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Assessing the financial needs of biodiversity in Ireland and filling the funding gap

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#EUGreenWeek
2021 Partner Event

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Biodiversity Finance in Ireland

A Financial Needs Assessment for Ireland's Biodiversity



Dr Shane Mc Guinness, FRGS

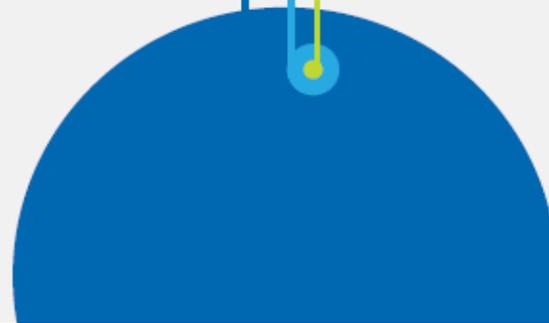
Dr Craig Bullock

School of Architecture, Planning and Environmental Policy, UCD

US\$24 trillion
Conservative Estimate of Economic
Value of Natural Assets

US\$150-440 billion
Estimated Annual Finance Needs

US\$52 billion
Current Annual Global
Biodiversity Funding



CDB Special Session: Resource Mobilisation (17/09/20)
Inaction costs global economy \$500 billion / yr. (0.6% global GDP)

(Global Canopy Programme, 2012, and BIOFIN, 2018)

We need to find a better way of funding biodiversity

Biodiversity finance requires legitimacy

Legitimacy / value



Ownership / responsibility



Protection / action

- Finance historically impenetrable / inaccessible (potentially by design?)
- Biodiversity stakeholders should learn the language (and vice versa)



A Financial Needs Assessment allows us to...

Quantify:

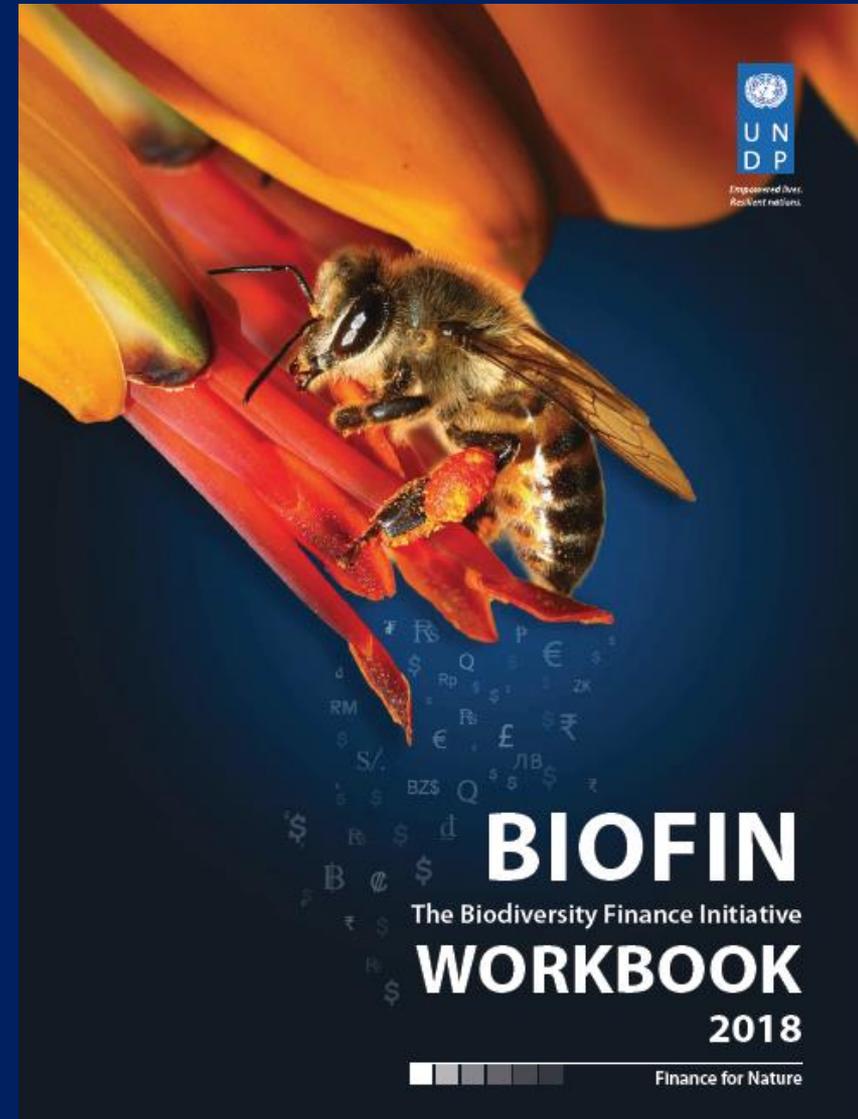
- What we currently spend
- Where this comes from
- Who spends it

