



LANDARNA

3ADAPT
People focused. Data informed.

LANDARNA

Landarna is brought to you by
3ADAPT.

Established in 2017, 3ADAPT is a renowned sustainability consultancy that collaborates with extensive landowners across public, private, and third sectors. Our experience spans partnerships with:

- Environmental NGOs
- Local governments
- Utility companies
- Developers

Insights gained from these collaborations have been integrated into our Landarna software, accelerating our pursuit of a more sustainable world on a broader scale.

Certified



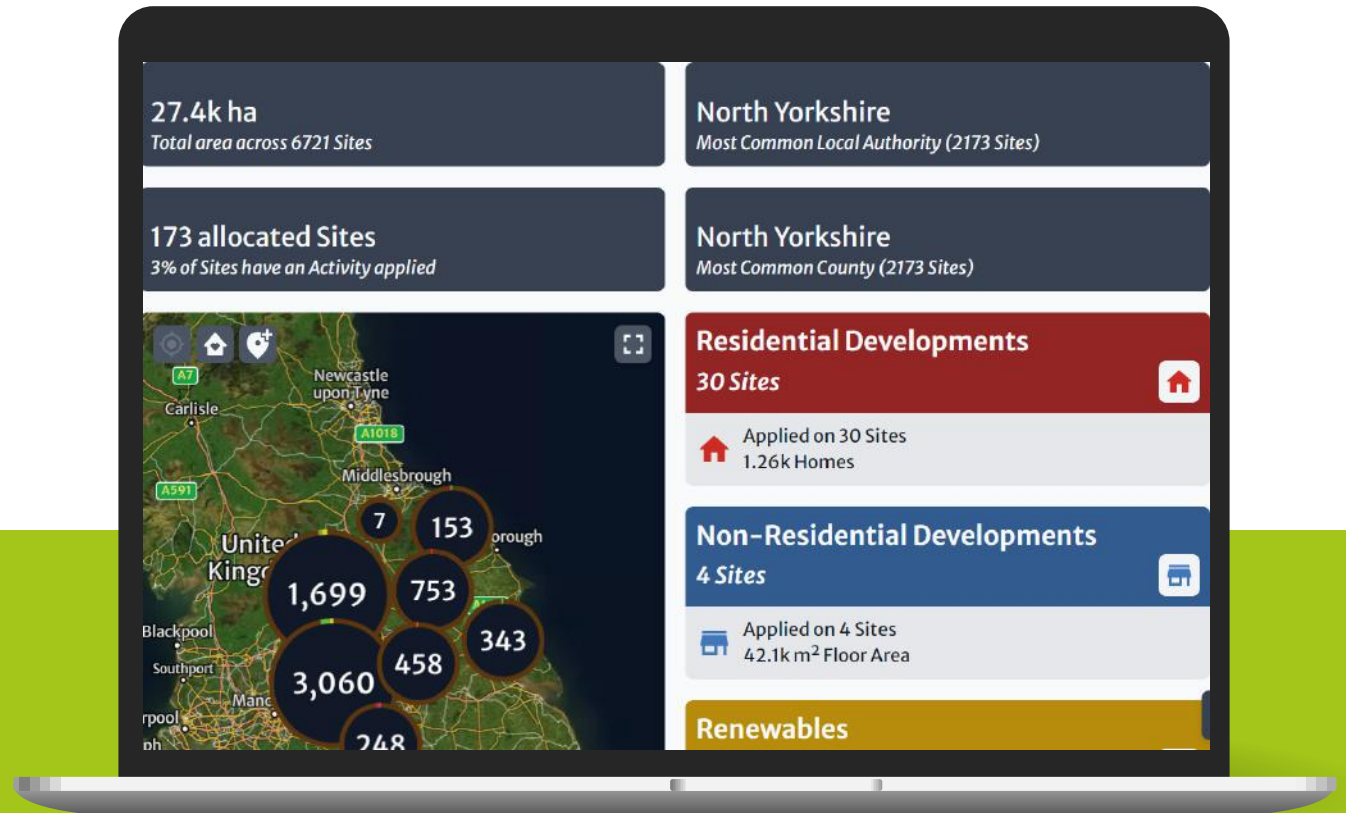
A selection of our clients



LANDARNA

VISION: TO CREATE A MORE SUSTAINABLE WORLD THROUGH IMPROVED LAND MANAGEMENT

MISSION: TO DEVELOP THE WORLD'S FIRST PLATFORM FOR ASSESSING, INFORMING, AND REPORTING THE HOLISTIC IMPACT OF LAND OPPORTUNITIES, ENABLING MORE SUSTAINABLE LAND USE DECISIONS



