

Chapelcross (CX) Site Transformation Programme

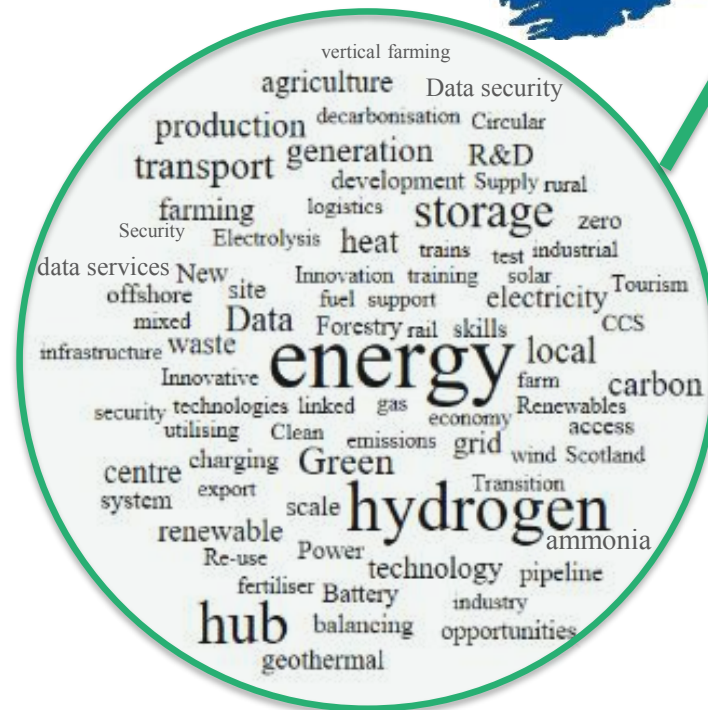
Our CX Stakeholder Briefing Pack

Contents

- Our CX Briefing Pack- Purpose and Foreword
- The site transformation story since 2004
- The Chapelcross Site – features and benefits
- Enabling zero carbon energy led growth
- CX Programme National Policy Drivers 1 to 5
- 2050 Climate Commitment Considerations
- The CX Borderlands Growth Deal 1 to 3
- Developing a shared vision of a brighter future
- COVID 19: Economic growth, skills and resources
- Inviting Stakeholder Contributions

May 2020 V2.1

Supporting SOBC development



Our CX Stakeholder Briefing Pack

Briefing Pack Purpose and Foreword

I am delighted to introduce this Stakeholder Briefing Pack as a tool to support targeting ongoing stakeholder engagement and to capture the “stakeholder voice” within the development of the Chapelcross business case.

Our definition of a stakeholder, taken from the Managing Successful Programmes (MSP) guide, is “any individual, group or organisation that can affect, be affected by, or perceive itself to be affected by a programme”.

For the purpose of clarity, CX stakeholders targeted by this Briefing Pack this includes, and are not limited to: policy owners, potential sponsors, the programme board, potential collaborators, public servants, academics and universities, potential partners, potential suppliers, local community groups, potential programme beneficiaries, etc.

We hope that this Briefing Pack, and subsequent iterations, provides appropriate information to support constructive dialogue throughout the site transformation process. And in particular, to explain the context and rationale of the programme objectives and emerging programme proposals in support of the engagement process.

Our current stakeholder activities focus on the development of the Borderlands Strategic Outline Business case (SOBC). As we progress our mobilisation journey and establish a formal Programme Board, stakeholder engagement arrangements will be developed accordingly.

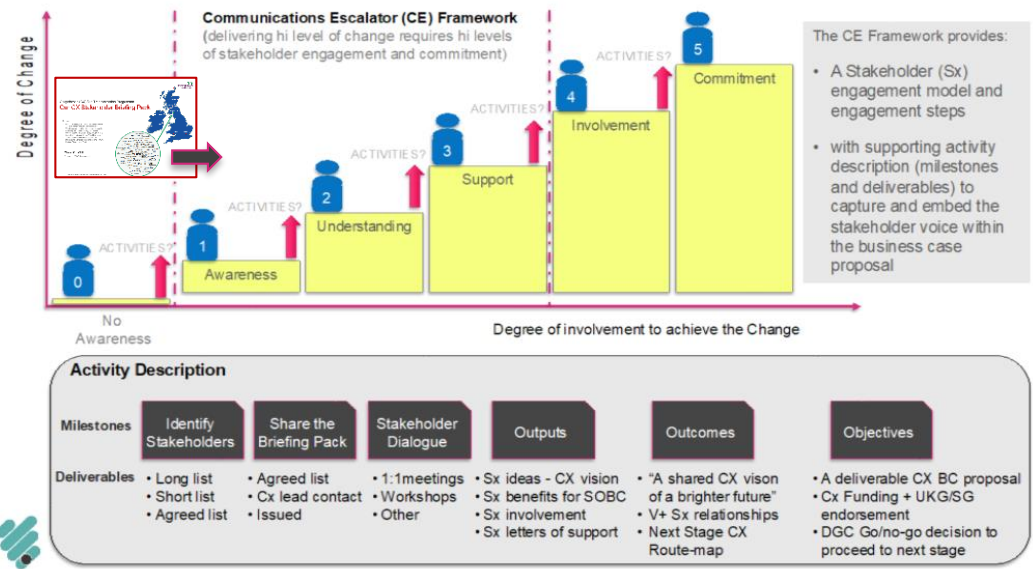
Unlocking of the Chapelcross site is the key enabler the transformation activities for delivery against our local, regional, national and international ambition

We would welcome stakeholder contributions or queries to this end throughout the CX business case development process.