Analyse:

- Effectiveness
- Institutional capacity
- Better ways of spending for biodiversity

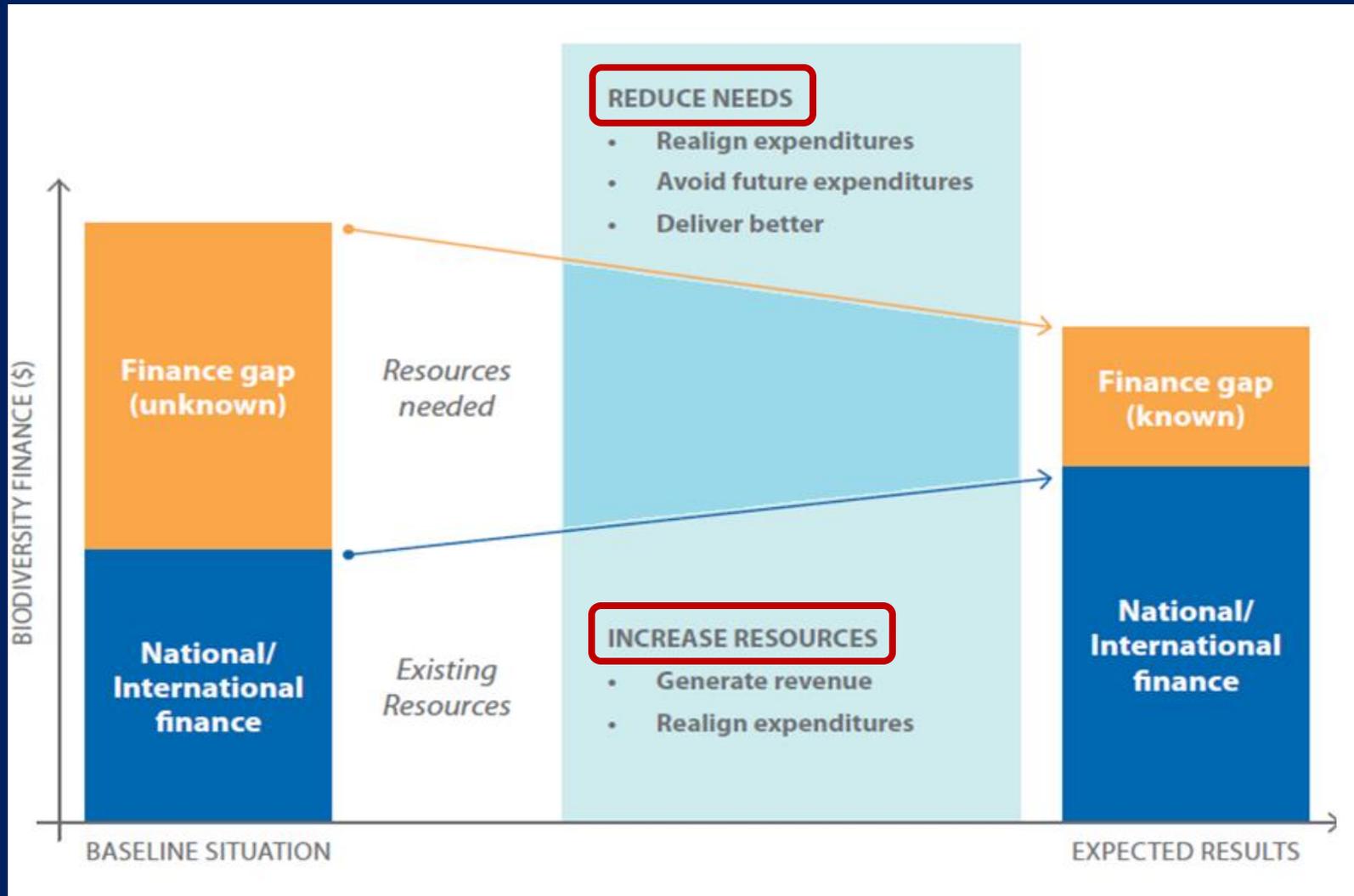
The UNDP BIOFIN model

- Developed across several CBD COPs
- Pushes for bottom-up calculation of financial needs
- Requirement now integrated into national and international targets
- Adopted by >35 nations globally
- Predominantly developing world tool
- Ireland one of first developed nations to do so