See the value and suitability of your land



Model the impacts of different activities



Align with globally recognised standards

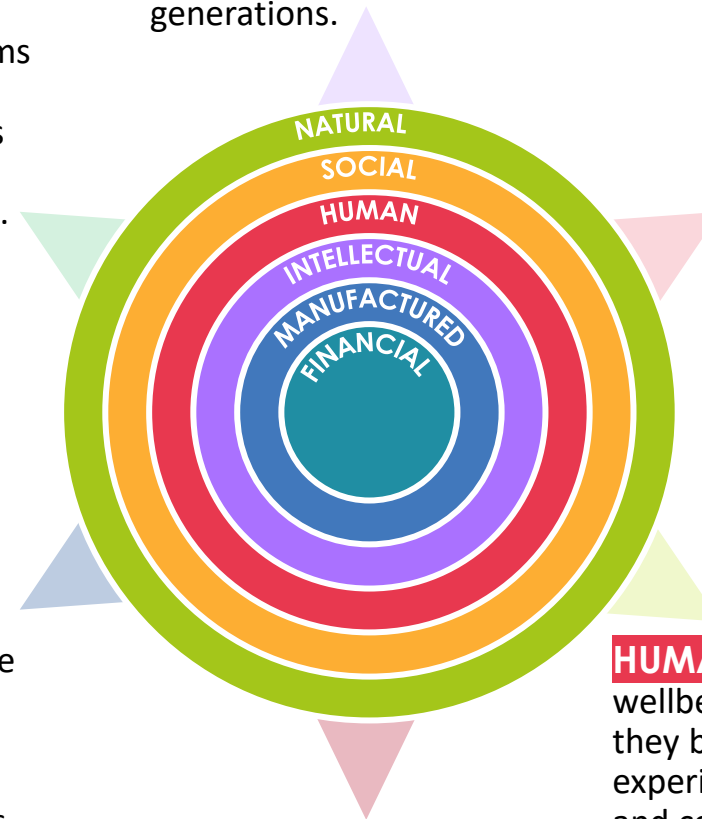
LANDARNA

The 'Six Capitals' model emphasises living within the limits of the natural environment and developing strategies that grow all capitals to deliver benefits for society as a whole.

FINANCIAL: The common way in which society measures 'value' e.g. items that have cash value: money, stocks and shares or the value on a company's balance sheet.

NATURAL: The natural environment that people use, manage and depend on for life. This includes water, land, air, plants, forests, fisheries and heritage inherited from previous generations.

SOCIAL: The networks, relationships and systems that support us, for example, families, neighbourhoods, schools and voluntary organisations that collectively influence culture.



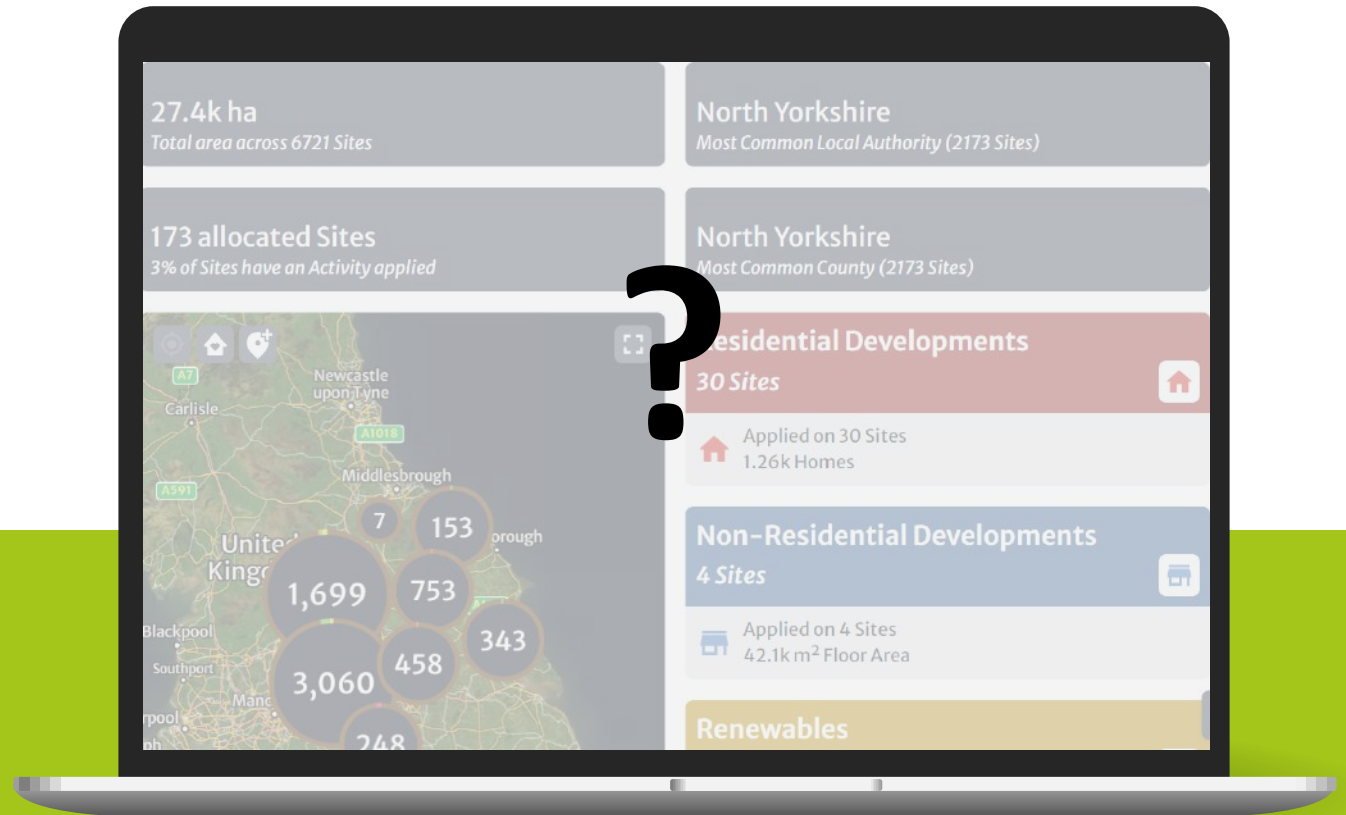
MANUFACTURED: The human-made material goods or fixed assets. These include infrastructure, buildings, vehicles, machines, chemicals, pipes, etc.

