Integrating and benefits of trees on the farm



Tom Houlihan, Teagasc Forestry Specialist



Teagasc Forestry Research

Tree improvement programmes



Broadleaf silviculture



Fit Forests Project

- Key species in Irish forestry
- Best provenances and seed origins adapted for future Irish climatic conditions

Breeding for disease tolerance





AdaptforRes

New research to improve adaptation, mitigation and protection measures in Irish forests to strengthen resilience



Teagasc Forestry Research

Forest thinning/potential of other species







PW-IPM: Towards Integrated Pest Management for Pine Weevil in Ireland



Teagasc Forestry Advisory

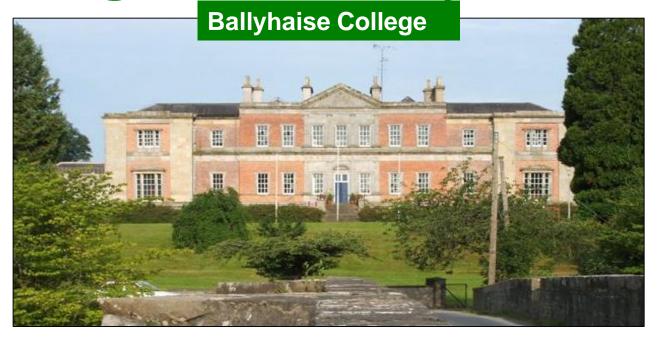








Teagasc Forestry Training















23,500 private owners 81% farmers, 389,000 ha



Thousands of jobs mainly in rural areas









Ireland's forests and Forestry Programme supporting...



780,000 + ha Over 11% of land area

Wood and wood based product exports €446 million



Ecosystem services



GPC 3: Mainly spruce & 15% other species €510 - 520/ha/yr (15 years)



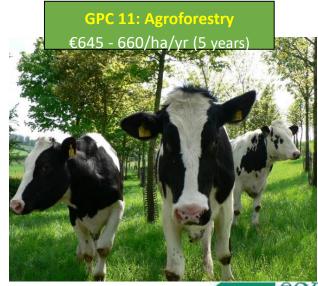
GPC 4: Scots pine €590 - €600/ha/yr (15 years)