The UNDP BIOFIN model

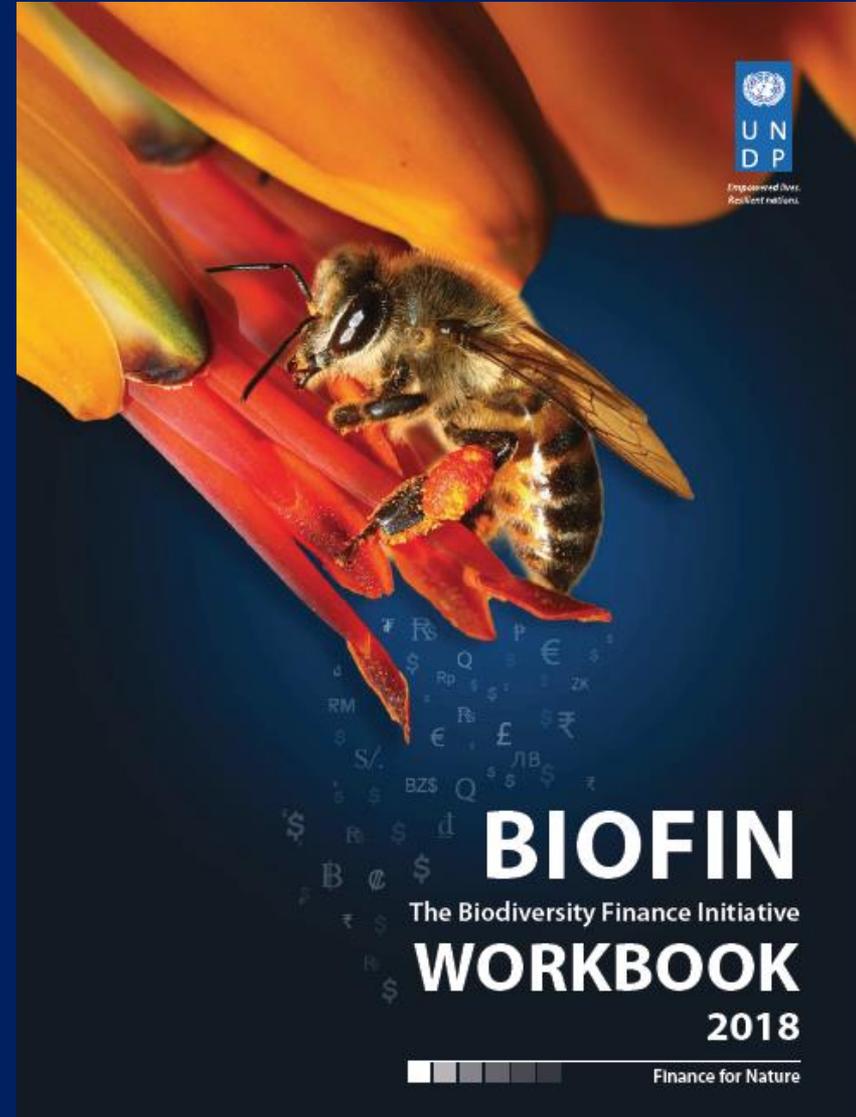
Ultimate goal



The UNDP BIOFIN model

Ireland: Progress to date

1. National Biodiversity Expenditure Review (Delivered Dec. 2018)
2. Policy and Institutional Review (Delivered March 2020)
3. Financial Needs Assessment (Expected May 2021)
4. Resource Mobilisation Strategy (In prep.)

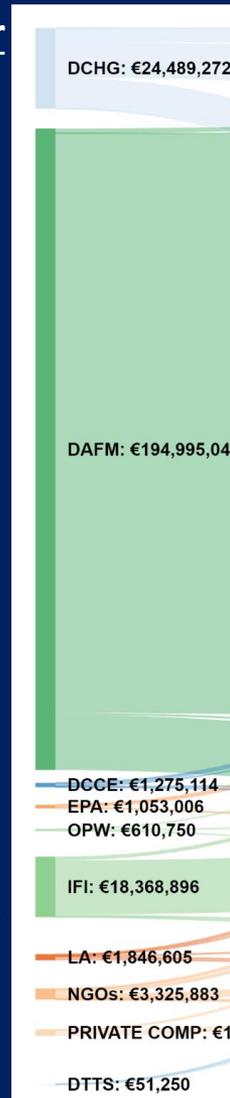


NBER – Results

- On average **€250 million per year (2010-2015)**.
- 0.13% of GDP (Kazakhstan: 0.1%)
- Recommended = 0.3%
- 0.3% of total government spending

Sources of finance

- **97% state-led expenditure**
- 42% of this is sourced from EU (match or direct funding)
- 55% from national and local government
- 80% subsidies, <4% capital investment
- 78% spent by Department of Agriculture, Food and the Marine
- <1% of voluntary sector spend, on average 77% of NGO income from Government grants.