INTELLECTUAL: The knowledge and information used, generated and shared. It encompasses innovation and research.

HUMAN: People's wellbeing and the value they bring through experience, productivity and competencies to society or to an organisation.

LANDARNA

WHY DID WE
BUILD IT?



LANDARNA

How Landarna addresses your challenges

Your Challenges

There are many *fragmented datasets* and impact valuation methods, but finding the right one to calculate impact for your opportunity is *difficult*.

Calculating impact holistically *requires a multi-disciplinary team* of experts with significant coordination which is *slow and costly*.

Platforms exist, but they are typically *focused on a narrow scope of impact* - i.e. economic or focused in on specific development types or land use changes.

Decision making is slow and opaque as options and assessment requires *significant coordination across many stakeholders*.

Aggregating impact is challenging across numerous projects as each is done in a slightly different way by different people using different techniques.

How Landarna can help



Collates and synthesizes datasets and approaches through a single platform and user interface which makes assessing opportunities *easy*.



Brings together leading methodologies used by researchers, academia and consultants in one place and coordinates assumptions *instantly*.



Holistically considers a wide range of impacts aligned with *SDG's* and the *Integrated Reporting Six Capitals Framework*.



Quick, dynamic and fun optioneering with the ability to test changes and scenarios live in workshops.



Landarna allows easy *creation of portfolios* of projects, *aggregating impacts seamlessly* to be able to *report at an organisational level*.

LANDARNA

How Landarna addresses your challenges

Your Challenges

There are many *fragmented datasets* and impact valuation methods, but finding the right one to calculate impact for your opportunity is *difficult*.

Calculating impact holistically *requires a multi-disciplinary team* of experts with significant coordination which is *slow and costly*.

Platforms exist, but they are typically *focused on a narrow scope of impact* - i.e. economic or focused in on specific development types or land use changes.

Decision making is slow and opaque as options and assessment requires *significant coordination across many stakeholders*.

Aggregating impact is challenging across numerous projects as each is done in a slightly different way by different people using different techniques.

How Landarna can help



Collates and synthesizes datasets and approaches through a single platform and user interface which makes assessing opportunities *easy*.



Brings together leading methodologies used by researchers, academia and consultants in one place and coordinates assumptions *instantly*.



Holistically considers a wide range of impacts aligned with *SDG's* and the *Integrated Reporting Six Capitals Framework*.



Quick, dynamic and fun optioneering with the ability to test changes and scenarios live in workshops.



Landarna allows easy *creation of portfolios* of projects, *aggregating impacts seamlessly* to be able to *report at an organisational level*.

LANDARNA

How Landarna addresses your challenges

Your Challenges

There are many *fragmented datasets* and impact valuation methods, but finding the right one to calculate impact for your opportunity is *difficult*.

Calculating impact holistically *requires a multi-disciplinary team* of experts with significant coordination which is *slow and costly*.

Platforms exist, but they are typically *focused on a narrow scope of impact* - i.e. economic or focused in on specific development types or land use changes.

Decision making is slow and opaque as options and assessment requires *significant coordination across many stakeholders*.

Aggregating impact is challenging across numerous projects as each is done in a slightly different way by different people using different techniques.

How Landarna can help



Collates and synthesizes datasets and approaches through a single platform and user interface which makes assessing opportunities *easy*.



Brings together leading methodologies used by researchers, academia and consultants in one place and coordinates assumptions *instantly*.



Holistically considers a wide range of impacts aligned with *SDG's* and the *Integrated Reporting Six Capitals Framework*.



Quick, dynamic and fun optioneering with the ability to test changes and scenarios live in workshops.



Landarna allows easy *creation of portfolios* of projects, *aggregating impacts seamlessly* to be able to *report at an organisational level*.

LANDARNA

How Landarna addresses your challenges

Your Challenges

There are many *fragmented datasets* and impact valuation methods, but finding the right one to calculate impact for your opportunity is *difficult*.

Calculating impact holistically *requires a multi-disciplinary team* of experts with significant coordination which is *slow and costly*.

Platforms exist, but they are typically *focused on a narrow scope of impact* - i.e. economic or focused in on specific development types or land use changes.

Decision making is slow and opaque as options and assessment requires *significant coordination across many stakeholders*.

Aggregating impact is challenging across numerous projects as each is done in a slightly different way by different people using different techniques.

How Landarna can help



Collates and synthesizes datasets and approaches through a single platform and user interface which makes assessing opportunities *easy*.



Brings together leading methodologies used by researchers, academia and consultants in one place and coordinates assumptions *instantly*.



Holistically considers a wide range of impacts aligned with *SDG's* and the *Integrated Reporting Six Capitals Framework*.



Quick, dynamic and fun optioneering with the ability to test changes and scenarios live in workshops.



Landarna allows easy *creation of portfolios* of projects, *aggregating impacts seamlessly* to be able to *report at an organisational level*.

LANDARNA

How Landarna addresses your challenges

Your Challenges

There are many *fragmented datasets* and impact valuation methods, but finding the right one to calculate impact for your opportunity is *difficult*.

Calculating impact holistically *requires a multi-disciplinary team* of experts with significant coordination which is *slow and costly*.

Platforms exist, but they are typically *focused on a narrow scope of impact* - i.e. economic or focused in on specific development types or land use changes.

