What we have done so far.....

Reducing carbon emissions through low carbon and renewable energy generation

- Installed low carbon and renewable energy systems in over 50 of our own buildings such as schools, offices and leisure centres Technologies include solar PV, solar thermal, wind turbines, heat pumps, biomass boilers and combined heat and power.
- Own and operate 2 landfill gas engines which generate low carbon electricity and are now complemented by 2 solar farms. These all power on site facilities as well as the nearby waste transfer station.
- Non domestic energy generation systems met approximately 10% of the Council's energy demand in 2018-19.
- The Council has been installing low carbon and renewable energy systems in its own housing since 2009 including solar PV, ground and air source heat pumps and battery storage. There are now over 700 homes with solar PV and the Council was one of the first authorities to trial the combination of air source heat pumps, solar PV and battery storage.
- Invested in innovative technologies such as transpired solar collectors and battery storage.
- As of October 2019 all of the Council's electricity supply comes from certified renewable energy sources.

Reducing carbon emissions through improving energy efficiency

- Delivering an annual programme of energy efficiency measures, such as building fabric insulation, draught proofing, new boilers, new heating controls, lighting upgrades etc in the Council's non domestic buildings since 2008. This has helped to deliver a 51% reduction in carbon emissions from energy.
- Investing in and delivering energy efficiency improvements in our own housing through the Welsh Housing Quality Standard and Welsh Government/UK Government schemes such as Nest, Arbed, Warm Homes Fund and Eco (these have also improved the efficiency of private households). Measures installed include new boilers, new windows, building fabric insulation etc and will help to reduce fuel poverty.
- The Council has been facilitating the installation of gas to off gas grid areas enabling those on oil, LPG and electric heating to switch to gas which has lower carbon emissions. This will also help reduce fuel poverty as oil, LPG and electric are expensive heating fuels.
- The Council has rationalised its estate, moving staff to a modern, more energy efficient building at Ewloe and phases 3 & 4 of County Hall will soon be demolished.
- Building and renovating fit for the future schools through the 21st Century Schools Programme.

• Replacing the Council's streetlighting with LED lamps which use significantly less electricity.

Reducing carbon emissions from waste

- The Council has achieved, year on year, its waste reduction and recycling targets set by Welsh Government and is currently 3rd in Wales.
- Through collaboration with regional partners and Welsh Government, the Council has managed the construction of an energy from waste facility, Parc Adfer, which will create electricity for 30,000 homes from waste that cannot be recycled. It will also help to prevent waste from going to landfill.
- Through the same partnership all of the Council's food waste is taken to an anaerobic digester where it is used to produce electricity (via biogas) and liquid fertilizer, preventing food waste from going to landfill.

Reducing carbon emissions from transport

- The Council's fleet meet the Euro 6 standard and therefore have the lowest emissions possible for diesel vehicles.
- Delivering safer routes in the community schemes around schools, encouraging children with their families to walk and cycle to school, trying to tackle air pollution around schools and get people active and healthy.
- Developing community based transport options when commercial bus services have been withdrawn.
- Developing and delivering active travel routes across the County.

Reducing carbon emissions through the use of our land assets

- Trialing different grass cutting regimes on the Council's verges, roundabouts etc to encourage and enhance biodiversity.
- Developed a 15 year Urban and Woodland tree strategy and are working to increase urban tree coverage from 14% to 18% by 2033. The Council has also been working with Community Groups, Natural Resources Wales and schools planting trees in education and public land.
- Supporting the Big Dee Day which is now a week long event, working with hundreds of businesses, volunteers, charities, schools and other organisations, across the region of North Wales, Shropshire and Cheshire removing litter from the banks and tributaries of the River Dee.
- Countryside Services manages over 40 sites, 1200 km public rights of way, 37 miles of Welsh Coastal Path, 2 events programmes, Country Parks, the heritage valley and brings in external grants of over £400k per year connecting people to nature.
- The Council has protected our 120 play areas and invested over £2m in partnership with town and community councils over the last 8 years as well as ensuring free open access to country parks with no parking charges.

Reducing carbon emissions through promoting sustainable behaviours and lifestyles

- Delivered environmental awareness campaigns with Council staff.
- Developed and delivered the Flintshire Eco Champions Programme to schools across Flintshire with partners; Plas Derw (ongoing).
- Consistently support Earth Hour.

What we are doing now and are going to do

Calculating our complete carbon footprint to enable prioritization of short, medium and long term actions.

Developing 2 further solar farms and reviewing the Council's estate for further renewable energy opportunities.

Building a new waste transfer and recycling depot powered direct with renewable energy.

Installing electrical charging points and working regionally on a collaborative approach.

Working with Welsh Government and Transport For Wales, we are delivering Active travel schemes and the North Wales Metro, developing multi modal transport solutions of railway, bus and cycle ways, along with Park and Ride facilities.

Aim to improve our recycling rates and will increase capacity at our transfer/recycling station, we will be educating, encouraging and enforcing to improve recycling, none of our waste will leave Europe as agreed in the contracts with our merchants.

Keep our waste local and continue to look at solutions for a circular economy and innovative solutions, eg, trialling plastic in road resurfacing/potholes.

Assessing the options for greening our fleet.

Developing smarter ways of working to reduce business travel.

Continuing to invest in energy efficiency measures across all of the Council's buildings.