed families struggling with the cost-of-living increases - the solutions to one are also largely the solutions to the other. The following sections highlight many recommendations that we feel are both achievable and, crucially, within the powers we have available to us in Wales.

Key recommendations

- Introduce a **new Sustainable Fashion and Textile Director role** within Welsh Government to oversee action across all sectors outlined in this report to ensure action across all sectors is joined up and works for people, jobs, communities, and the environment in Wales.
- Welsh Government to work with relevant organisations and experts to draw up a **new Microplastics Action plan for Wales** to tackle the problem of plastic microfibre release and pollution on land and in water courses around Wales.
- Welsh Government to roll out a **nationwide project to ensure school uniform and sports kit swap schemes** occur in all school communities across Wales

New Sustainable Fashion and Textile Director role

A new role within Welsh Government, a 'Sustainable Fashion and Textile Director', would ensure progress is made across all the different sectors and across different relevant governmental departments. The person in this role could help draw up a detailed action plan to ensure that action is coordinated for the benefit of families, businesses, and the planet.

Microplastics Action Plan for Wales

Welsh Government has a strong record of action on plastics and resource use, but we feel there is scope for increased action on microplastic fibres. This issue cuts across the sustainable fashion one given that around [50%](#) of our clothes are made from plastic which shed hundreds of thousands of tiny plastic fragments with each wash. We believe that a new Microplastics Action Plan for Wales would start to help address this issue whilst also helping support Welsh Government's ambitions to move to a truly circular economy.

Nationwide roll out of school uniform and sports kit swap schemes

In this report we highlight the benefits of school uniform and sports kit swap schemes, not only for the environment but also for family's wallets. Buying school uniforms, school sports kits and non-school sports kits can cost families hundreds of pounds each year. Many schools already organise their own swap schemes, but these tend to rely on enthusiastic and dedicated parents and teachers. When these parents or teachers leave or run out of capacity, these schemes run the risk of petering out. Given 'Education' is a devolved issue, Welsh Government has the levers to roll out a nationwide school uniform and sports kit swap scheme to ensure all schools benefit and that reusing uniforms become a normal part of school life.

Encouraging behaviour change

Behaviour change is vital if we are to move from a fast fashion throwaway culture to one planet living. We know that currently there still exists a certain stigma among some people for wearing second-hand clothes but if this becomes a more normalised practice by everyone in society then these sorts of barriers become broken down gradually.

We believe that a clear pathway of long-term behaviour change exists through introducing school uniform swaps in all Welsh schools, sports kit initiatives based on the successful Play it Again Sport model (see page 27), right through to how the public then engage with charity shops.

A clear joined up strategy that introduces more clothes swap initiatives for people of all ages, allied to online clothes swap apps, could create a pathway whereby people grow up using pre-owned uniforms in schools, pre-owned kit in sports clubs, clothes swaps in their communities and also then how they perceive and interact with charity shops in their local high streets.

Fast fashion - what's the problem?

Climate emissions

The fashion industry has a huge carbon footprint. It is estimated to be responsible for around [10% of the world's greenhouse gas emissions](#).

The UK, for example, emitted 26.2 million tonnes of CO2e in 2016, just from its clothing consumption. To put this into perspective, this makes fashion the 4th largest contributor to greenhouse gas emissions, with only transport; food and housing having a larger impact ([WRAP, 2017](#)).

If the fashion sector continues its current course, its share of the world's carbon budget could jump to [26% by 2050](#).

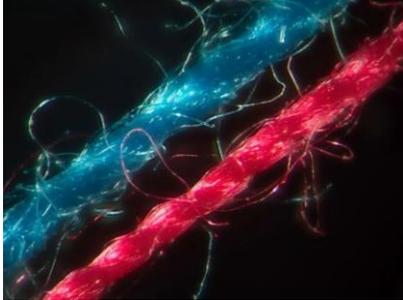
Amazingly, the fashion industry emits more carbon than international flights and maritime shipping combined and is classed as the [second dirtiest industry in the world](#), next to the oil industry.

Pollution

15,000 litres of water are needed to grow the cotton to make just one pair of jeans

A huge amount of pesticides and fertilisers are used in [cotton](#) growing, toxic dyes are used in the manufacturing process, and [untreated toxic wastewaters](#) from some textiles factories contain toxic substances such as lead, mercury, and arsenic among others and are dumped directly into rivers. In fact, the fashion industry is the second-largest consumer of water worldwide.

Microplastics



Around [70 million barrels of oil](#) a year are used to make polyester fibres in our clothes. [Washing](#) some clothes, meanwhile, releases about [500,000 tons](#) of microfibres into our oceans each year (the equivalent of roughly 50 billion plastic bottles!). Left: microfibre fleece under microscope.

Consumption

The UK is notorious for being one of the biggest consumers of clothing and textiles in the world.

Figures from the [European Clothing Action Plan](#) highlight that the UK buys more clothes per person than any other country in Europe, purchasing a whopping 26.7kg a year of new clothes, enough to fill a suitcase!

[WRAP](#) estimates that on average, each UK household owns [around £4,000 worth of clothes](#), that around 30% of clothing in wardrobes have not been worn for at least a year (the cost of this unused clothing in the wardrobe is estimated to be around £30 billion) and that an estimated £140 million worth (around 350,000 tonnes) of used clothing goes to landfill in the UK every year.

Unethical fashion

The ethical issues within the fashion industry are no secret. They are often [categorised](#) by poor working conditions, lack of a minimum wage, [long working weeks](#), child labour and poor environmental regulations which can lead to workers to being exposed to [harmful chemicals and dyes](#).

Fashion Revolution's [garment worker diaries](#) examined the experience of workers in Bangladesh, India and Cambodia, where the ethical implications of making the clothes we wear are appalling.

Bangladeshi workers stated that in 2018, on average, they worked 60-hour weeks, which is over the legal requirement of 48 hours. In addition to working hours, garment workers also report that factories lacked basic safety equipment, such as sprinkler systems and clear emergency exits.

The global model that the 'fast' fashion industry currently follows is unsustainable and cannot continue in this way forever.

What is the situation in Wales?

It is estimated that [the UK](#) sends 540,000 tons of textiles to be reused every year, with 70% of this exported overseas. Despite the aim of 'reusing' these clothes, often they will end up all around the world, either being bought on the second-hand market, or simply sent to landfill. These recycled clothes travel by air, and therefore add even more pollution onto their life cycles. That is why it is so important to start using locally based solutions to tackling the textile crisis.

In the UK, 540,000 tons of textiles are sent to be reused every year, with 70% of this exported overseas.

These practices not only have a negative effect on the environment, but they also limit the opportunities here in the UK for employment. The manufacturing process for fashion and textiles has been outsourced to developing countries leaving few opportunities in this sector in the UK. Many universities (including universities here in Wales) are providing skilled fashion and textiles graduates, but there are very few employment opportunities for them.

While in Wales we cannot change the system on our own, we can seek to address a lot of the issues we have responsibility for in Wales. We firmly believe that there are also several things that we **can** do in Wales across a variety of different sectors without waiting for either the fashion industry or the UK Government to act.

In the sections below we have attempted to look at some of these different sectors, what the situation is now and then recommend some steps forward.