Wider countryside

Protected areas

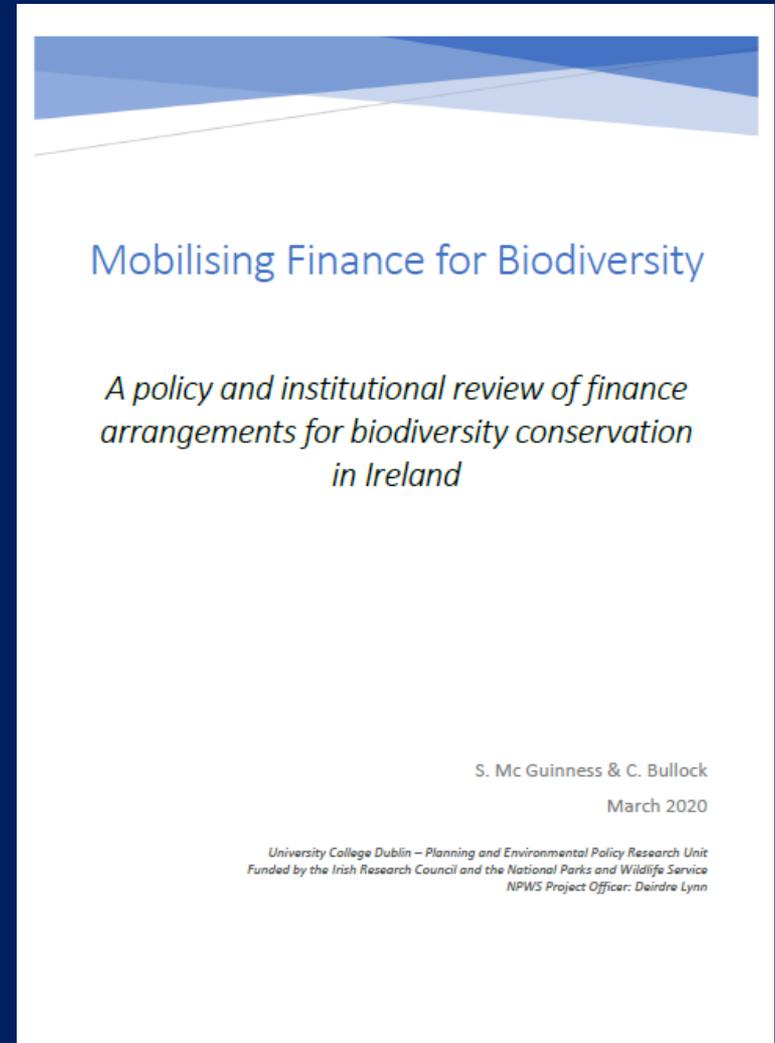
NBER – Limitations

- Exclusion of distorting funds
 - CAP Basic Payment Schemes: Inclusion of 5% of this (c. €850 million/yr) would triple annual expenditure reported in NBER
 - EPA budget in period (€1.5 billion) largely focused on remediation and human health concerns.
 - Wastewater treatment: 5% of this would equal average annual budget of NPWS
 - **All of the above**: protecting the environment for our benefit.
 - Barely *No Net Loss* (NNL), and very far from *Net Gain* (NG)
- Subsequent changes in prioritisation of funding since 2015...
 - Outreach / engagement / education much higher priority
 - Commitment to peatlands through restoration (carbon tax) and compensation (CTCCS)
 - NPWS funding increases: operational review underway

Policy and Institutional Review (PIR) – Approach

Aims

- Identify *drivers* of biodiversity loss
- Collate *legislation, policies* and *plans*
- Review existing *financial mechanisms*
- Identify *harmful subsidies*
- Analyse *capacity* of institutions
- Account for potential *synergies*
- Highlight potential *future sources* of funding



PIR – Findings

Trends, drivers and value

- Continuing decline in species, habitats and env. quality
- Contradictory national strategies / priorities
- Despite this, vast natural capital still provided by native biodiversity
- Increased awareness, but greater political will and public support required

Policies and plans

- Growing suite of EU Directives and time-bound national strategies
- Many fail to meet targets through poor implementation and monitoring
- Resources not dedicated through absence of legitimacy
- Limited cross-sectoral cooperation in composition and enforcement
- Operate in isolation – Limited cross-compliance