Mark Fulton

CX Strategic Programme Lead
Dumfries and Galloway Council
mark.fulton@dumgal.gov.uk

Developing a Shared Vision of a Brighter Future



- The Communications Escalator is intended to be used as tool to plan and deliver stakeholder engagement activities that target the development of shared vision of a brighter future
- This Briefing Pack provides basic information about CX to progress the first 3 steps: awareness, understanding and support
- And follow up with dialogue to support the development of the “vision” and and the inclusion of the stakeholder voice within the business case

Site Transformation Story so far...

Developing options for the re-use of the 200+ hectare Chaplecross site have been a topic of discussion since before site decommissioning work started in 2004.

Activities and studies have been led by a number of bodies including the Nuclear Decommissioning Authority (NDA), Scottish Enterprise (SE), Dumfries and Galloway Council (DGC).

The chronology of events looks like this:

- The period from 2004 to 2016 supported numerous studies and proposals, these tended to be led or sponsored by a single entity and, in some instances, were impacted by government changes to accountability for regional development
- In March 2017 the NDA, SE and DGC (the Partnership) agreed a Memorandum of Understanding (MoU) to collaboratively develop an Action Plan in support of the site transformation as the CX Project
- In 2018, the Borderlands Inclusive Growth Deal provided an opportunity to reset the CX Project Action Plan as a Green Book led initiative
- In 2019, we developed a CX Route-map to guide collaborative efforts over the short (to 2035), medium (to 2050) and longer term (beyond 2050) supported by proportionate controls and governance based best practice guidance recommended by the HMT Green Book
- In September 2019 the Council authorised the first stage of the CX programme (identify the programme-MSP) underpinned by a programme mandate with 4 high level objectives aligned to UK wide policy drivers.

The high level CX programme objectives are to:

- Support the development of green energy production, storage and distribution solutions
 - Make a significant contribution to the UK and Scottish Government's net-zero targets.
 - Create a large-scale mixed-use employment site for Borderlands with significant wider economic and policy impacts
 - Maintain 100% beneficial use of the site over the full decommissioning period (in line with Energy Act 2004) and beyond.
- Since September 2019 the Partnership has been implementing the programme mandate and is currently at the latter stages of CX strategic outline business case development (SOBC)
 - The CX SOBC and Borderlands Growth Deal approval timetable has been affected by the UK wide COVID 19 response and we intend to complete its drafting for issue into the Borderlands review/approval process on 26 June
 - The SOBC ASK of Scottish and UK Governments is for funding to support the unlocking of the site through new access to the A74(M) and site servicing costs.
 - Note- unlocking the site does not only rely on site access alone. It also requires the creation of a shared Chaplecross vision that engages stakeholders from many perspectives in the making a compelling proposition which invents a new future for the re-use of the site in the achievement of the mandate objectives - it requires "market making"
 - Current **National Policy Drivers** indicate that the time is right to bring forward significant transformational change for the benefit of the local, regional and international stakeholders.

We hope that this briefing pack and the site video will help to build readers' awareness, understanding and support for our efforts going forward... [Link to Chaplecross Project video](#)

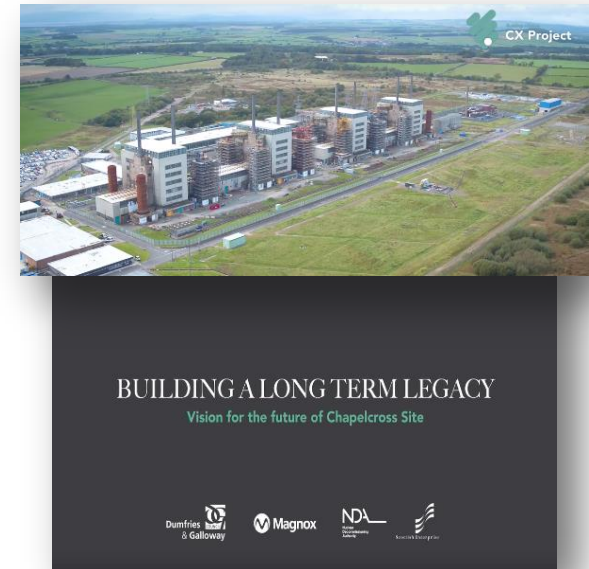


Figure 2.1 CX Video screen shots

Please take 3 minutes to view the

"Building a Long Term Legacy- a vision for the future of the Chaplecross site" video.

This provides a comprehensive introduction to the full 200ha site, including the pipeline to the Solway Firth coastline (a further 13.8ha)



The Chapelcross Location...