Education sector

Education is a powerful tool when trying to encourage behaviour change.

Curriculum for Wales - opportunities

The new Curriculum for Wales provides an opportunity to embed sustainable development education through the four Core Purposes allowing for an authentic context in which to co-construct a curriculum with young people.

Developing young people using the Four Core Purposes of Ethical and Informed, Creative and Enterprising, Healthy and Confident and Ambitious and Capable through the lens of climate and circular economy allows for increasing development and understanding of these topic areas whilst developing key attributes.

Many schools are already embracing the immersive opportunities that sustainable education can provide, and this is evidenced in the highlights of the good practice seen within schools as part of the work of the [Eco-Schools programme](#).

The current provision of sustainable education teaching in primary and secondary schools, however, is sporadic, and depends on the personal knowledge, enthusiasm, and commitment of individual teachers. Otherwise, everything is light touch.

Helen O'Sullivan from Sustainable Fashion Wales is a former teacher. While researching her PhD, she identified a gap in Welsh-based professional development for teachers, who, she found, often lacked the skills and knowledge to engage pupils effectively on the subject (see the case study overleaf).

Excerpt from Helen O'Sullivan's PHD

During 2019 the Environmental Audit Committee identified the need for education surrounding the issues of fashion, to be embedded not only within post-compulsory education but, specifically within school classrooms.

These are the keynotes of the report:

"Many people currently lack the skills, ability or confidence to create, repair or alter clothing" Page 41

"Social responsibility should be encouraged through sustainable education initiatives which give the public the information and skills to understand the real social and environmental cost of consumption of cheap clothes"
Page 41

"Sustainability and waste issues need to be covered at all levels [of education] to raise awareness" Page 42

"We recommend that lessons on designing, creating, mending and repairing clothes be included in schools at Key stage 2 and 3" Page 48

Environmental Audit Committee (2019) Fixing Fashion, London, House of Commons

While sustainability is a central theme within the current GCSE in Design & Technology (KS4) and at Further and Higher Education in Wales, there is no consistent requirement to teach this during the Key Stages 1-3. The future is however promising within Wales as the new curriculum launches in September 2022, notably embodying sustainability and ethics across the whole curriculum (Welsh Government, 2020). However, design has been removed entirely from the subject name, being replaced with Science and Technology. This is concerning as this could eradicate the links between design, consumption and environmental impact.

Furthermore, there is currently (April 2022) a significant lack of guidance on what and how to teach, and the responsibility and content largely falls on the individual teacher and their own skills and values.

If teachers are responsible for designing their own curriculums with limited guidance or even training and support, this could lead to inconsistent sustainability content as they could be influenced by their own backgrounds, morals and values, also known as habitus. Habitus, is a set of dispositions that influences one's perception, thought and action influencing how individuals relate to the social world (Bourdieu, 1989). Therefore, teachers' habitus informs their "subjective stock of knowledge" (Edgerton, et, al. 2014 p.201) and ultimately, those with strong environmental ethics could include deeper critical content than others with fewer environmental morals.

Research has also demonstrated a systemic disregard of the creative subjects and the skills gained through design thinking and how pedagogy needs a radical overhaul to ensure education is relevant to the real-world and the environmental changes we face.

Therefore, it is recommended that design and technology teachers at secondary school have specific and strategic guidance and training on how to deliver a diverse and rich curriculum which equips young people with the skills for life and the knowledge of the environmental and social impacts their consumption choices have. Radical action is required to overcome the devastating state of the planet we are leaving for future generations.

It's their education. It's their future.

Helen O'Sullivan April 2022

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School uniforms recycling

Another aspect within education that we believe can be addressed positively here in Wales is that of school uniform. The cost-of-living crisis is affecting us all and school uniforms and school sports kits can be a significant added burden on already stretched family finances.

With research from the [Children's Society](#) showing that parents with children in state schools spend on average £315 per year for each primary school child and £337 per year on uniform for each secondary school child, we believe that school uniform swaps should be rolled out in every school in Wales.

Case study

Bryn Awel Primary School, Rhymney, Caerphilly

The Eco Committee at Bryn Awel Primary School in Rhymney organised a 'pop up' shop to re-love unwanted school uniform!

Depindeer, Year 6 Eco Committee "The 'pop up' uniform shop is a super sustainable idea everyone should try it!"

Mrs. Pascoe headteacher, "This great Eco enterprise idea has sent a positive message to the school and wider community to 're-love your stuff!'"

A cross-section of 54 pupils were surveyed before and after the actions on 'waste reduction' including the enterprise 'pop up shop.' There was a measureable impact on behaviour, attitudes, knowledge and understanding:

- (1) Is it ok to wear uniform that has been worn before? *before* 87% *yes after* 100% *yes***
- (2) Do you know why we're trying to reduce waste from clothing? *before* 46% *yes after* 81% *yes***

Children improved their knowledge and understanding of where material for clothes comes from and how clothes are made. 100% children now aware reusing school uniform can save money and help the environment. Over 115 pieces of school uniform were prevented from going to landfill.

Case study

Cynffig Comprehensive School



- In 2019 the eco-committee of Cynffig Comprehensive School started a uniform recycling scheme.
- It has a high profile in the school, and is regularly promoted on the school's Twitter feed.
- It is also popular with parents and is helping to remove the stigma associated with second hand school uniforms.

The Children's Commissioner for Wales and her team have worked with school children on a project called The Revolve Project to develop [resources](#) on school uniform swaps. They also worked with pupils from Maesteg School to make a video outlining how to organise a [Pop Up](#)

[Prom Shop](#)'.

The above case study highlights how pupil-led action can have a positive impact within the school environment and how the Eco-Schools programme provides the framework for that alongside informing and involving the families and communities in meaningful action.

Recommendations

Following the examples of small-scale interventions, the following recommendations look at how these could be scaled across the education sector in Wales to support authentic opportunities for students to demonstrate and lead work across the 4 core purposes.

Explore

Explore with schools the barriers to a reuse ethos throughout the school setting. Facilitate the development of solutions to overcome these barriers.

Facilitate Sustainable School Clothing

Provide a framework for all schools in Wales to develop social enterprise through a Uniform Swap Shop including sportswear.

Provide financial support

Allow schools to add the task of running the Swap Shops to be added to job descriptions of the most appropriate staff.

Minimise school branding

Encourage minimum items with school branding so they can be circulated through a wider community. Curate a list of suppliers of sustainable climate friendly uniform.

Address the Knowledge Gap

Facilitate Continual Professional Development such as attendance on training courses to upskill teachers on topics such as circular economy and fast fashion, including the impact of clothing recycling bags. Curate a list of trusted providers that can support teachers to deepen their knowledge of fast fashion and circular economy. Provide high quality case studies showing where fast fashion and circular economy is infused within the curriculum.

Communication

Proactively communicate the fast fashion issues and circular economy directly with schools and teachers. Discourage school use of rags to riches/clothing recycling for cash through education of the impact.

Business sector

Given targeted support and encouragement, Wales could become famous throughout the world for its thriving Sustainable Fashion business sector.

As you will see from [Sustainable Fashion Wales's business directory](#), an increasing number of sustainable fashion SMEs are choosing to make Wales their home. From bridalwear and raincoats to t-shirts and knitwear, these businesses sell a wide range of items online.