PIR – Findings

Institutions and capacities

- Sectoral priorities do not effectively couple biodiversity and climate change
- Mainstreaming not well advanced
- Failure of State to meet many minimum EU requirements
- Public institutions involved in conservation are *chronically* underfunded

Financing biodiversity

- Biodiversity loss should be a requisite consideration in sectoral finance plans
- Should be conceptually reframed as binding investment in future cost-savings, as opposed to optional expenditure if budgets allow
- Greater extension to private sector sources and cooperation
- Need to acknowledge that *capacity* can lead to *funding*

Financial Needs Assessment (FNA)

- Combines:
 - Financial results of the NBER
 - Policy and institutional analysis of PIR
- Key stages:
 - Ascertain the 'costability' of NBAP actions
 - Prioritise those most important for biodiversity
 - Engage with stakeholders to obtain bottom-up projected costs



FNA – Limitations

- Variation in spending and costing methods
 - Incremental / Activity-based / Results-based, etc.
- Term length
 - MFF vs. NBAP vs. schemes vs. international targets
- Stakeholder cooperation/contributions
 - Varied, with overlaps in spending, remits and plans
- Comparison with NBER?
 - Should not be made directly
- No 'blank slate' like less-developed examples
- COVID-19



FNA – Methodology

- Prioritisation of NBAP actions (n = 119) through multi-criteria analysis
 - 60 priority actions
- Existing priority spending of key programmes tagged to NBAP targets, SDGs, EU Biod. Strategy, SEEA
- Future priorities and spending estimated through consultation
- Main barriers to priorities assessed
- Sectoral narratives built
- Recommendations made on future sources of funding to meet financial needs



FNA – Preliminary findings

- **Quantitative:**

- Nearing completion: Some key sectors remain

- **Qualitative:**

- Cooperation in effort, remit and funding presents best efficiency
- Funding not always the issue: staff/capacity is the key in many sectors
- Broad brush vs. targeted initiatives. Funding skewed to the former
- “Cost of compliance” and corporate risk (transitional and reputational)
- Several sectoral narratives composed



Final deliverables

- FNA report, including:
 - 'Catalogue of Financial Mechanisms'
 - Overall national recommendations
 - Sector-specific recommendations
- *Resource Mobilisation Strategy* - Summer 2021



Peatland Finance Ireland



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage



**LANDSCAPE
FINANCE LAB**

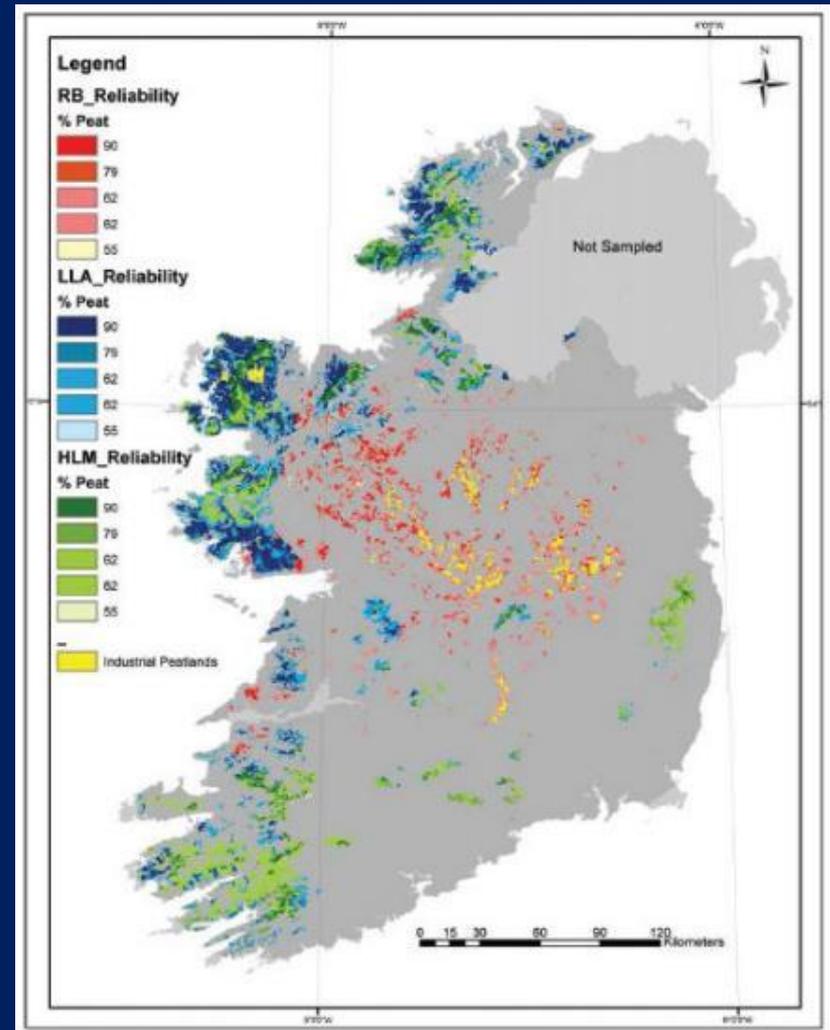


Community
Wetlands
Forum

This assignment is financed under the Natural Capital Financing Facility (NCFF) which is a financial instrument blending EIB funding with European Commission (EC) financing funded by the Programme for the Environment and Climate Action (LIFE programme)