Pipeline route to the Solway Firth Coastline

Figure 5.1 NDA CX Freehold Red line

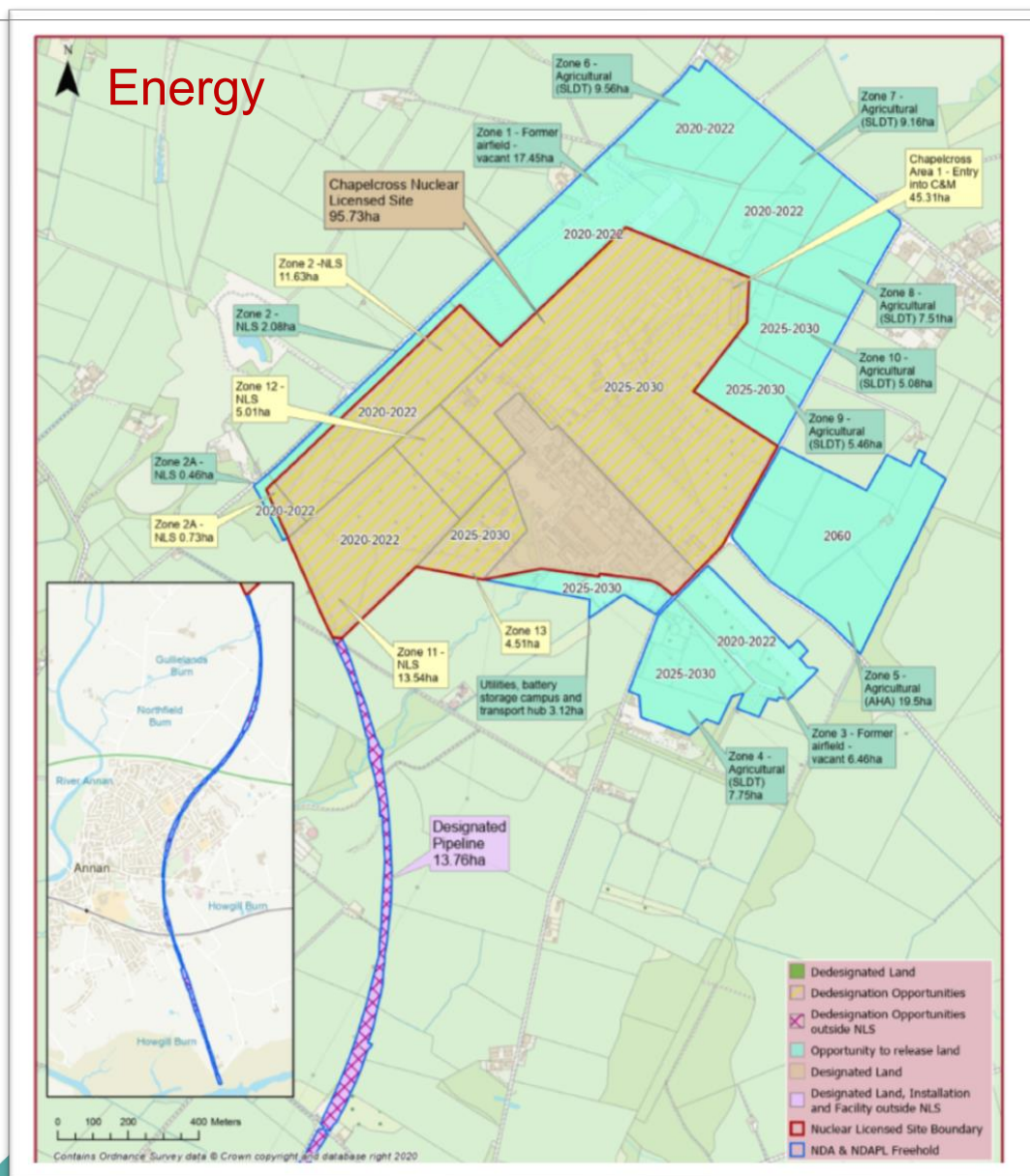
Chapelcross is very large site located near the town of Annan in Dumfries & Galloway. During WWII the site was an RAF fighter training base. It is a former nuclear Magnox power plant which was opened on 02 May 1949 and stopped Energy production in 2004. The site (within the red line) is being decommissioned by the NDA with final completion planned in 2095.

Key marketable features of the location are:

- Over 200 ha of developable land with 60 ha available now and over 160ha available over the next 10 years
- A workforce culture in with safety critical and regulated industry practice embedded
- Accessible by air, road, rail and sea
- Potential for hi capacity, zero latency digital connectivity
- An existing nuclear license
- Existing HV connection to the National Grid
- Potential to generate, store (hydrogen, ammonia) and distribute electricity with onsite high voltage connection to the National Grid Electricity network
- Potential utilisation of historical water abstraction license
- Direct access from site, through the town of Annan to the Solway Firth coastline through an NDA owned land corridor (13.8ha)
- Site development supported within the Dumfries and Galloway Local Development Plan with site Planning guidance with authority to create a Simplified Planning Zone
- Memorandum of Understanding between Dumfries and Galloway Council, Scottish Enterprise and the Nuclear Decommissioning Authority to deliver the transformation plan
- Potential for support Scottish Government, UK Government and the Borderlands Regions with Climate Emergency Commitments including removing constraints from wind power power in the Region (onshore and offshore)
- Well-placed within one of the Borderlands Strategic Growth Corridors and the Gretna-Lockerbie-Annan regeneration corridor to build on current economic strengths. With the ability to 'transmit' economic activity and inclusive growth through these corridors and beyond
- Strategic location on the Scottish-English borderlands within the M74/M6corridor–on the Trans-European Transport (TEN-T) Network core network of transport corridors across Europe
- NDA sponsored £495k Grant Fund for CX Mandate led transformation over 5 years
- Stunning scenery
- Compelling strategic fit against National Policy Drivers and business case



Enabling Zero Carbon Energy led Growth ...