Sustainable fashion industry in Wales

Sustainable fashion SMEs strive to minimise their environmental and social impact. They are a small but fast-growing industry in Wales.

While most do not have physical premises, they sell to customers throughout Wales and the rest of the UK, and sometimes even further afield.

These businesses could become the jewel in the crown of the Welsh green economy, helping regenerate local communities. For instance, all Elin Manon's stock is manufactured from sustainable materials in Ammanford, Carmarthenshire.



Gabriella Diana, Founder of Onesta

Gabriella says her business is "proud to be Welsh and proud to be bringing manufacturing back to the UK. The textile industry is very much within Great Britain's DNA with a rich heritage in garment making. We have a huge sense of pride in what we are able to produce in the UK."

It is time for the Welsh Government to seize the opportunity and take steps to nurture this fledgling industry so it can really take off. We have made some recommendations below (see page 19), such as a fund for sustainable fashion SMEs.

Why is it so important to support SMEs?

According to a Welsh Government report published in 2019, small and medium enterprises (SMEs) make up 99.4% of all enterprises in the UK, accounting for 62.4% of employment.

Therefore, small and independent businesses are important in establishing local economies and facilitating local, community-based initiatives across the country. Small businesses in Wales have been considered the UK's most 'Community Conscious', according to a report by The Co-operative Bank.

In 2019, 83% of Welsh business owners saw their business as particularly important to their local community, and 40% acknowledged that they provided jobs and wealth to local people.

This energy is similarly matched by Welsh town residents, who state that "thriving small and independent shops" are their highest priority for the future of their town centres.

Additionally, small businesses tend to be more sustainable and have less of an environmental impact than large companies.

Even SMEs that do not specifically

incorporate green initiatives into the core of their business produce less waste and emit fewer greenhouse gases. It is surprising then, that of nearly 700,000 businesses established annually, 90% fail in their first year, and, only 3% Welsh residents feel as though their town centre is currently "thriving".

SMEs face numerous challenges that larger businesses do not face.

A major factor impacting an SME's ability to overcome challenges in their business is poor cash flow. SMEs tend to experience longer payment durations for services due to their limited power to negotiate contractual terms with larger companies. What is more, according to a 2020 report, 78% of UK SMEs that are owed money are forced to wait at least one month beyond their agreement terms before being paid.

Cash flow issues can have devastating effects on a small business. For example, 1 in 7 small businesses have been known to be unable to pay their employees on time, leading to high staff turnover and lack of motivation in staff, huge administration costs related to chasing late payments and ultimately insolvency.

Research carried out by the Association of Chartered Certified Accountants and the Corporate Finance Network show that these current financial difficulties will result in **47% of smaller businesses in Wales to run out of cash in the next year**. Additionally, Welsh businesses owners are experiencing disproportionate levels of stress and anxiety relating to cash flow, comparatively to other regions in the UK.

The current UK energy crisis that has elevated household energy costs by more than 50% in the last six months, and an increase in interest rates from 0.25% to 0.5%, make clear that these cash flow problems are only due to get more severe.

Another major factor challenging SMEs is the impact of COVID-19 on the everyday running of business. As social contact with others was limited during the 2020 pandemic, almost all industries were forced to move operations online.

Challenges facing sustainable fashion SMEs

- Poor cash flow
- Current UK energy crisis
- COVID-19 impacts
- Keeping up with technology

Similarly, consumers are also now more likely to opt for digital alternatives. For example, over half the Welsh population now shop online, as opposed to visiting their local high streets. This widespread, habitual shift has put pressure on all businesses to

ensure they have efficient technology and can survive almost entirely digitally, something far less accessible to smaller businesses.

To survive and excel, companies these days are expected to have effective email services, access to laptops or desktop computers, smartphones, extensive data storage and file sharing capabilities, video conferencing software, creative suits, and digital marketing software, the list goes on.

However, this technology is very costly, and comes with continual upgrading expenses. With the cash flow issues experienced by small businesses, the tech playing field is far from fair between large companies and SMEs. With limited cash flow, it is likely that many SMEs attempt to manage their tech in-house, further creating problems from a lack of applicable skills and poor understanding of systems.

SMEs require more technological support to keep up with the demands of a post-covid digital world.

COVID-19 also posed many other challenges to SMEs, including forced temporary closure, and 81% of small businesses claim that they have not had enough support from the government.

A lack of technical acumen has proven to cause confusion over GDPR protocol and has had a significant impact on business data security. In fact, SMEs have been accused of “Threatening the Welsh Economy” due to the vast number of cyber-attacks caused by inefficient security put in place by small businesses.

Whilst poor cash flow and inefficient technology have proven to be two large challenges faced by SMEs, other problems include an inability to compete with large business' marketing campaigns, comparatively slow-paced product R&D and a general lack of appreciation for business heritage and continuation of traditional skills from governing bodies.

It is evident that small businesses play a vital role in facilitating local community initiatives, bringing people together and contributing to the development of green industries. However, they do not receive sufficient support from the government to survive and thrive.

Recommendations

Introduce more funding opportunities, e.g., sustainable fashion grants

SMEs should have greater accessibility to funding and/or financial subsidies. Although a traditional method of funding for SMEs, banks are offering fewer loans than ever before. This is largely due to the perceived risk of start-up businesses, but also the archaic, convoluted application processes that are required to apply.

Similarly, SMEs rarely acquire investment opportunities, as the return on investment is so low in comparison to larger, more established businesses. Government funding and/or financial subsidies must, therefore, be more accessible to SMEs. For example, subsidising tax rates in their first 1-5 years of trading would allow companies to reinvest a larger proportion of revenue into growth.

Furthermore, since Brexit, there is reduced grant funding in the UK as this was largely funded by the EU. Additionally, although matched funding is relatively accessible to SMEs, this requires the business to already have a substantial amount of capital to be eligible for funding. This makes it nearly impossible for micro and small businesses to acquire decent funding opportunities.

Companies that can show they can and will have a positive effect on their local community should be offered government grants to aid growth. Financial aid could also be offered through creating a network of investors who are interested in funding small businesses through grants or shares, and who might be interested in offering mentorships. This way, when SMEs are searching for funding opportunities, they have a portfolio of investors who are more likely to be interested to contact directly, rather than wasting time and money on the search for investment.

Introduce better funding structures

Although funding grants have been offered, there have been major issues associated with these grants, including long delays before grant opens and sudden changes to the grant amount available. This is very difficult for SMEs who are then unable to adequately plan for / forecast their operational functions, thus resulting in delays and loss of income and growth. Furthermore, the grant structures are typically unsuitable for SMEs, as many require 50% match funding, and they are based on purchases being made upfront and reimbursing the SME later. Most SME's who are applying for financial aid are not in the fortunate position of having capital available to match fund or to make large purchases up front, putting the company in a worse financial position. This should be reviewed to support small businesses better financially.

Greater access to skilled knowledge, such as technology

This could be achieved through schemes that offer an apprentice or employee, free of charge to the company, for a certain period. Schemes like these have proven to be effective in the past, such as the Kickstart scheme set up in response to the employment crisis caused by the COVID-19 pandemic that saw many skilled 16–25-year-olds out of a job. The Kickstart scheme covered the minimum wage of a young person for 25 hours a week for 6 months, giving SMEs access to a workforce at a low risk and with no financial investment, while also reducing unemployment. Many universities have similar schemes in place, such as the Bristol SME Internship Scheme that places a student in a small or medium enterprise for 140 hours and covers their wages.