Extent and condition

- Peat soils cover 20% of Ireland's land surface
- Varied degradation and visibility
- 30% of this drained, forested, mined or converted
- Only a fraction is protected:
 - e.g. SAC network captures just 22,107ha of raised bog (~8%)
 - 23% of Ireland's peat soil is now under conifer plantations
- Ireland still a haven for peatlands though!



Ownership

- Bord na Móna (semi-state peat): 80,000 ha
- Coillte (semi-state forestry): 232,500 ha
- National Parks and Wildlife Service: 105,000 ha
- Mosaic of private ownership and commonage: > 200,000



Community



130 ha

Industry



250 ha

Ecosystem services

Carbon

- Peatlands store significantly more carbon than all the world's forests: **Continual sequestration for thousands of years....**
- Fully functioning raised bog: $50 \text{ g /m}^2 \text{ /yr} = 500\text{kg /ha /yr}$
- Currently emitting 3 MT carbon annually
- If restored, could sequester 6-10 MT carbon annually

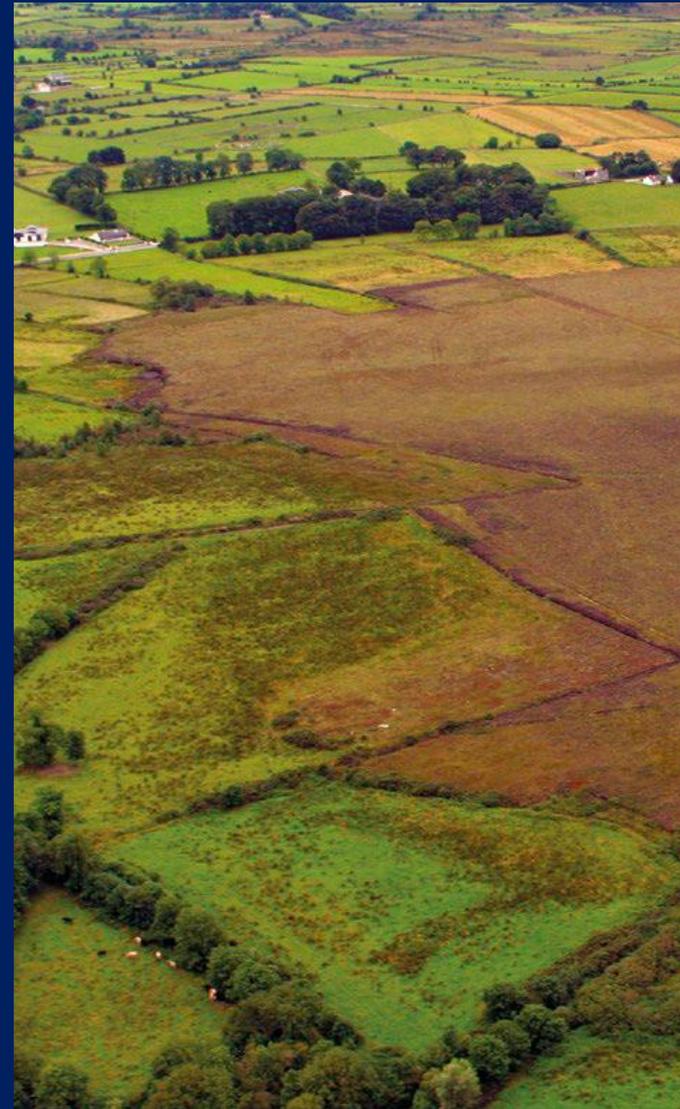
Water

- Water quality (filtration, sediment load, nutrients)
- Flood attenuation
- Soil stability

Culture and amenity

- Increasing prominence

Paludiculture?