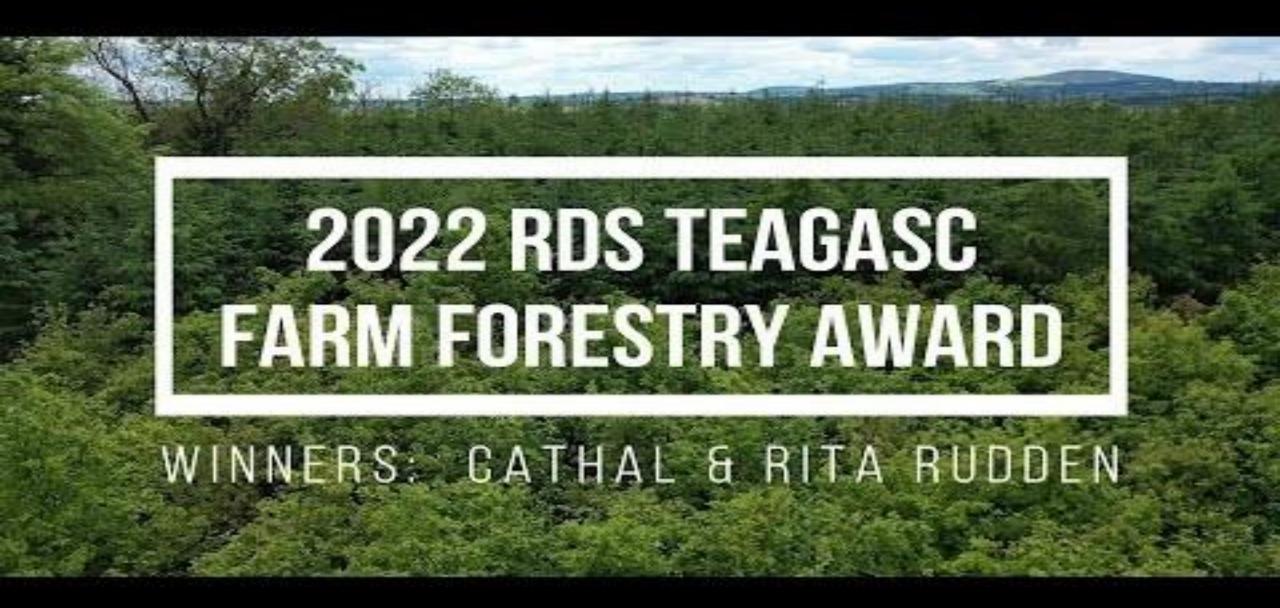




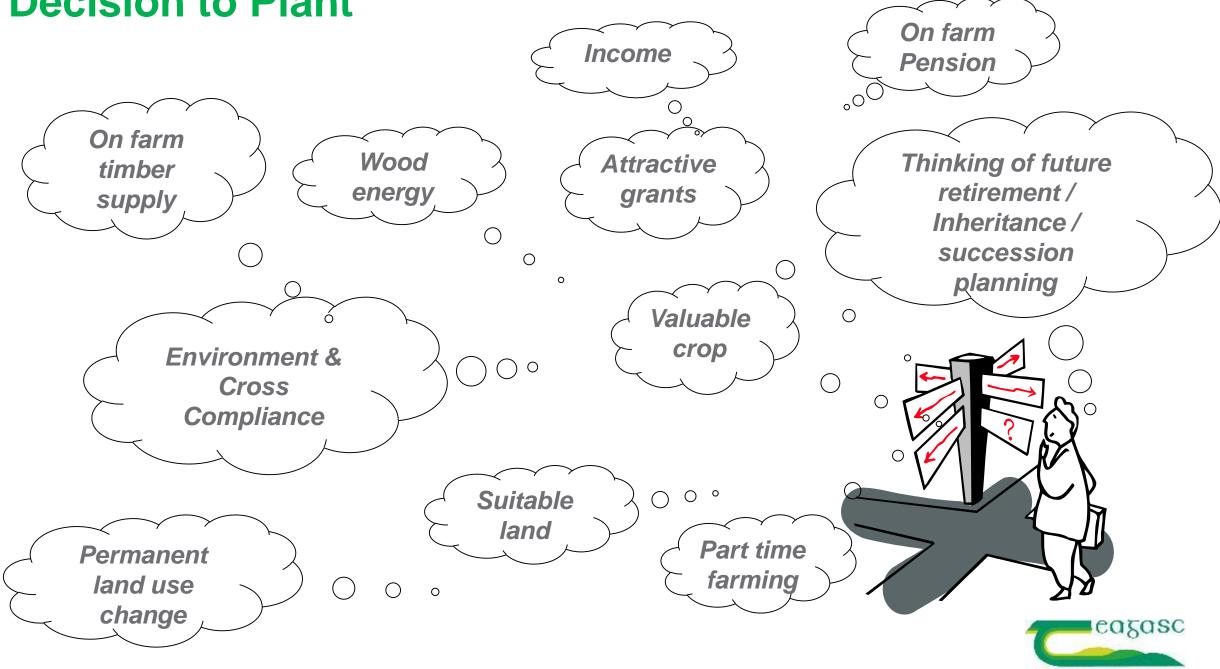








Decision to Plant



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New Forestry Programme 2023-2027

- Currently being developed
 - Will be fully aligned with and supporting new Forestry Strategy
 - More details in the coming weeks
- Bilateral meetings (commenced) / stakeholder workshops
- Strategic Environmental Assessment consultation on Forestry Strategy and Programme to the wider public
- State aid approval from EU Commission
- Due to be launched in Jan 2023 with rollout of remaining schemes during 2023



Attitudes to Afforestation in Ireland – survey March 2022

Most important benefits:

- Addressing climate change (25%)
- Enhanced air quality (15%)
- Contribute to wildlife and biodiversity (14%)
- Support mental health (14%)



- 88% of those surveyed considered forests and woodland to be of benefit to communities
- 72% favoured planting broadleaf and conifer trees in new forests
 - Mainly broadleaves (17%), Mainly conifers (11%)
- Three out of four people in favour of planting more forests, as well as more trees in urban area
- 58% of people have visited a forest in the past year