While these schemes offer students and graduates good working opportunities, they are only effective for a short period of time. What is more, they often only cover the minimum wage of the intern, which as a skilled individual, has been known to cause the intern to feel devalued and demotivated when other graduates are earning a greater wage for a similar role. In fact, one Kickstarter described the wage as “borderline exploitation, especially for graduates”.

Additionally, on completion of the internship, if the SME is unable to afford to keep the employee on, they are left with little support and a smaller workforce. The SME is also required to pay for PAYE which can be costly for a brand still trying to make sales.

Therefore, SMEs must be offered greater support for taking on employees with the essential skilled knowledge for business success or offered support for personal learning opportunities. For example, similarly to the network of investors proposed above, this could include a network of mentors and coaches who provide advice and support to small business owners. A greater number of free or highly affordable training programmes run by the government on important topics such as GDPR and security would also be beneficial in ensuring the success of SMEs.

Improve access to experienced business personnel

While funding has been available for SMEs to employ young interns, for example the Kickstart programme which helped businesses employ young people aged between 16 – 25, the experience for both company and interns has not been beneficial. Most SMEs start with a small team and do not have formal HR, Legal or Finance teams, therefore limiting the SME from growing and managing staff effectively, or implementing proper financial planning and management, or ensuring the company is legally protected with adequate policies and procedures in place. The SME team is usually inexperienced with these functions, doing the best they can but having to wear multiple hats within the company.

This results in the team having to act in an HR, Finance or Legal capacity without having the training with a likelihood of making mistakes. Furthermore, when adding interns to the mix, it is hard for the existing team to offer the interns the support they need in terms of training and development and effective leadership, because the team is busy wearing all the hats needed to run the company. The interns therefore are joining companies that have not been supported with experienced staff and therefore they have no one to learn from.

To truly grow and become an established business, SMEs require support in accessing experienced members of staff, and with this experience they will be able to grow and have more resources available to hire graduates. The current system is the other way around and has not proven to be an effective method for which SMEs can grow or give young people the support they need to develop skills for their future.

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Tech and SME
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<https://www.thalesgroup.com/en/united-kingdom/news/how-smes-are-threatening-welsh-economy-and-what-you-can-do-about-it>

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<https://opus-bp.com/why-smes-struggle-to-get-business-loans/>

Kickstart reviews
<https://www.glassdoor.co.uk/Reviews/KickStart-Jobs-Reviews-E2032275.htm>

Community sector

Many people are already championing sustainable fashion within their own communities. There are brilliant examples of community-led, sustainable fashion schemes in Wales, which bring communities together to promote the value of reusing and repurposing clothing and textiles.

Mending or upcycling clothes, buying second-hand, or taking part in clothes swaps, from school uniforms to sports kits, is a great way to lessen our fashion footprint and create a strong and circular community.

The following case studies show the steps some communities are taking to reuse the overwhelming amount of barely worn clothes, which are devastating the environment. The Welsh Government must encourage and promote these pioneering initiatives to help change behaviour so we can lessen the impact that the fast fashion industry is having on our planet.

Case study 1: Dillad Dwywaith

Dillad Dwywaith ('twice worn' in Welsh) is a community clothes swap shop, located in the 'plastic-free' Village of Aberporth in Ceredigion. Aberporth is a small community which has been awarded the status of the 1st plastic-free village in the world. The village and its inhabitants are dedicated to environmental causes and sustainability.

This initiative was born out of the need of local people to save money on children's clothing. The group behind the initiative wanted to provide an opportunity for

Features and benefits

- Community clothes swap in Aberporth
- Clothing and footwear for local children
- School uniform swap - link with a local school
- Dedicated space, open 5 days a week
- Bring in items, scour the rails and pick up whatever you need or want

people in the village to come together to swap children's clothes after they have grown out of them so that they can be reworn and reused. Many of these clothes are as good as new or have never been worn.

The group wanted to do something on a local level to help slow down the cycle of fast fashion, reduce consumption, and to raise awareness of unethical consumer habits.

At first, there was just one rail for children's clothing in Aberporth hall. But the rail gained traction quickly via a dedicated Facebook page and community boards - Dillad Dwywaith was soon inundated with donations!

There was lots of media interest in Dillad Dwywaith. Within the first month of setting up the rail, we gave interviews to the [BBC](#), [ITV](#) and [S4C](#) and were featured in many [local publications](#).

The initiative quickly grew and is now a clothes swap for both adults and children. From 2021 it has had a dedicated space in Canolfan Dyffryn in Aberporth, as part of 'The Heart the Community' project.

Initially open once a week on a Tuesday, Dillad Dwywaith is now open 5 days a week and is run by a dedicated team of volunteers. They have now teamed up with the local school, managing their school uniform swap from Canolfan Dyffryn, and with Gwersyll yr Urdd in Llangrannog, who donate their lost property clothing at the end of each summer.

Dillad Dwywaith is open to everyone to use. You bring in items, and then you scour the rail and pick up whatever you want. Not everybody who brings in clothes leaves with something, but they return regularly.

Case study 2: Repair Cafe Wales

A great example of a community-led scheme is Repair Cafe Wales, which runs repair sessions all over the country. Repair Cafe Wales promotes and [creates a culture of repair and reuse](#) with a network of over 75 repair cafes. Repair Cafe Wales has three core values:

Waste Reduction

Repair Cafe Wales takes items usually destined for landfill, and, using methods such as repairing, recycling, repurposing, or upcycling, they preserve those items for as long as possible, so that they may still be useful. This reduces the volume of raw materials and energy needed to manufacture new products, cutting CO2 emissions as a result.

Community Cohesion

Repair cafes are friendly, informal, and inspirational places that promote social cohesion and community resilience. They provide safe and inclusive spaces in the community where people from diverse backgrounds can connect with each other. Repair cafes help address social issues such as poverty, loneliness, and isolation, repairing items that would usually have to be replaced at a cost. They bring the community together



Photo courtesy of Rupal Shah-Clark



Repair cafe in Swansea (courtesy of Repair Cafe Wales)

irrespective of a person's race, gender or cultural background, supporting community development and improving health and wellbeing.

Skill Sharing and Development

"I've had people bring their sewing machine along, there's nothing wrong with them but they just want somebody to show them how to thread the needle. There's no repair to be done it's actually about having a place they trust where they can get advice."

Quote from a sewing volunteer from our focus group in 2020

Repair Cafe Wales recognises the value of people with practical skills in our community, and the potential for those skills to be shared. We promote the concept of a repair culture by inviting members of the public to learn a skill from our experienced volunteer repairers, or through more formalised training. Our objective is to reskill or upskill members of society, increasing that person's employability.

Repair Cafe Wales aims to open local repair cafes in every corner of Wales, which would make sustainable fashion accessible and viable for everyday people.

Repair cafés were recently described in the Senedd by

the First Minister as a 'phenomenon of Wales' and are an excellent example of an innovative, scalable project which reflects Welsh Government's plans to promote community infrastructure that helps citizens reduce waste.