Current investment

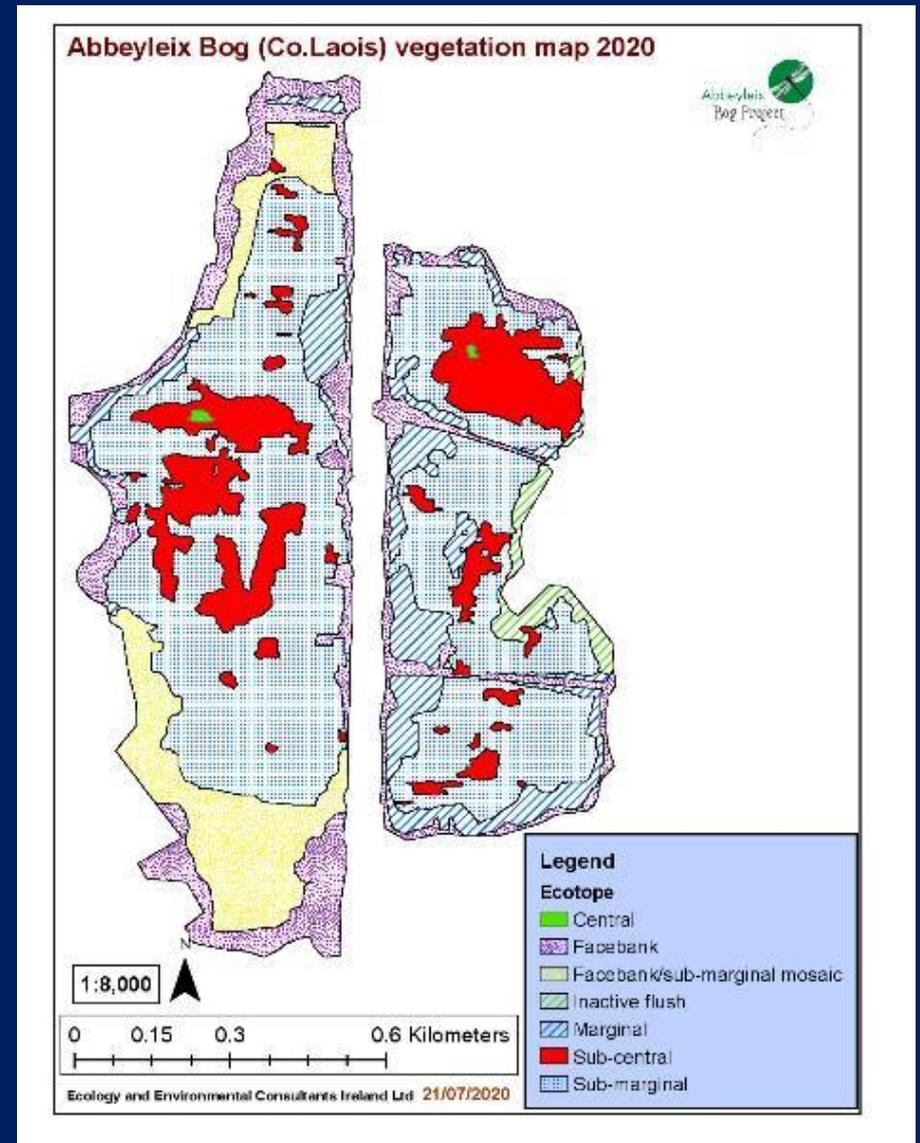
- Current spending: c. €29 million / yr
 - 96% government spending (incl. carbon tax revenue)
- Restoring and rehabilitating all of Ireland's peatlands: >> €1 billion
 - Significant shortfall
- But worth it...
 - e.g. 5 MT @ €50 / T
= **€ 250,000,000 / yr**
on carbon credits alone...



Future options

- Engage at community level
- Demonstrate economic value
- Incubate innovation
 - Carbon farming
 - Paludiculture
 - Ecotourism
 - Water services
- Eventually offer an 'ES bundle' to investors
- Carbon, water, biodiversity, amenity, employment

Community-based Natural
Resource Management (CBNRM)



The timing is right

- Climate and biodiversity awareness
(and interlinkage of the two)
- Advanced scientific understanding now held
- Economic tools emerging (e.g. Peatland Code)
- Political change in Ireland
- High realisation of value of natural systems (ES, natural capital, Dasgupta report, etc.)
- Corporate interest in offsetting transitional and reputational risk