The NDA Decommissioning Programme – at March 2020

The NDA Decommissioning programme drives land release for zero carbon energy led development. Over 60ha is available now outside the nuclear licensed boundary. Further land may be made available within the nuclear licensed site .

The facility decommissioning programme delivers over a number of sequential stages

- 2004 - 2025: Care and Maintenance Preparation Period
- 2025 - 2089: Care and Maintenance Period
- 2089 – 2095: Final Site Clearance

Figure 5.1 provides detail of zone size and estimated availability for development

Site development will be subject to planning conditions, as described in the Dumfries and Galloway Local Plan – see links below

See Dumfries and Galloway Council Policy ED4: Chapelcross and pages 232 - 234 on Chapelcross Business and Industry Overview
https://www.dumgal.gov.uk/media/21885/Adopted-Local-Development-Plan-2/pdf/Adopted_LDP2_OCTOBER_2019_web_version.pdf?m=637060550180970000

https://www.dumgal.gov.uk/media/22140/Chapelcross-Development-Framework/pdf/Chapelcross_Framework_for_LDP2.pdf?m=637098373408230000

https://www.dumgal.gov.uk/media/22139/Chapelcross-Development-Framework-Appendices/pdf/Chapelcross_Framework_appendice_for_LDP2.pdf?m=637099271078130000

Figure 5.1 Designated land status – estimated availability for development

National Policy Drivers 1 of 5

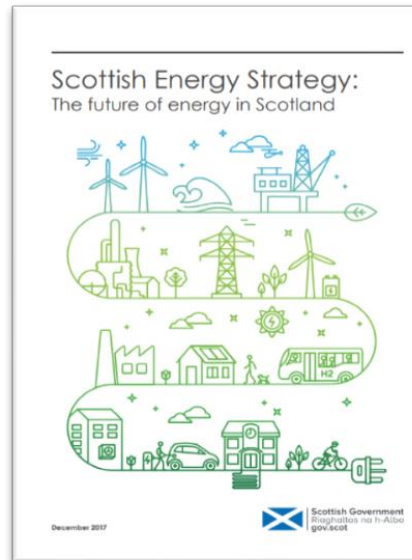
Economic



The Chapelcross site has the potential to facilitate uses that will be effective in driving economic growth and meeting the ambitions of Scotland's Economic Strategy, which include investment, innovation, inclusive growth and internationalisation.

[Link to Scotland's Economic Strategy](#)

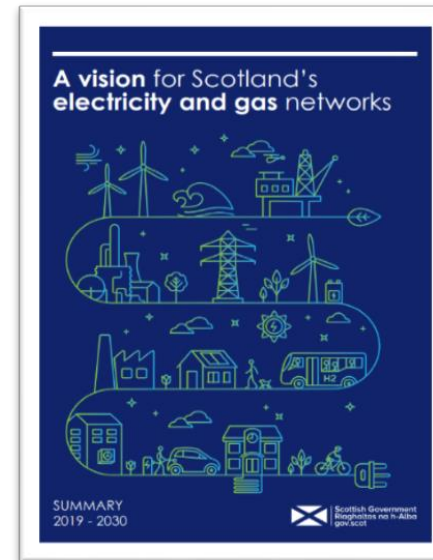
Energy



Scotland's First Minister has declared a climate emergency and the Scottish Energy Strategy sets out the vision for the future energy systems up until 2045, articulating the need for an integrated systems-wide approach – crucially reaching net zero by 2045.

[Link to Scottish Energy Strategy: The future of energy in Scotland](#)

Energy



This document sets out Scotland's ambitions for the future and enabling the gas and electric networks to deliver decarbonised energy. This sets out principles and priorities for Scotland's energy going forward, these are ambitions that Chapelcross can look to serve and deliver.

[Link to A vision for Scotland's electricity and gas networks](#)

Energy



The Borderlands Partnership recognises the importance of the energy sector as a driver for job creation and growth.

The Borderlands Partnership Heads of Terms Agreement sets out a vision for a Borderlands Energy Investment Company and a regional energy masterplan, facilitating a whole energy systems approach.

Future energy systems will require substantial storage space which Chapelcross is potentially well placed to provide.

[Link to Borderlands...](#)



National Policy Drivers 2 of 5

International Trade



The Scottish Enterprise Strategy focuses on improving exports, capitalising on their comparative advantage and building Scotland's reputation among other nations

Chapelcross is the most strategically placed site within the south of Scotland, with the correct attributes to achieve these ambitions

[Link to Net Zero: Building Scotland's Future Today](#)

Legacy - Socio & Economic



The Energy Act 2004 created the NDA as the authority tasked with cleaning up the UK's public sector nuclear legacy safely, securely, cost effectively, and in ways that safeguard the environment for this and future generations. The NDA has responsibility for designated sites in Scotland that represent that legacy, including sites and facilities that were developed in the 1950s and 1960s to support defence and nuclear power generation research. There are three NDA sites in Scotland: Dounreay, Hunterston A, and Chapelcross.