Sequestration Pathways

1. C - Sequestration in growing forest -pools



2. C - Storage in harvested wood products - HWP

3. Substitution of fossil fuels with wood energy





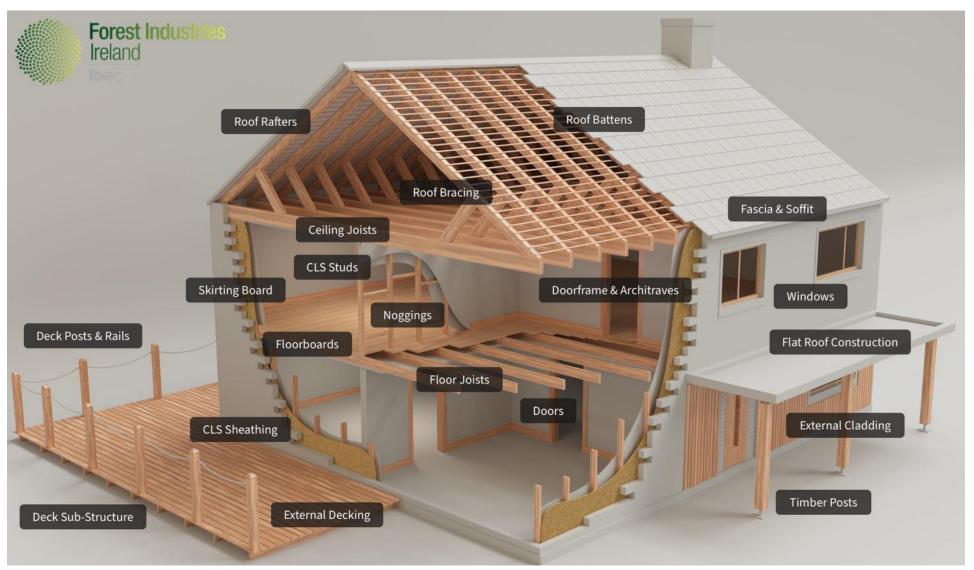






Source: www.moelvin.com

Wood - Multiple Applications

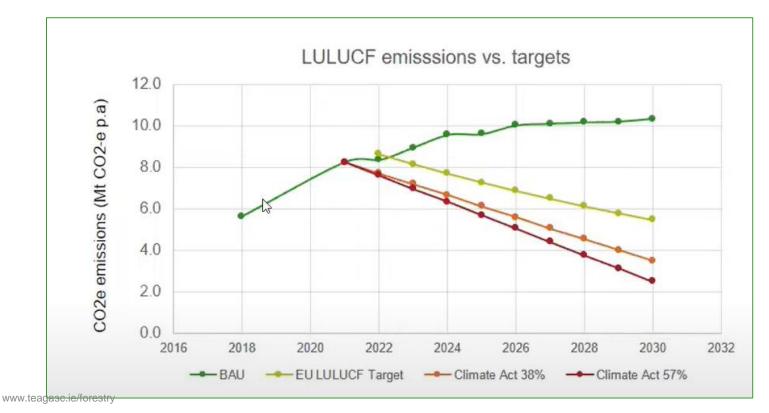


Source: Forest Industries Ireland



Land use, land use change and forestry (LULUCF)

- Separate to agriculture sector will have its own target
- Forestry sequestration decreasing
- Challenge to enable additional forest creation and sustainable forest management among other measures
- Very important post 2030 also







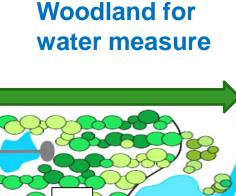
Woodland for Water

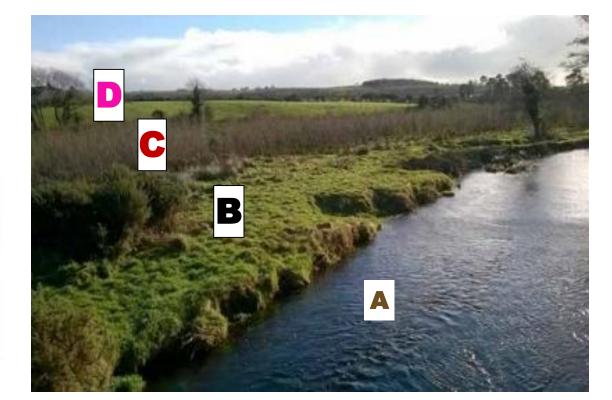
Capacity for water protection and enhancement by combining undisturbed water setbacks and new native woodland