In the last financial year, Repair Cafe Wales diverted 3005 items from landfill, equating to 98,864.5 kg Co2e in emissions savings and 10,517.5 kg in landfill and recyclables savings. In 2021 repair cafes in Wales fixed over 400 textiles items. Textiles and clothing items have the highest likelihood of a successful fix of all the item categories seen at a repair cafe, with a 97.5% success rate.

'From repurposing old sofa cushions into a comfy area for nursery children to showing someone how to make basic repairs to clothing to extend its life. It is great to know that people have been helped and items that still have life have been saved from landfill.'

Penny, a sewing volunteer at the RE:MAKE Newport repair cafe.



Photo courtesy of Lynn Gazal

Repair cafes often encourage other forms of textile reuse by acting as a community hub and supporting other environmental initiatives, for example several repair cafes also run clothing swap shops.

Case study 3: Play It Again Sport

One [social enterprise](#) has been tackling sustainability in sport in the Rhondda Valleys. Play it Again Sport rescues sports kits and equipment from landfill and then sells them back to the community at heavily reduced prices. This helps to knock down the financial barriers stopping people participating in sport and improves physical health and mental wellbeing.

To make it easy for people to donate, there are donation bins at every council leisure centre in Rhondda Cynon Taf (RCT), and grassroots clubs and organisations help collect and redistribute kit and equipment, ensuring the whole community buy-in to the project.

The textile industry has an enormous impact on the environment; the materials, the treatment and dyeing process, transportation, and packaging, to name a few.

The key to tackling this lies at heart in reducing the amount that is produced, which is facilitated by the amount that the public demands. So, it stands to reason that if there is less need and want for new clothing, then less will be made and in turn, the impact on the environment will be reduced. But of course, this is easier said than done.

Play It Again Sport has operated as an independent shop above a café, as a concession within 'Too Good To Waste' (a furniture re-use charity shop) and in the near future will be moving into a new sustainability hub 'Y Siop Fach Sero', while also selling online.

How these items are sold really depends on the local area and what constitutes an area of high footfall and good accessibility. The key consideration is cost – retail space comes at a premium, and of course, the purpose of this project is to help people and the planet, not to make money! It is important to keep donated items local to reduce transport costs and promote the circular effect of reap and reward.

To lower their carbon footprint, Play It Again Sport uses an electric car to make collections and distribute the items. The electric car is a definite talking point, leading to conversations with customers around sustainability and how to live in a more environmentally friendly way. For them, using a sustainable method of transport reinforces why they are making these changes and demonstrates how it is possible to run an electric car in the south Wales valleys - something many people believe is impossible, a view shared across Wales.

Play it Again Sport says what they do is relatively simple and could be rolled out across Wales - perhaps even expanded beyond sportswear to school uniform, and other 'specialist' items. A nationwide sports swap scheme would prevent 1000s of tonnes of clothing from going to landfill sites, help families save money and live

Three reasons Play it Again Sport is successful

- A central project manager orchestrates the collections, the organisation and distribution of the items.
- Connections with relevant sports groups, community organisations and charities enable the distribution of the items to where they are needed.
- There is a retail space to sell items from - this could work well as part of a larger second-hand clothing space, with a 'department store' approach.

Nationwide sport swap scheme - benefits

- Enable more children to participate in sport
- Improve mental and physical health
- Save money
- Reduce waste

more sustainably, and make it easier for people to stay physically and mentally healthy.

Case study 4: The Respect Programme



During the 2013-14 academic year, the Swansea 14-19 Network (part of the City and County of Swansea) ran a series of OCN Aged accredited courses for young people disaffected by mainstream education and at risk of becoming NEET ('not in education, employment or training').

They partnered with a group of local creatives and organisations to run different courses of 10 weeks per term. Helen from Sustainable Fashion Wales was the lead for the charity shop, upcycled fashion and event planning courses. Each of the 10-week courses involved the following:

- The young people undertook work placements at a charity shop (they had never stepped foot in one before) in Morriston gaining retail skills, customer service skills while also learning how to sort through textile donations for the shop floor.
- They identified clothing and textiles which would only be used for rags due to damage or excess stock.
- The young people collected materials and clothes from the rags to use within their own design work.
- They worked with Helen learning about fibre types and fabric construction, design skills and practical sewing skills.

- The young people then applied these skills to create fashion garments based on their own designs over several weeks.
- They then worked with Helen to organise an event to showcase their work. This involved a fashion show and exhibition about the importance of upcycling textiles and reducing textile waste at their school.
- They also gained a qualification in hair and beauty with another professional teacher. These skills were assessed during the fashion show event.

Each student gained 4 qualifications (Retail; Upcycling Textiles; Event Planning; Beauty) from the courses, which were the only qualifications they gained from school. It gave the young people not only self-respect but also an opportunity to gain respect from their school community and their family. Many of them went onto study textiles and they also had a radical shift in mindset when it came to clothes in general but specifically the stigma of second-hand clothes and charity shops. Unfortunately, despite the phenomenal success, the Swansea 14-19 Network dissolved due to lack of funding and the programme was never repeated.

Case study 5: School Uniformcycle Caerphilly

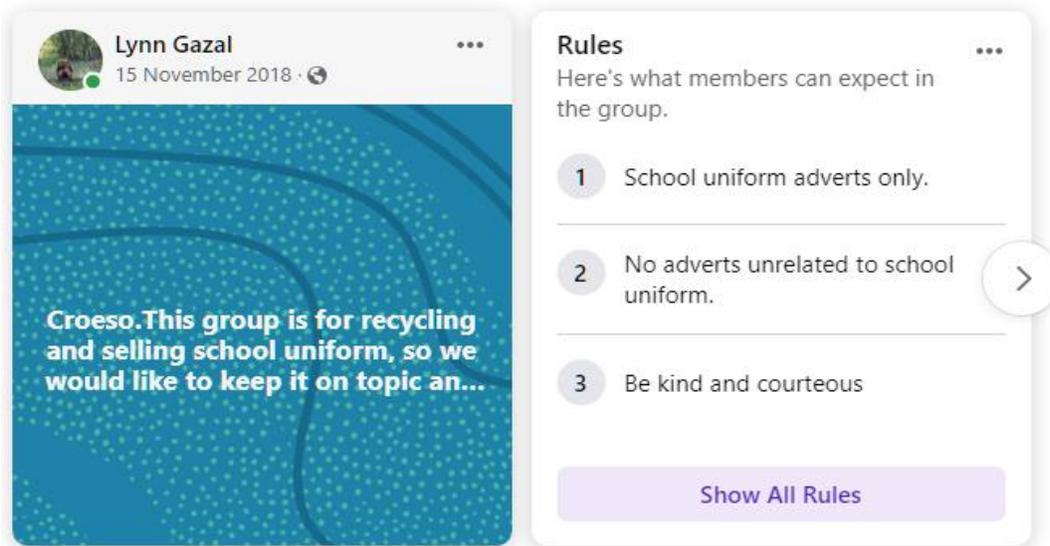
In 2019 a few environmentally minded parents from Caerphilly set up a Facebook group to enable local people to buy, sell or give away preloved school uniforms.