[Link to The Energy Act 2004...](#)

Net Zero



Chapelcross, with the existing national grid connection, is well suited to provide green energy usage, production or storage. This would align with the wider legacy of energy production at Chapelcross and its ambition to play an enabling role in achieving the 2050 net zero carbon target with region, national and international impact.

- This is now a binding requirement in law.
- Dumfries & Galloway Council have made their own Climate Emergency Declaration in June 2019.

[Link to Net Zero: the UK's contributions to stopping global warming](#)

Domestic Economy



The site is well placed to facilitate the expansion and development of high-value sectors noted in the Regional Economic Strategy.

High value sectors in the strategy are sectors with identified growth potential and which are in a position to provide more highly paid, skilled employment

The Regional Economic Strategy identifies the following sectors:

- Digital
- Energy (renewables)
- Forest and timber technologies

[Link to DGC Economic Strategy](#)



Electricity / Green Energy

Scottish Government National Planning Framework 3 (NPF3) - April 2020

National Developments



Detail key

National Developments

- Ravenscraig
- Dundee Waterfront
- Carbon Capture and Storage (CCS) Network and Thermal Generation
- A High Voltage Energy Transmission Network
- Pumped storage
- Central Scotland Green Network
- Metropolitan Glasgow Strategic Drainage Partnership
- A National Long Distance Cycling and Walking Network
- High Speed Rail
- Strategic Airport Enhancements
- Grangemouth Investment Zone
- Freight on the Forth
- Aberdeen Harbour
- A Digital Fibre Network

Chapelcross

National Planning Framework 4 (NPF4)

Chapelcross is making its case to be included in NPF4 as a National Development Site for Scotland

International Gas Transmission

The UK Feeder 12 gas transmission pipeline runs through Langholm and Longtown, just east of CX, before heading east towards Bishop Auckland (County Durham).

There is also a recent EU reference to a PCI for upgrading the Scotland to Northern Ireland interconnector (SNIP)

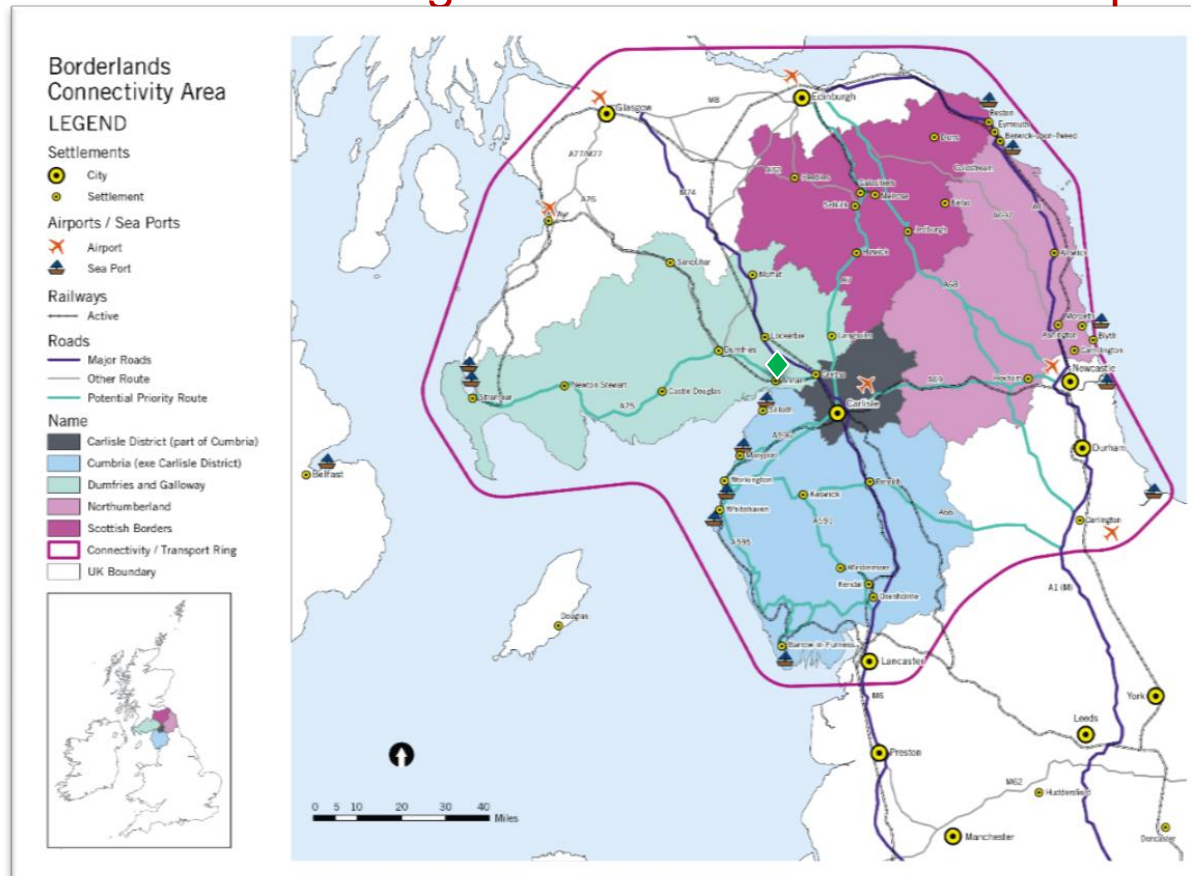
http://ec.europa.eu/energy/maps/pci_fiches/pci_5_1_2_en_2017.pdf