Decision making is slow and opaque as options and assessment requires *significant coordination across many stakeholders*.

Aggregating impact is challenging across numerous projects as each is done in a slightly different way by different people using different techniques.

How Landarna can help



Collates and synthesizes datasets and approaches through a single platform and user interface which makes assessing opportunities *easy*.



Brings together leading methodologies used by researchers, academia and consultants in one place and coordinates assumptions *instantly*.



Holistically considers a wide range of impacts aligned with *SDG's* and the *Integrated Reporting Six Capitals Framework*.



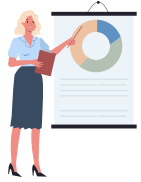
Quick, dynamic and fun optioneering with the ability to test changes and scenarios live in workshops.



Landarna allows easy *creation of portfolios* of projects, *aggregating impacts seamlessly* to be able to *report at an organisational level*.

LANDARNA

Benefits to different organisations:



Local Authorities

- Build better policy standards through testing impact of policy changes
- Develop your own property and land portfolio in a way that achieves your organisational objectives
- Build impact-driven business cases to attract public and private investment



Land Managers / Developers

- Maximise and communicate the wider positive impact of your developments
- Have more informed stakeholder consultations and conversations focused on tangible impacts
- Demonstrate compliance with planning requirements or alignment with industry leading standards



Charities & NGO's

- Focus your funding to maximise impact
- Communicate benefits to funders and gain additional support
- Engage and leave a legacy of positive impact



Impact investors / Funders

- Inform investment decision making
- Report the wider impact of your investment decisions
- Collate impacts across a portfolio

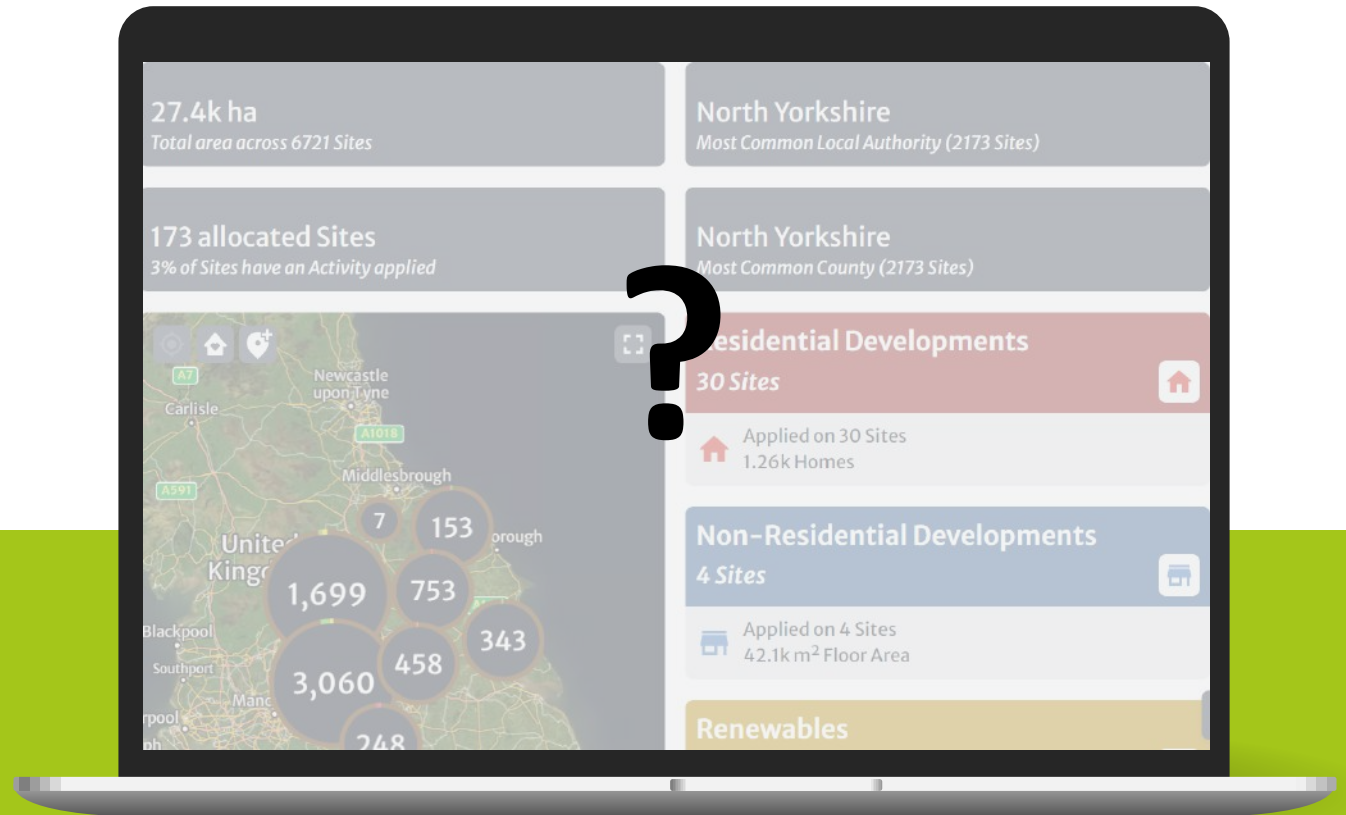


Consultants & Analysts

- Provide your clients with an efficient assessment of the sustainability impacts with greater cost certainty
- Test development scenarios live in workshops
- Streamline work across multiple clients

LANDARNA

HOW DOES IT WORK?