As of August 2022, the group has 840 members. A wide range of clothes are bought and sold, including branded items that are often very expensive to buy new.

The School Uniform Caerphilly Facebook group is widely used and known about in the community. It is well managed, with several admins and clearly communicated rules (see overleaf).



Photo courtesy of Michelle Owen



Recommendations

Roll out sports swap kit scheme across Wales

We call on Welsh Government to work with Play it Again Sport and other relevant organisations and public sector bodies to put in place a strategy to roll out this sports kit scheme to cover all areas of Wales.

Create a web portal

A central web portal or a 'one-stop shop' for Wales could provide information on how to run community clothes swaps and other similar schemes. It could also host case studies, best practice guidelines and links to possible funding streams.

Free up space for community initiatives

Underused, unused, or empty local public sector owned buildings offered to community groups free of charge for community events such as swishing clothes swap events.

Provide training

Community education - training for community groups.

Charity shops

Charity shops are increasingly dominating Welsh high streets. They provide the perfect opportunity to showcase sustainable fashion choices, helping to foster behaviour change within communities.

Wales Council for Voluntary Action (WCVA) estimates there are 550 charity shops within Wales, all raising a huge amount of money for the causes they support.



Photo by [Prudence Earl](#) on [Unsplash](#)

Charity shops have a multitude of benefits, which span social, economic, and environmental boundaries. They promote the idea of a circular economy, giving their local communities access to a sustainable way of buying and donating clothes. Alongside this, there is a huge social benefit of charity shops. WCVA estimate over 11,000 people volunteer in charity shops, and with that volunteering comes opportunities for building skill sets and gaining experience.

[Eco Age](#), citing WRAP UK, explains how reusing clothes, and expanding their lifetime by just 9 months, can reduce the carbon, water, and waste footprints of UK clothes by 20-30%. This impact of second-hand clothes shopping is immense in tackling the carbon footprint of textiles and is something which makes up a large proportion of what charity shops provide.

A study by Osterley and Williams ([2019, pp.32](#)) on the benefits of charity shops found that charity shops have an important part to play in keeping the high street alive. As other retailers suffer from online competition and more and more shops become vacant, charity shops can sustain footfall to retail areas, and fill vacant lots.

Looking at the benefits that charity shops provide, they provide the perfect opportunity to showcase sustainable fashion choices, and slowly promote behaviour change from within communities. By using charity shops, the public can have an easy way to recycle their clothes, whilst also having an active and thriving shop on the local high street.

The cost-of-living increases will also likely mean that more people will make more use of charity shops.

We believe that with some imaginative planning and collaboration, charity shops could even work together occasionally on things like promotion and marketing, evening sustainable fashion shows, themed days, or weeks etc.

It is not impossible to imagine a future where charity shops play an even more integral role in high streets, offer a different type of shopping experience, sell different types of products whilst continuing to play their part in local circular economies.

Charity shops and Education

Charity shops can also play a vital role within education. This is evidenced through the [CharioCity](#) workshops, which were held throughout 2021, and the resulting report (due imminently). CharioCity is part of [World Circular Textiles Day](#), led by Professor Becky Earley of [The Centre for Circular Design](#) at UAL, and investigates the role these crucial communities have within reshaping design education at all levels: from Key Stage 1 to PhD. Helen O'Sullivan was an advisor to the reports and attended all workshops, which also uncovered how charity shops, if utilised fully, can offer an affordable material resource for schools and colleges while also helping to rebrand the image of charity shops post-pandemic.

For example, Helen has collaborated with local charity shops who provide materials for her school projects that would have otherwise been sent to rags, or even worse shipped to other countries resulting in mountainous textile waste like that found in the Atacama Desert in Chile in 2021. Her lessons are based around reuse of materials and rebranding the charity shops to

appeal to young people. Helen's work has been presented at CharioCity workshops, through a [video](#) created by her Year 7 pupils and also at the [JOMEK SecondHand Cultures](#) Symposiums and workshops during 2021 and 2022. She has also worked with various schools and charity shops across Swansea to provide accredited courses in retail and design skills since 2010 including the RESPECT programme in 2013.

Charity shops are a vital resource and a crucial hub within many communities, but there remains a stigma of uncleanness which can only be overcome through awareness and education with young people.

Recommendation

We recommend that Welsh Government work with representatives of the charity shop sector in Wales, CharioCity and other interested organisations to put in place a plan which would not only help support the charity shop sector in Wales but also investigate the role they have to play in town centre regeneration.

Plastic microfibres

Our understanding of the dangers of plastic microfibres is constantly evolving. [Microfibres](#) are a type of microplastic – particles of plastic below 5mm in size (thinner than a human hair) and come from a variety of different sources.

Astonishingly, plastic microfibres washed off from synthetic clothes are estimated to make up about [35%](#) of the entire plastic pollution in our seas and oceans. The majority of these microfibres are released the first few times a piece of clothing is washed.

Other sources of microplastics include:

- bits from larger plastic items like bottles and bags that break down in the sea
- pieces that wear away from vehicle tyres while driving
- microbeads in cosmetics paints on buildings and marking roads.

Washing machines and wastewater treatment plants aren't designed to trap the minute plastic fibres that our clothes shed during washing. Many of these fibres sneak into our waterways and ultimately the oceans. And lots are caught up in sludge at the treatment plants – which is then sprayed over our soils as fertiliser.

The microplastics are ubiquitous in the environment, from in the deep oceans to the top of mountains and evidence already exists of their presence in the food chain and the adverse effects on animals. Microplastic fragments have also now been found in the blood in [8 out of 10 people](#) with as yet unknown health effects.



The Young Darwinian™



Case study - finding microplastics

Finding microplastics

The Young Darwinian in collaboration with CALIN and Cardiff University have developed a safe method to detect microplastics in the environment. This has been successfully used in pilot projects in primary and secondary schools in Wales. The method has also been showcased as an outreach activity at both the Urdd Eisteddfod and National Eisteddfod in 2022 where it proved very popular with participants of all ages. It is now planned to make this available to all schools in Wales.

Ysgol Pen Rhos and Pentip Primary schools, Llanelli

“The microplastic experiment was conducted in school with local beach sand. The children aged 5-6 years old were mesmerised by Dr. Iwan and his special glasses and fully engaged in the important messages this experiment brought home about what is in the sea and sand where they play. In our recent inspection in July, it was noted how much the children recalled and knew about microplastics in their environment. This activity is outstanding and has been run in both schools I lead. The experiment is so good it is on the curriculum long term plan permanently with a critical message to all of us at its heart.” Dr Joe Cudd Executive Headteacher

Sources of information

- The National Federation of Women's Institutes (WI) have been a leading voice on this issue in the UK with their excellent [‘End Plastic Soup’](#) campaign.
- In 2019, the then National Assembly for Wales's Climate Change, Environment and Rural Affairs Committee conducted a review of available information and produced a report called [‘Report on policies and proposals relating to plastic pollution and packaging waste’](#). They heard evidence from several experts and came up with a series of recommendations. Science and our understanding of the causes and scale of the

problem of plastic microfibres has moved on, even within the space of 3 years so we would like to see the Welsh Government update this report reflecting current available science.