THE EUROPEAN NATURAL GAS NETWORK (ENTSOE, 2015) –

https://www.entsoe.eu/sites/default/files/2018-10/ENTSOE_CAP_MAY2015_A0FORMAT.pdf



Borderlands Regional and International Transport



Regional

The Borderlands Partnership sets out the shared desire to play a full part in the Scottish and wider UK economy, through the development of five 'Strategic Growth Corridors' shown above. Chapelcross forms an important part of the South West Scotland and Northern Ireland Corridor as a result of its strong transport links. Unlocking sites of major economic activity such as Chapelcross has the potential to 'transmit' economic activity and inclusive growth outwards through these Strategic Growth Corridors and beyond

International

The M6/M74 corridor forms part of the TEN-T – Core Network of Transport Corridors

https://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/index_en.htm



Independent advice to government
on building a low-carbon economy
and preparing for climate change

Just Transition Commission

Interim Report

A European Green Deal

Striving to be the first climate-neutral continent

Scottish Climate Plan

A letter from the Chairman of the CCC outlining how effective climate policy can and should play a part in the economic recovery. The climate plan update scheduled has been delayed to reframe the Plan in the context of a 'green pathway' to aid an economic recovery in line with Scotland's net zero targets.

Scottish Government Just Transition Commission Interim Report

This interim report identifies some key areas which they believe merit action from Government now. They include:

- Ensuring Fair Work is promoted across programmes receiving public money.
- Development of a Climate Emergency Skills Action Plan.
- Begin planning for and delivering inclusive low-carbon infrastructure now.

EU Green Deal and EU Sustainable Investment Taxonomy

The European Green Deal provides a roadmap with actions to:

- boost the efficient use of resources by moving to a clean, circular economy
- restore biodiversity and cut pollution.

The EU taxonomy is a tool to help investors, companies, issuers and project promoters to navigate the transition to a low-carbon, resilient and resource-efficient economy.

Other emerging drivers:

- [Scottish Hydrogen Assessment for Net Zero](#)
- [Scottish hydrogen activity GIS mapping](#)
- [IEA 2020 Energy Review](#) and [Hydrogen Opportunities](#)



2050 Climate Commitment Considerations

The role that “ green energy production, storage and distribution and the site’s contribution to zero carbon targets ” within emerging business case could play in addressing Climate Commitment targets on a local, regional, national and international scale could be a game changer.

The Chapelcross programme has the potential to complement and directly collaborate in the development and implementation of local, regional, national and international scale plans to achieve our shared zero carbon targets.

This presentation helps to put this into a context well beyond the red line that defines the Chapelcross site boundary

Supplying energy for our everyday lives reliably and affordably has always been a key goal of government policy.
But the UK’s commitment to do so while almost completely eliminating carbon emissions over the next three decades poses an unprecedented challenge for government, business and individuals.
BBC Briefing explores how that challenge can be met.

The details in this Briefing were correct in November 2019



BBC Briefing: Energy

[Link to BBC Energy Briefing Dec 2019](#)



The Borderlands Inclusive Growth Deal Context 1/3

Four themes: Infrastructure; Places; Business Skills and Innovation; and Green Growth
Ten Initiatives: 5 cross cutting themes; 5 regional priorities



The Borderlands Partnership was established in 2018 to unlock the potential for sustainable and inclusive economic growth across the South of Scotland and North of England.

It has changed the site development strategy from zone led to United Kingdom and Scottish Government backed Green Book Business Case approach with a full site vision for the short term (to 2035) medium term (to 2050) and longer term (beyond 2050).

The CX programme is one of ten initiatives supported from the Scottish Government the United Kingdom Government over a 10-15 year period with circa £400m funding

The CX Programme Mandate and Council Report captured the lessons learned from the "cold eyes review" and secured approval from the Full Council in September 2019.

The "review" identified the need for a step change in approach to create the right environment for success over the short, medium and longer term.

The Borderlands Inclusive Growth Deal Context 2/3

The site's qualities and assets, not least in the shape of the existing grid connection, as well as the area's emerging interests in key sectors and technologies relating to clean growth, green energy, and zero carbon, offer a significant 'market-making' opportunity for investment.

As has been mentioned earlier, Chapelcross is located within the M74 corridor, a priority for investment in its own right thanks to its strategic connectivity, connections to Scotland's Central Belt, and major urban and industrial centres in the North of England. The diagrams help to bring together the UK, Scotland, Borderlands and Chapelcross components.



Chapelcross site – sitting within the M74 corridor that connects Scotland's Central Belt with northern English towns.



Chapelcross and Dumfries & Galloway in the wider context of the Borderlands region.