LANDARNA

KeyLand

Esholt Positive Living

1. Easy to access web platform – quickly add all your land



LANDARNA

View land characteristics and current impacts for your whole portfolio or any subset.

2. Understand and map your land like never before

LANDARNA

- Home
- Portfolio
- Sites
- Land Characteristics
- Suitability Analysis
- Impact
- Search for Sites

Admin Tools July 24

v6.42.1

Sites

91 out of 91 Sites - Filter Sites

Select Filtered Sites on Map

Enter text & press enter to filter by Site name...

Name	Ref	Tags	Area	Local Authority	Primary Land Cover	Applied Activi
Beck Farm, Norwood, Harrogate (HG3 1SZ)	0		0.35 ha	Not Found	Improved grassland	
Brame Hall, Norwood (HG3 1SB)	0		0 ha	Not Found	Suburban	
Brame House Farm, Norwood, Harrogate (HG3 1SZ)	0		0.35 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW)	0		0.02 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 2	0		1.15 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 3	0		5.07 ha	Not Found	Improved grassland	
Crayke Service Reservoir, Crayke, York	0		0.25 ha	Not Found	Improved grassland	
Hill Top Farm, Back Lane, Fewston	0		0.03 ha	Not Found	Improved grassland	
Home Farm House And Home Farm Cottage, Esholt Hall E...	0		0.21 ha	Not Found	Deciduous woodland	
Home Farm, The Avenue, Apperley Bridge, Bradford (BD1...	0		1.31 ha	Not Found	Suburban	
Land adjoining 41 Bracken Park, Scarcroft, Leeds (LS14 3HZ)	0		0 ha	Not Found	Suburban	
Land adjoining Ferrybridge Sewage Pumping Station, Kir...	0		0.33 ha	Wakefield	Improved grassland	
Land adjoining Little Lane, Doncaster	0		0.31 ha	Not Found	Freshwater	

Map of All Sites

Downloads

Select one or more Sites to enable download options.

Selected Sites List

Selected Site(s) details compiled into a CSV file.

Download Selected Sites List

Energy Certificates

Available energy certificates of specified type will be compiled into a CSV file.

Energy Certificate Type

Domestic Energy Performance Ce... | v

Download Energy Certificates

Delete Selected Sites

15

3. Summarise land characteristics across your sites in one structured system

LANDARNA

 Home
 Portfolio
 Sites
 Land Characteristics
 Suitability Analysis
 Impact
 Search for Sites
 Admin Tools

 PH

Sites

91 out of 91 Sites - Filter Sites

Select Filtered Sites on Map

Enter text & press enter to filter by Site name...

Name	Ref	Tags	Area	Local Authority	Primary Land Cover	Applied Activi
Beck Farm, Norwood, Harrogate (HG3 1SZ)	0		0.35 ha	Not Found	Improved grassland	
Brame Hall, Norwood (HG3 1SB)	0		0 ha	Not Found	Suburban	
Brame House Farm, Norwood, Harrogate (HG3 1SZ)	0		0.35 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW)	0		0.02 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 2	0		1.15 ha	Not Found	Improved grassland	
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 3	0		5.07 ha	Not Found	Improved grassland	
Crayke Service Reservoir, Crayke, York	0		0.25 ha	Not Found	Improved grassland	
Hill Top Farm, Back Lane, Fewston	0		0.03 ha	Not Found	Improved grassland	
Home Farm House And Home Farm Cottage, Esholt Hall E...	0		0.21 ha	Not Found	Deciduous woodland	
Home Farm, The Avenue, Apperley Bridge, Bradford (BD1...	0		1.31 ha	Not Found	Suburban	
Land adjoining 41 Bracken Park, Scarcroft, Leeds (LS14 3HZ)	0		0 ha	Not Found	Suburban	
Land adjoining Ferrybridge Sewage Pumping Station, Kir...	0		0.33 ha	Wakefield	Improved grassland	
Land adjoining Little Lane, Doncaster	0		0.31 ha	Not Found	Freshwater	

Map of 91 Selected Sites

Downloads

Select one or more Sites to enable download options.

Selected Sites List

Selected Site(s) details compiled into a CSV file.

[Download Selected Sites List](#)

Energy Certificates

Available energy certificates of specified type will be compiled into a CSV file.

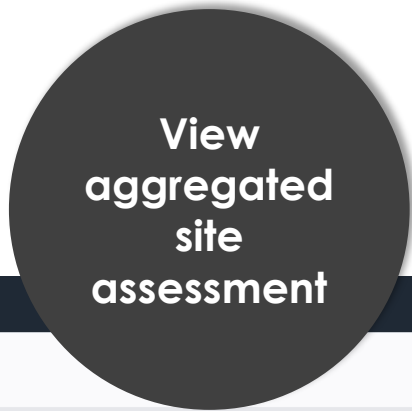
Energy Certificate Type: Domestic Energy Performance Ce... ▼

[Download Energy Certificates](#)

[Delete Selected Sites](#)

v6.42.1
←

4. View Pre-activity impacts



LANDARNA

- Home
- Portfolio
- Sites
- Land Characteristics
- Suitability Analysis
- Impact
- Search for Sites
- Admin Tools

Portfolio Land Characteristics

91 Sites Selected

91 out of 91 Sites - Filter Sites

Select Filtered Sites on Map

Enter text & press enter to filter by Site name...