Adjoining land use:

- Agriculture
- Forestry
- Built environment









Pathway

Receptor

Source: DAFM 2018



Small scale native woodland planting

- Enabling legislation for small woodland creation
 - Exempting requirement for afforestation licence (0.1 1.0 ha) in certain circumstances
- Objective to increase native tree planting
- DAFM will develop a scheme which will allow the planting of up to 1 ha of native trees, when planted as part of an approved DAFM scheme
- The 1 ha scheme will allow the planting of riparian woodlands and it will be in addition to a new riparian initiative



Title: Increasing tree cover on Irish dairy and drystock farms: Main barriers and perceptions that impede agroforestry uptake

 Author and co-authors: <u>Rachel Irwin</u>, Aine Ni Dhubhain, Ian Short, Mohammad MohammadRezeai

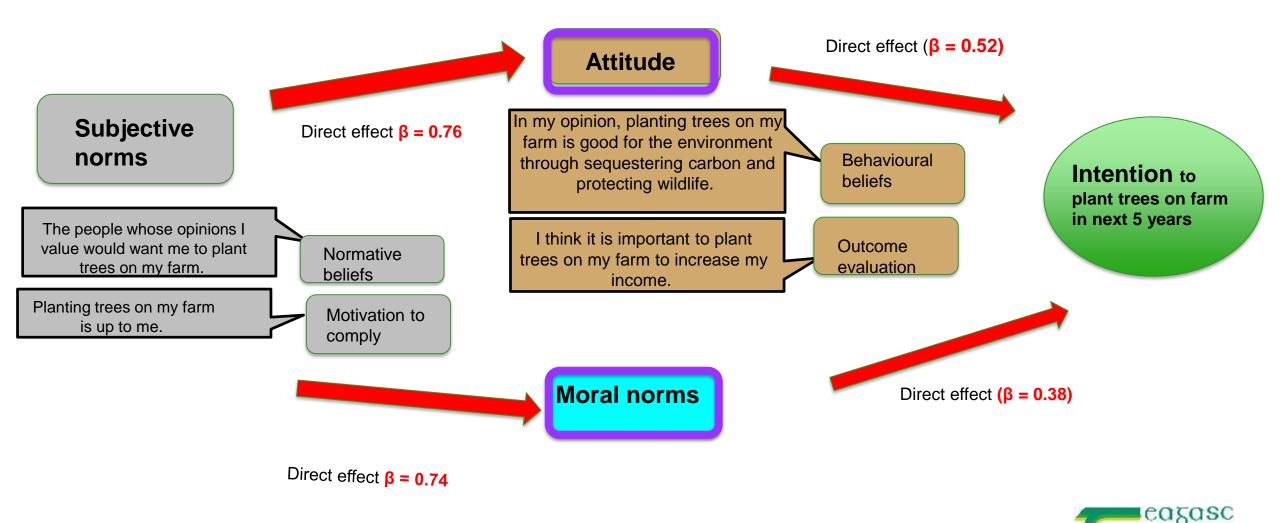








Intention to plant trees



18 www.teagasc.ie/forestry

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Results to Date



Subjective Norms - Influential People (Likert scale)

- 1. Family -> 79% (n = 314)
- 2. Teagasc -> 68% (n = 268)
- 3. Other farmers -> 59% (n = 234)

Table 1: Influential person or organisations scored 5 and above.

Influential person or organisation	Frequency (n)	Percentage (%)
Family	314	79
Teagasc	268	68
Other farmers	234	59
Close friends	212	54
Policy makers	160	41
Forestry company	158	40
Newspaper articles	116	29
Neighbours	104	26
Vet	55	14
Social media	53	13

Note: Participants could select one or more options.