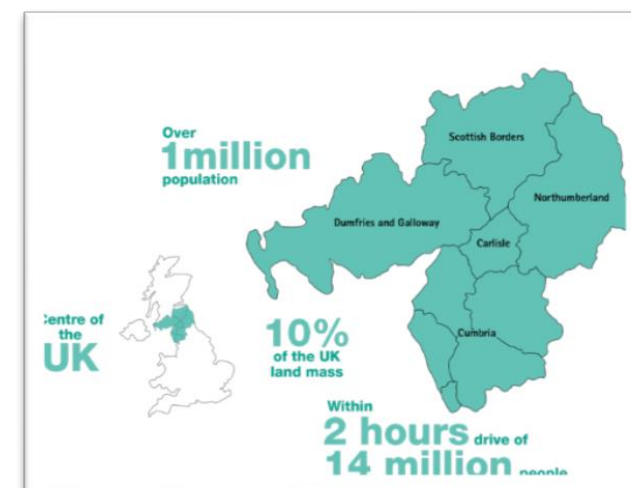


Figure 12.1 Chapelcross and the M74 corridor

Figure 12.2. Chapelcross Local context

Figure 12.3. Borderlands UK context



The Borderlands Inclusive Growth Deal Context 3/3



Figure 13.1. CX Programme Mandate

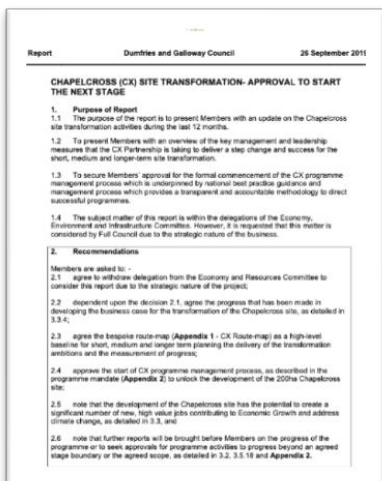


Figure 13.2. 26th September Full Council Committee Report

Borderlands Growth Deal has had a very positive and significant impact on the partners approach to the transformation of the site to deliver its 4 key objectives. Dumfries and Galloway Council have lead accountability, und currently accountable for delivery of the programme mandate

The CX Programme Mandate provides a framework and method to agree and authorise the commencement of the Chapelcross Transformation Programme management process. The creation of a mandate a recognised good practice approach to defining and approving the commencement of major change initiatives.

Commencement of the programme management process, summarised in the **CX Route-map**, was triggered by the approval Full Council Report to Start the Next Programme Stage on 26 September 2019.

Consequently, CX Programme Mandate were agreed by the Dumfries and Galloway Leadership Team and approved by its Chief Executive in October 2019. The links below provide further detail of Council support for the programme including why the report was produced, recommendations, considerations and detailed underpinning appendices.

The CX Mandate clearly states that securing the financial UK/SG ASK is only one of Critical Success Factors needed to create an environment for success required to “unlock the site”.

Officers from SE, NDA and DGC are currently engaged in the implementation of the CX mandate to deliver the CX SOBC and the decision to progress to the next programme stage.

Hyperlinks

- 26th September **Full Council Committee Report** scroll to item 8 on the list of reports, the Report and Appendices can all be downloaded from there: <https://dumfriesgalloway.moderngov.co.uk/ieListDocuments.aspx?CId=137&MId=4469>
- **CX project website:** <https://www.cxproject.co.uk>
- **CX video clip- a vision for the future of Chapelcross :** <https://www.youtube.com/watch?v=7H1jLHi0bPY>
- **Borderlands Partnership website:** <http://www.borderlandsgrowth.com/>
- **CX Update to Economy and Resources Committee Jan 2020 – see item 11**
<https://dumfriesgalloway.moderngov.co.uk/ieListDocuments.aspx?CId=551&MId=4888>

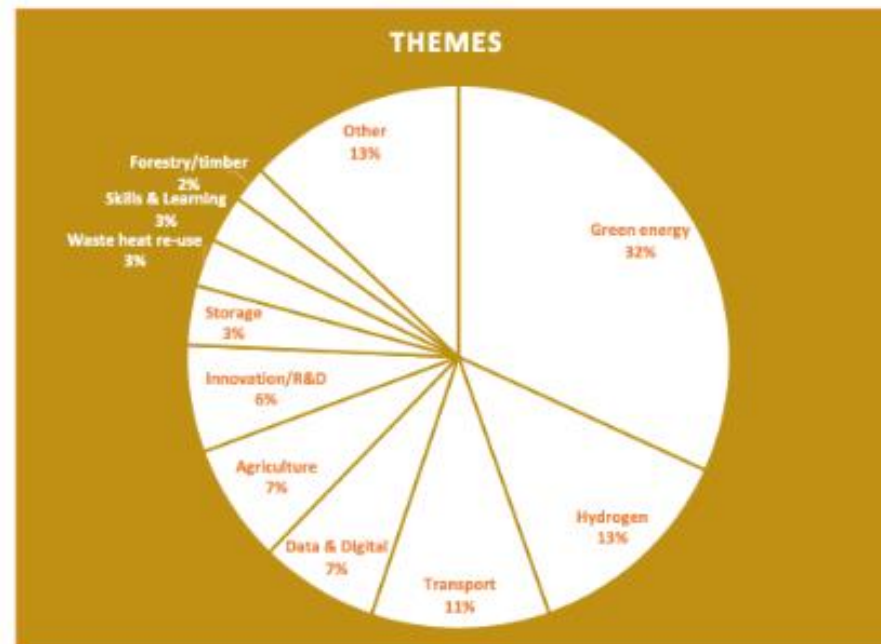
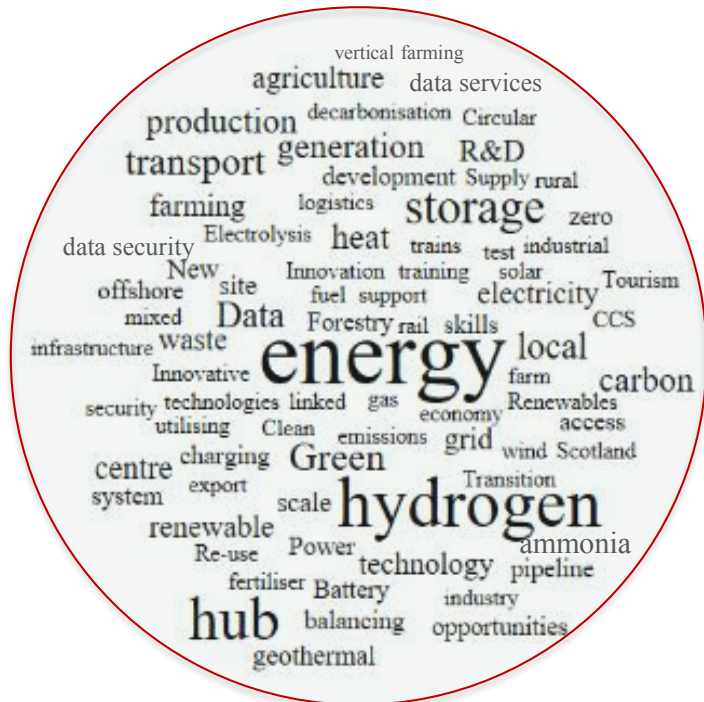