Name	Area
Beck Farm, Norwood, Harrogate (HG3 1SZ)	0.35 ha
Brame Hall, Norwood (HG3 1SB)	0 ha
Brame House Farm, Norwood, Harrogate (HG3 1SZ)	0.35 ha
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW)	0.02 ha
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 2	1.15 ha
Broomfield Farm, Stainsacre Lane, Whitby (YO22 4NW) 3	5.07 ha

Selection Land Characteristics Summary

- Land Registry
- Location
- Land Use
- Constraints
- Demographics
- Landscape Designations
- Heritage
- Land Value
- Energy Certificates

Area: 273 ha

Total UPNs: 455 UPNS

Sites With a UPRN: 40 Sites

Land Owners

KEYLAND DEVELOPMENTS LIMITED

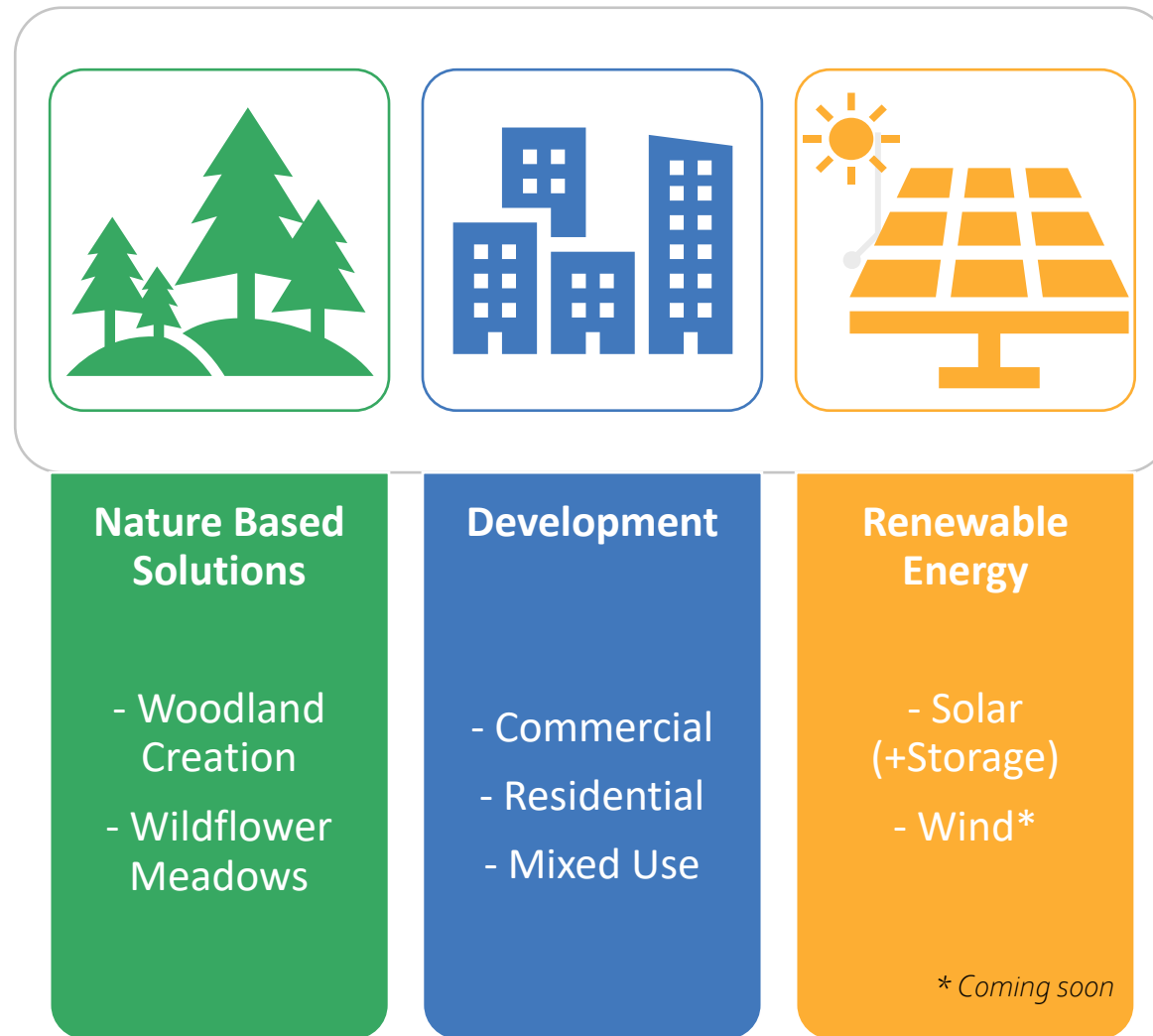
Land Owner Categories

Limited Company or Public Limited Company

Tenure



5. Adding and comparing Activities



5. Adding and comparing Activities

LANDARNA

PH

- [Home](#)
- [Portfolio](#)
- [Sites](#)
- [Land Characteristics](#)
- [Suitability Analysis](#)
- [Impact](#)
- [Search for Sites](#)

Land at The Avenue, Esholt, Shipley

[Download Report](#)
[Save Site](#)

Site Details

Land Registry
Location
Land Use
Constraints
Demographics
Landscape Designations
Heritage
Land Value
Energy Certificates

Area 5.79 ha	Perimeter 1.35k m	Landowner KEYLAND DEVELOPMENTS LIMITED	Landowner Category Limited Company or Public Limited Company
Title Number YY60543	Tenure Freehold	Leaseholder(s) None	UPRNs 10090153250, 10090153256, 10090153249, 10090153255, 10090153254, 10090153246, 10090153460, 10090153863, 10090153553, 10090153483, 10090153462, 10090153461, 10090153547, 10090153550, 10090153223, 10090153808,

Site Impact

Pre-activity impact from 2024 to 2064 with discount factors

Impact from 2024 to 2064

Annual Return
 Cumulative Return
 Use Discount Factors

Impact	Physical	Monetised
TOTAL	+	£342K
NATURAL	+	£317K
SOCIAL	+	£13.6K
HUMAN	+	£10.8K
INTELLECTUAL	+	£11.4
MANUFACTURED	-	£0

Site Properties >

Considered Activities v

Add Activity

Search Activities by Name or Activity Type...