- At a [UK](#) level, 'the All-Party Parliamentary Group on Microplastics works to raise awareness of the effect microplastics have on the environment. The group works cross-party with interested stakeholders to discuss potential policy solutions to the problem of microplastics and microfibres.'

[The European Environment Agency](#): *'Fast fashion accounts for particularly high levels of such releases because fast fashion garments account for a high share of first washes, as they are used for only a short time and tend to wear out quickly due to their low quality.'*

Recommendations from UK parliamentary group

While their recommendations are aimed at the UK government, they are nevertheless worth noting here as they include (amongst others):

- Emphasise the role of education and awareness of microplastics.
- Targeted public behaviour awareness communication campaigns on the environmental impacts of plastic microfibre release from the laundry and wastewater treatment cycle.
- The UK Government to work with curriculum leads, academia, citizen science facilitators and on- the-ground educators to provide teachers and educational professionals with researched and evidenced 'microplastic action packs' for use in schools and youth

groups. This is for young people to be aware of the problem and the steps they can take to mitigate their own impact.

- Appoint a designated 'Minister for Plastics Pollution' (MOPP): a new cross-departmental Minister with a clear remit for the control and prevention of plastic pollution, as well as oversight of environmental policies that concern plastics and their polluting effects on the land and aquatic environments.
- Introduce an Extended Producer Responsibility scheme for textiles from 2023.
- Introduce legislation and standards which require microfibre filters to be fitted into all new domestic and commercial washing machines from 2025

Clearly, some of them are not relevant to Wales but others are, and we would recommend that they be included in a new Microplastics Action Plan for Wales.

Our recommendations

- Welsh Government to review current science and form a taskforce group made up of relevant organisations and experts in Wales to produce a Microplastic Action Plan for the reduction of plastic microfibres within Wales.
- Support innovation by encouraging our universities, entrepreneurs, and the private sector to work together to develop new materials. Wales is well positioned in Biotech to lead this.
- Education of school children and the public of the situation and actions that can be taken immediately, including the stemming of the 'fast fashion' explosion.

Alternative materials

As mentioned in other sections of this report, there are a variety of environmental and societal problems associated with the production and use of many types of textiles ranging from land and water use, pollution, and climate emissions from cotton farming to the release of plastic microfibres from synthetic clothing.

While many of the recommendations in this report concentrate on solutions such as using less, reusing, upcycling, and swapping, there is also clearly a need to identify other suitable, less damaging fabrics from which to make our textiles and clothes.

The obvious one for us in Wales is wool. This is an industry with a long history in Wales but that is now in need of support. A long-term sustainable fashion and textile industry in Wales will have wool at its centre, will support sheep farmers and rural economies and should provide Wales with a growth industry.

We also believe that other natural textiles are worth considering and exploring, both from a sustainability point of view but also from a rural economy point of view.

One of these products is hemp. We believe that hemp is a crop that merits further investigation and research and development to determine what opportunities there are for us in Wales and how to overcome the current obstacles.

Industrial hemp is a valuable product which will help transition to more sustainable agricultural practices with positive ecological and economic benefits.

Wool

Sheep's [wool](#) has, for centuries, been a backbone of the Welsh [rural economy](#). The last 100 years has seen the number of woollen mills in Wales reduce from a once proud 217 to a low now of just 8.

Wool has many uses, from the obvious clothing and other textiles to [insulation for buildings](#).

Covid-19 has had a disastrous effect on the wool industry in Wales and the UK generally with prices for a tonne of wool dropping dramatically. This has obviously had a huge impact on sheep farmers in Wales with many [struggling](#) to even cover their own costs. This has in turn then also affected the rural economy in Wales more generally.

Organisations such as the [National Farmers Union \(NFU\)](#) have been leading the call for Welsh Government to increase support for sheep farmers by specifying new markets for wool products in Wales.

With around 5 million breeding sheep in Wales and with wool being a sustainable textile (being rapidly renewable, biodegradable, recyclable, and able to be produced organically) there does seem to be a huge opportunity here to develop a world leading long term strategy that supports sheep farmers and the Welsh rural economy whilst producing high quality sustainable textiles.

Our recommendation

That Welsh Government convene a taskforce of farming unions, the wool industry and Welsh sustainable fashion businesses to draw up a long-term plan to both support the wool industry in Wales and to put in place the markets within Wales for the wool.

Hemp

Environmental benefits of hemp

- Hemp can be grown without pesticides or herbicides. Nonorganic cotton currently uses more than 10% of the world's pesticides.
- Hemp absorbs toxic metals.
- Hemp improves soils by returning 60-70% of the nutrients it takes back to the soil.
- Hemp sequesters carbon at a rate higher than that of trees. For every tonne of hemp grown, it will remove 1.63 tonnes of carbon dioxide from the atmosphere. It can also be harvested within 4 months.
- Hemp requires much less water to grow, about 50% less than cotton. When adding in the consequences of processing, cotton requires more than 4 times as much water as hemp.

Hemp farming in the UK goes back centuries, having traditionally been used to make ships' sails as well as clothes and ropes as well as being used for things like animal feed and paper production. Indeed, Henry VIII made every farmer grow some hemp to be used for sails and ropes for the navy,

By the twentieth century hemp was grown worldwide and it became cheaper to import it from abroad. In 1928 it became illegal to grow hemp in the UK, due to its association with psychoactive cannabis.

Hemp and marijuana plants belong to the same family but are in fact very different. Hemp plants contain a small

fraction of the amount of THC (the psychoactive compound responsible for the high) compared to marijuana plants. THC is found in hemp in such small doses that it does not give people a 'high'. The UK government did change the law in the 1990s to reflect the fact that these 2 plants were not the same.

Currently, UK farmers must hold a licence to grow hemp which costs in the region of £600 and must agree to regular checks, which often incur extra fees. Farmers must also renew their licence every three years.

Hemp is now being described as farming's '[next big trend](#)'.

Summary

- Industrial Hemp is a valuable product which will help transition to more sustainable agricultural practices with positive ecological and economic benefits.
- Unfortunately, production in the UK is not possible due to outdated, misguided, and unwarranted restrictions.
- This needs to change and Wales could take the lead.

The plant and the confusion

Industrial hemp is grown from seeds of the Cannabis Sativa plant, cultivated to produce plants with long stalks, very good for fabric and many other applications. They are easy to grow and are planted very close together at 3-400,000 per acre. The stalks from these plants DO NOT contain the psychoactive compound, THC, the flowers contain virtually none at less than 0.2% and are not harvested.

Cannabis Sativa plants grown (illegally) to harvest THC, are very different and specifically cultivated for this purpose. THC is extracted from the flowers and are planted 6 feet apart at about 1,600 per acre, to encourage the flowers, from which the THC is extracted. The plants look, act and are treated very differently and are labour intensive but unfortunately carry the same scientific name.

Advantages of hemp for fabrics

- Hemp grows very well in the UK, unlike cotton.
- Hemp can produce nearly double the fibre yield per acre than cotton.
- Hemp is easy to dye.
- Hemp is resistant to mould
- Hemp is up to 3 times stronger than cotton and its fibres degrade much less on washing. It is estimated that a hemp t-shirt will last 3 times as long as a cotton one.
- The fibre from hemp is like linen but can be mixed with other fibres to enhance softness.
- Hemp can be used to make construction materials such as Hempcrete, biofuels and much more.
- Hemp oil can be made from the seeds - this is a healthier alternative to olive oil.
- CBD oil is also a viable product, the CBD industry predicted to be worth £1 billion by 2025 but this is from a different seed and is more difficult to grow.