Results to Date

Intentions – Locations of trees (Likert scale)

- 1. Along field boundaries \rightarrow 71% (n = 281)
- 2. On marginal land -> 39% (n = 156)
- 3. Along watercourses \rightarrow 27% (n = 107)

Table 2: Intention to plant trees

Intention to plant trees	Frequency (n)	Percentage (%)
Along field boundaries	281	71
On marginal land	156	39
Along watercourses	107	27
In a block plantation	86	22
Scattered in pasture	83	21
Around houses or sheds	77	19
No intention to plant trees on my farm in the next five years	42	11

Notes: Participants could select one or more options.





CAP Strategic Plan

Pillar 1

Eco schemes

Pillar II

 AGRI-Climate Rural Environment Scheme or ACRES

Please note: All agricultural practices outlined in the following slides are proposed and <u>subject to</u> <u>agreement with the EU Commission</u>



Eco-Scheme

- Funded under Pillar 1
 - Incorporates proposed agricultural practices for climate, environment, water quality and biodiversity
 - Farmer to deliver two practices to qualify for payment
 - Agricultural practices are subject to agreement with the EU Commission
 - Annual payment per eligible hectare



Eco-Scheme: tree-related options

1. Space for Nature

- Proposed for forests to contribute towards eligibility
- Under current negotiation



Eco-Scheme: tree-related options

- 4. Planting of Native Trees/Hedgerows
- A proposed minimum planting rate of 3 native trees or I metre of hedgerow per hectare per annum
- Proposed enhanced Option (counts as 2 action)
 - 6 native trees/ha OR
 - 2 metres of hedgerow/ha OR
 - 3 native trees AND 1 metre of hedgerow per ha



New Agri-Environment Scheme - ACRES

- General measure Tiered structure, 3 Tiers
- To qualify for Tier 1, the applicant must commit to completing appropriate mandatory actions relevant to Priority Environmental Assets on their holding:
 - Private Natura
 - Commonage
 - Geese and Swans mapped area
 - Breeding Wader mapped areas
 - Catchments identified as having high status water actions appropriate to local needs
 - Conservation of Rare Breeds



Tier 2

- Farmers who lands include a Vulnerable Water Area may apply for scheme access under Tier 2
- Applicants may also be considered under Tier 2 if s/he is a participant in the Native Woodland Scheme or GPC 11 – Agroforestry (at time of application)
- Or if s/he adopts at least one of the proposed tree planting actions i.e.
 - Planting Trees in Rows, Groups or Parkland
 - Planting Trees in Riparian Buffers
 - Tree Belt for Ammonia Capture at farmyard





Tier 3: Tree-related actions

Wide range of proposed actions to address climate change, water quality and biodiversity benefits in addition to any mandatory Tier 1 or Tier 2 actions:

Planting Trees – in Rows, Groups, or Parkland

• create new habitats to improve on-farm biodiversity.

Planting Trees in Riparian Buffers

• will create new habitats to support biodiversity / water quality

Tree Belt for Ammonia Capture at farmyard

• create new non-productive features to improve air quality as well as on-farm biodiversity

Traditional orchard

 to Increase biodiversity and provide a habitat for wildlife on the farm. To ensure the survival of old fruit varieties and to enhance the visual and historical value of the landscape



2022/23 RDS Forestry and Woodland Awards

Now open for entry ... up to July 31, 2022

- 3 categories
 - Teagasc-sponsored Farm forestry award
 - Production forestry
 - Community woodlands
- Prizes for <u>each category</u>
 - Winner €2000, RDS Silver Medal and perpetual trophy
 - **Runner up** €1000 and special Certificate of Merit
- Application forms
 - <u>www.rds.ie/agriculture/forestry</u>
 - via email from <u>forestry@rds.ie</u>
 - Information also available from Teagasc website: <u>www.teagasc.ie/forestry</u>







An Roinn Taimhaíochta, Bia agus Mara Department of Agriculture, Food and the Marine

For all your forestry advice and training needs Contact your local Teagasc Forestry Development Officer:

Comprehensive Advisory Supports



Keeping in touch!

