Create Activity >

v6.42.1
<

5. Adding and comparing Activities

🏠 ★★★★★ KDL Esholt Positive Living (Case Study)

[Download Report](#)
[Save Activity](#)

Activity Output Selection

Land at The Avenue, Esholt, Shipley

All Applied Sites

Activity Options

Type
Residential Development

Reference
EPL

Description
 The housing part of the masterplan has been led by the drive to create an exemplar residential development which will be one of the most sustainable in the UK. The masterplan outlines 150 homes, from 1-bedroom maisonettes to 5 bedroom detached houses to allow for a diverse community. The residential development will act as a catalyst for the wider scheme, demonstrating that by linking and integrating with the Yorkshire Water treatment works, and their surrounding fantastic landscape, we can create a positive development with amazing wellbeing benefits.

Referenced in the RIBA Plan for Use Guidance.

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKewiipNeK->

Programme
 Planning Duration years

Activity Output

The values below represent the projected output from this Activity on Land at The Avenue, Esholt, Shipley.

🏠

Applied Activity Area
4.34 ha

🏠

Floor Area
131k ft²

🏠

Homes
130

🏠

Residents
299

Impact of Activity on Land at The Avenue, Esholt, Shipley

Impact from 2024 to 2064 with discount factors

Impact from 2024 to 2064

Annual Return
 Cumulative Return
 Use Discount Factors

Impact	Physical	Monetised
TOTAL	+	£55.3M
NATURAL	-	-£1.45M
SOCIAL	+	£11.2M
HUMAN	+	£4.85M
INTELLECTUAL	+	£216K
MANUFACTURED	+	£35.9M
FINANCIAL	+	£4.50M

6. Post-Activity Impacts

LANDARNA

 Home
 Portfolio
 Sites
 Land Characteristics
 Suitability Analysis
 Impact

 PH

Home

Portfolio

Sites

Land Characteristics

Suitability Analysis

Impact

Search for Sites

Admin Tools

Sites

18 out of 91 Sites - Filter Sites

Activity Presets

Residential Development
Non-Residential Development
Solar PV
Wildflower Meadow
Woodland Planting
Peatland Restoration

Custom Presets

Bristol Apply
Place based investment Apply
Residential Developer - gt 1 ha Apply

Residential gt 1ha GP Apply
Woodland Carbon Code Apply

Add Filter

Select filter...

Reset Filters

Applied Filters

Save Filters as Preset

Overlaps Agricultural Land Classifications of Grade 3b, Grade 4, Grade 5, Non Agricultural or Urban

Doesn't Overlap Sites of Special Scientific Interest of Conditions FAVOURABLE, UNFAVOURABLE RECOVERING, UNFAVOURABLE NO CHANGE, UNFAVOURABLE DECLINING, PART DESTROYED, DESTROYED, NOT ASSESSED or UNKNOWN

Doesn't Overlap Areas of Outstanding Natural Beauty

Doesn't Overlap Special Protection Areas

Doesn't Overlap Special Areas of Conservation

Doesn't Contain Listed Buildings of Grades I, II or II*

Doesn't Overlap Scheduled Monuments

Overlaps Land Covers of Arable, Improved grassland, Acid grassland or Heather

Select Filtered Sites on Map

Enter text & press enter to filter by Site name...

Name	Ref	Tags	Area	Local Authority	Primary Land Cover	Applied Activi
Land adjoining Ferrybridge Sewage Pumping Station, Kir...	0		0.33 ha	Wakefield	Improved grassland	
Land adjoining Little Lane, Doncaster 2	0		0.03	Not Found	Improved grassland	

Map of 18 Selected Sites

Downloads

Select one or more Sites to enable download options.

Selected Sites List

Selected Site(s) details compiled into a CSV file.

Download Selected Sites List

Energy Certificates

Available energy certificates of specified type will be compiled into a CSV file.

Energy Certificate Type

Domestic Energy Performance Ce...

Download Energy Certificates

Delete Selected Sites



A Beacon of Positive Living

ACCESSIBLE DESIGN
Homes and commercial site designed to be accessible

CONNECTIVITY BY CYCLE & FOOTPATHS
Connectivity provided across the site through the linear park, cycle networks and footpaths

SUSTAINABLE MATERIALS
Materials from the site to be reused and new materials sourced locally where feasible. Waste collection and recycling facilities provided across the site, reducing waste sent to landfill