The Law and Licensing

Since 1993 it has been legal to grow hemp in the UK but under very strict licence. In the UK, hemp is classified as a control drug under the 'Drugs and Firearms Licensing'. Farmers must apply to the Home Office for a licence to grow it.

The licence costs just under [£600](#) and has many restrictive practices. It lasts 3 years. Failure to comply can lead to the crop being destroyed. A licence is required for each site.

Currently only EU approved seeds can be planted. Until the laws are formally

changed, it is only possible to harvest the stems and seeds from hemp plants in the UK. The leaves, which are used for the extraction of CBD, must be destroyed as soon as they are separated from the plant because the cultivation process is still illegal in the UK. But it can be bought in shops and on the internet.

Current activity

- There are about 20 licensed growers in the UK, including university research departments.
- Five farmers are collaborating with a team from Cranfield University and the British Hemp Alliance as part of an Innovative Farmers programme by the Soil Association.
- The first hemp processing plant was due to be built in [East Midlands](#) pre Covid.
- China produces approximately 70 percent of the world's output of this textile. Only a small portion of the hemp produced in China is made into fabric; the vast majority is made into fuel, paper, or other industrial products.
- France is the next largest producer of this crop. In all, over 30 countries around the world produce industrial hemp, and production of this crop in the United States is also on the rise due to a law change.

Imagine a future where hemp is grown commercially in Wales, allowing farmers to further diversify their operations with a crop which has numerous environmental benefits and the products of which could be used within Wales to manufacture a range of products from sustainable clothing and other textiles and fabrics to oils and construction materials thereby supporting a range of businesses all around Wales.

Our recommendation

Welsh Government set up a taskforce group of interested bodies and organisations to investigate what benefits increasing hemp production in Wales would bring to farmers, rural economies, supply chains, jobs, and the environment. There are clearly major hurdles to overcome before hemp can be grown at a commercial scale in Wales, but the environmental benefits are clear. There is also an obvious growing marketplace for hemp products which would benefit 'first movers' on this in the UK.

Summary of recommendations

Education	Business	Community	Plastic microfibres	Alternative materials
<p>Explore</p> <p>Explore with schools the barriers to a reuse ethos throughout the school setting.</p> <p>Facilitate the development of solutions to overcome these barriers</p>	<p>Introduce sustainable fashion grants</p> <p>Sustainable fashion businesses which can show they can and will have a positive effect on their local community should be offered government grants to aid growth.</p>	<p>Roll out sport swap scheme national</p> <p>We would like to see Welsh Government work with Play it Again Sport and other relevant organisations and public sector bodies to put in place a strategy to roll out this sports kit scheme to cover all areas of Wales.</p>	<p>Form a task force</p> <p>Form a task force group made up of relevant organisations and experts in Wales to produce a Microplastic Action Plan for the reduction of plastic microfibres within Wales.</p>	<p>Wool</p> <p>We recommend Welsh Government convenes a task force of farming unions, the wool industry and Welsh sustainable fashion businesses to draw up a long-term plan to both support the wool industry in Wales and to put in place the markets within Wales for the wool.</p>
<p>Facilitate sustainable school clothing</p> <p>Provide a framework for all schools to develop social enterprise through a Uniform Swap Shop.</p> <p>Provide financial support to allow schools to add the task of running the</p>	<p>Facilitate a network of sustainable fashion investors</p> <p>Facilitate a network of investors who are interested in funding sustainable fashion small businesses through grants or</p>	<p>Create 'One-stop-shop' portal</p> <p>We would like to see a central web portal, or a 'one-stop shop' created for Wales where information on how to run community clothes swap and similar schemes is stored. This could also then</p>	<p>Support innovation</p> <p>Support innovation by encouraging our universities, entrepreneurs, and the private sector to work together to develop new materials. Wales is well positioned</p>	<p>Hemp</p> <p>We recommend the Welsh Government set up a taskforce group of interested bodies and organisations to investigate what benefits increasing hemp production in Wales would</p>

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<p>or staffing of swap shops to be added to job descriptions of the most appropriate staff.</p> <p>Encourage minimum items with school branding.</p> <p>Curate a list of suppliers of sustainable climate friendly uniform.</p>	<p>shares, and who might be interested in offering mentorships.</p>	<p>host case studies, best practice guidelines and links to possible funding streams.</p>	<p>in Biotech to lead this.</p>	<p>bring to farmers, rural economies, supply chains, jobs and the environment in Wales. There are clearly major hurdles to overcome before hemp can be grown at a commercial scale in Wales, but the environmental benefits are clear. There is also an obvious growing marketplace for hemp products which would benefit 'first movers' on this in the UK.</p>
<p>Address the Knowledge Gap</p> <p>Facilitate Continual Professional Development such as attendance on training courses to upskill teachers on topics such as circular economy and fast fashion, including impact of clothing recycling bags.</p>	<p>Improve access to training, support, and knowledge</p> <p>Some schemes that offer an apprentice or employee, free of charge to the company, for a certain period.</p> <p>While schemes like Kickstart offer</p>	<p>Encourage swaps and swishing events in unused buildings</p> <p>We would like to see local public sector owned buildings that are currently underused, unused, or empty, being offered to community groups free of</p>	<p>Educate school children and the public of the situation, including the stemming of the 'fast fashion' explosion.</p>	

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<p>Curate a list of trusted providers that can support teachers to deepen their knowledge of fast fashion and the circular economy.</p> <p>Provide high quality case studies of where fast fashion and circular economy is infused within the curriculum.</p>	<p>students and graduates good working opportunities, they are only effective for a short period of time. What is more, they often only cover the minimum wage of the intern, which as a skilled individual, has been known to cause the intern to feel devalued and demotivated when other graduates are earning a greater wage for a similar role. The SME is also required to pay for PAYE which can be costly for a brand still trying to make sales.</p>	<p>charge for community events such as swishing clothes swap events.</p>	<p>Continue to reduce single use plastics and encourage initiatives to minimise the stuff that is sent to landfill.</p>	
<p>Better communication</p> <p>Proactively communicate the fast fashion issues and circular economy directly with schools and teachers.</p>	<p>Network of mentors and coaches who provide advice and support</p> <p>SMEs must be offered greater support for taking on employees with the essential</p>	<p>Greater support for charity shops</p> <p>We recommend that Welsh Government work with representatives of the charity shop sector in Wales,</p>		

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Discourage school use of rags to riches/clothing recycling for cash through education of the impact.	skilled knowledge for business success or offered support for personal learning opportunities. For example, this could include a network of mentors and coaches who provide advice and support to small business owners.	CharioCity and other interested organisations to put in place a plan which would not only help support the charity shop sector in Wales but also investigate the role they must play in town centre regeneration.		
	<p>Free training programmes</p> <p>A greater number of free or highly affordable training programmes run by the government on important topics such as GDPR and security would also be beneficial in ensuring the success of SMEs.</p>			
	<p>Introduce better funding structures</p>			

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	Improve access to experienced staff			