Global Investor Pools

\$91T

Private Sector Debt

\$76T

Global Equity Market

\$42T

Global Public Debt

\$6.6T Sovereign Wealth Funds

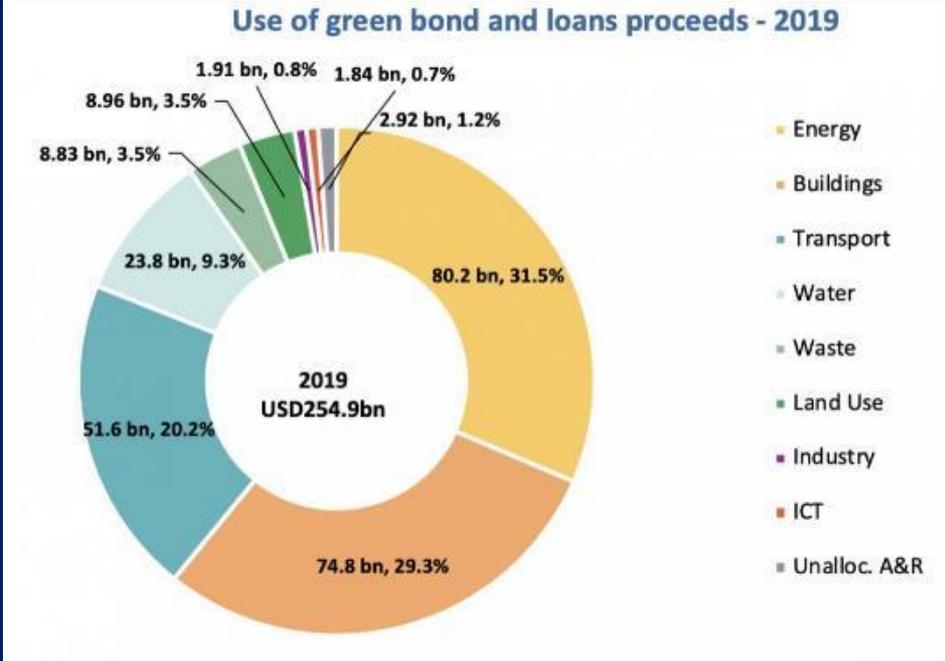
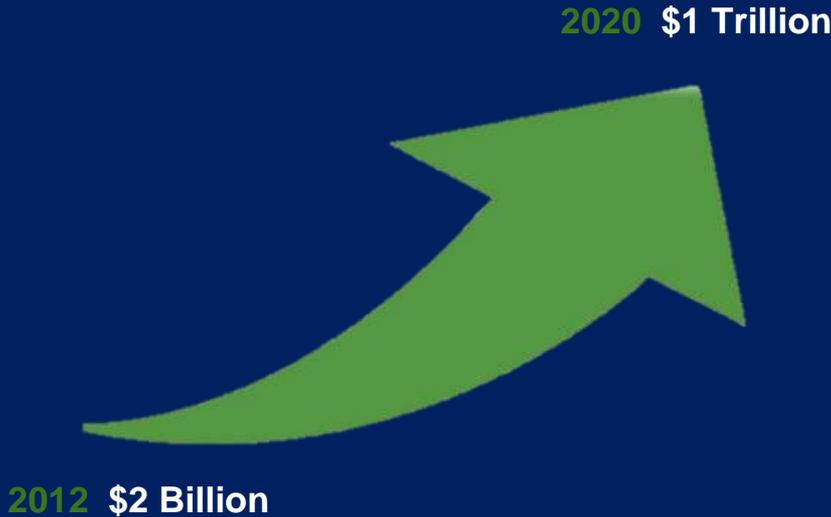
\$4.2T Private Capital

< \$1T
US Foundation Philanthropy

Global ODA
< \$0,2T

Most peatland protection operates here

e.g. Green Bonds

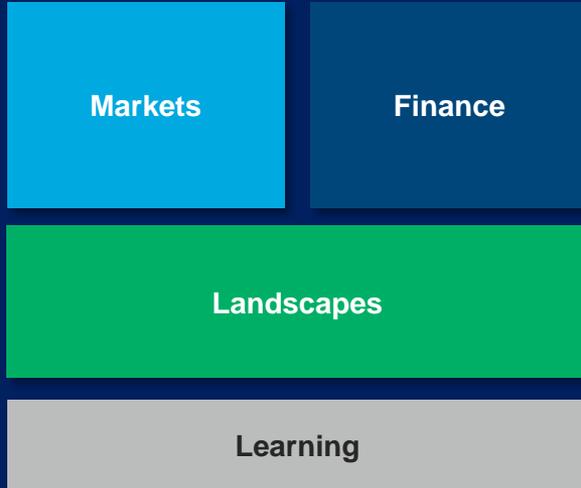


Source Climate Bonds Initiative

The Landscape approach



Purpose To harness blended finance at scale for sustainable landscapes and landscape sourcing solutions.



Thank you Questions?



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An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage



IRISH RESEARCH COUNCIL
An Chomhairle um Thaighde in Éirinn





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Thank you!

Questions welcome



Project smedia