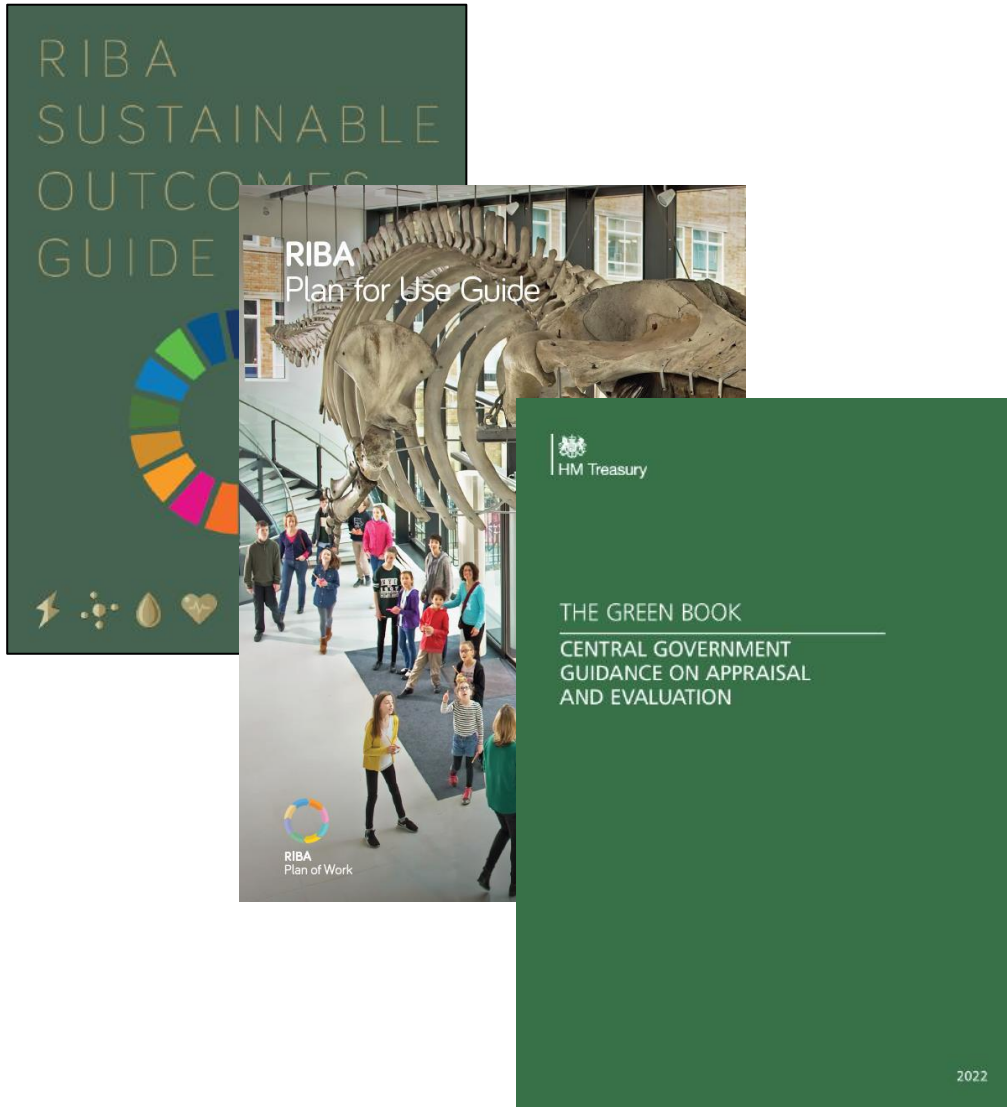
ECONOMIC BENEFIT
New jobs during construction and use providing economic benefit to the local area

CONNECTED DEVELOPMENT
High speed broadband infrastructure increasing digital connectivity

SUSTAINABLE ENERGY
Connection of commercial buildings to low carbon district heating/energy network from the Yorkshire Water facility where viable. Network to make use of waste heat and other innovative technologies

GREEN TRANSPORT
Train connections to Leeds / Bradford 400m from the entrance to the site

Responding to Best Practice Frameworks



Case Study 3: Setting targets from the outset and creating a framework to monitor these



The **Esholt Positive Living** project demonstrates the early use of a framework of sustainability targets that underpin the Project Brief and design proposals.

Please refer to [Plan for Use Stage 1: Preparation and Briefing](#) for more detail on actions that help embed desired project outcomes at project outset.

Esholt: Positive Living

Location: 3
Client: Yorkshire Water and Keyland Developments
Architect: Tate Harmer
Sustainability Consultancy: 3Adapt
Date: Outline Planning 2019

Esholt Positive Living will create a ground-breaking, beacon of sustainable development in West Yorkshire on land that includes disused water treatment works. Keyland Developments, sister company to the site's former owner Yorkshire Water believe that they have a responsibility to put this redundant land to positive use and have proposed a bold new vision for the site; to provide an exemplar model for responsible and sustainable development.

LANDARNA



Current status

We are currently trialing Landarna with progressive organisations to ensure its development meets your needs.



2024

What's next?

Sign-up to the launch of the Landarna Trial and receive a demo.

enquiries@landarna.com.



Want to know more?

Sign-up to the waiting list or get in touch directly to discuss your needs to ensure Landarna is right for you.

<https://landarna.com/>

SARA TELAHOUN

SARA@3ADAPT.COM

07588 451034

DR PHIL HAMPSHIRE

PHIL@3ADAPT.COM

07864 653600



www.3ADAPT.com

3ADAPT
People focused. Data informed.

3ADAPT Ltd is a company registered in England and Wales. Registered number: 10754360.
Registered office: 3ADAPT, F5a, The Foundry, Beehive Yard, Walcot Street, Bath BA1 5BT.

© 3ADAPT LTD. 2024