Developing a “Shared Vision of a Brighter Future”

Our current stakeholder engagement activity includes 1:1, group meetings and workshops. These are proving to be a very useful, popular and effective way of capturing the stakeholder voice. In March we carried out a structured opportunities workshop at the Strathclyde Innovation Centre. The workshop included a combination of key note speakers and sub-group workshops and whole group feedback and targeted the capture of opportunities and the development of an ambitious and pragmatic vision for role of Chapelcross.

Throughout the workshop a number of consistent themes began to emerge. Area of overlap between the the sub-group conversations included:

- Green Energy
- Hydrogen
- Transport
- Agriculture
- Innovation and R&D
- Energy storage
- Waste heat re-use
- Waste heat re-use
- Skills and learning
- Nationally important asset
- Enabler for 2050 net zero target
- Cross sector energy hub
- Agriculture – under glass nearby the site
- Green energy demonstrator at scale
- High security data and digital



Stakeholder Workshop,
Glasgow 21 Feb 2020



COVID 19: Economic growth, skills and resources

Impact of COVID 19

- The full impact of the Covid-19 lockdown will not be clear until more data is available; we can say:
 - Significant reduction in the business base, especially in the micro-business sectors
 - Potential change of travel habits and increasing interest in localism
 - Increase in domestic tourism leading to greater pressure on attractions and transport network
 - Significant increase in jobless households and reduced opportunities for young people
 - Potential increase in population decline
- The Chapelcross programme presents a unique opportunity to mitigate some of these impacts through establishing the foundations of a new economy built on clean energy and digital infrastructure.

Opportunities through Chapelcross investment

- The lockdown has brought the impact of climate change challenges into stark relief as pollution levels have fallen through the cessation of activity
- Opportunity to build a new economy based on green energy production, distribution and storage
- Such a venture would create significant local supply chain opportunities and the creation of high-value jobs
- The combination of investing in a green energy hub and spoke model and supporting this through skills development and knowledge exchange creates a powerful force for change in the economy of Dumfries and Galloway, the Borderlands and Scotland
- Economic growth requires the availability of resources with the right skills. These opportunities will only be realised by combining the knowledge and resources of both the public and private sectors.
- The alignment of public policy and commercial investment provides the best opportunity to deliver the full potential of the project.



Inviting Stakeholder Contributions...

We are keen to open a constructive dialogue with stakeholders and see this Briefing Pack as one way of reaching out and initiating and maintaining the dialogue

By stakeholder we mean:

- policy owners,
- potential sponsors,
- the programme board,
- potential collaborators,
- public servants,
- academics and universities,
- potential partners,
- potential suppliers,
- local community groups,
- potential programme beneficiaries,
- etc.

Please don't hesitate to get in touch if you would like to explore how you could support the Chapelcross Programme to develop and deliver a shared vision of a brighter future or be included in CX programme progress updates

CX PROGRAMME NEXT STEPS – 2020

The current Borderlands timetable has been impacted by the COVID 19 Pandemic, so the baseline timings for key activities and events put forward here are our current best estimate and may be subject to change.

Q2 APRIL- JUNE

- Stakeholder engagement activities – capturing the stakeholder voice
- Completion of the CX SOBC
- Review/approval of the CX SOBC by CX Partners
- Issue of the CX SOBC to Borderlands Governance

Q3 JULY- SEPTEMBER

- Borderlands receive CX SOBC
- Borderlands independent review CX SOBC
- Dumfries and Galloway Council review/approval

Q4 OCTOBER- DECEMBER

- UK Government/Scottish Government Review
- Full Deal Decision from UKG/SG
- Go/no-go decision to commence next stage (Outline Business Case)