Policy options and strategies for renewed plantation development

FWPA Webinar

19 June 2013

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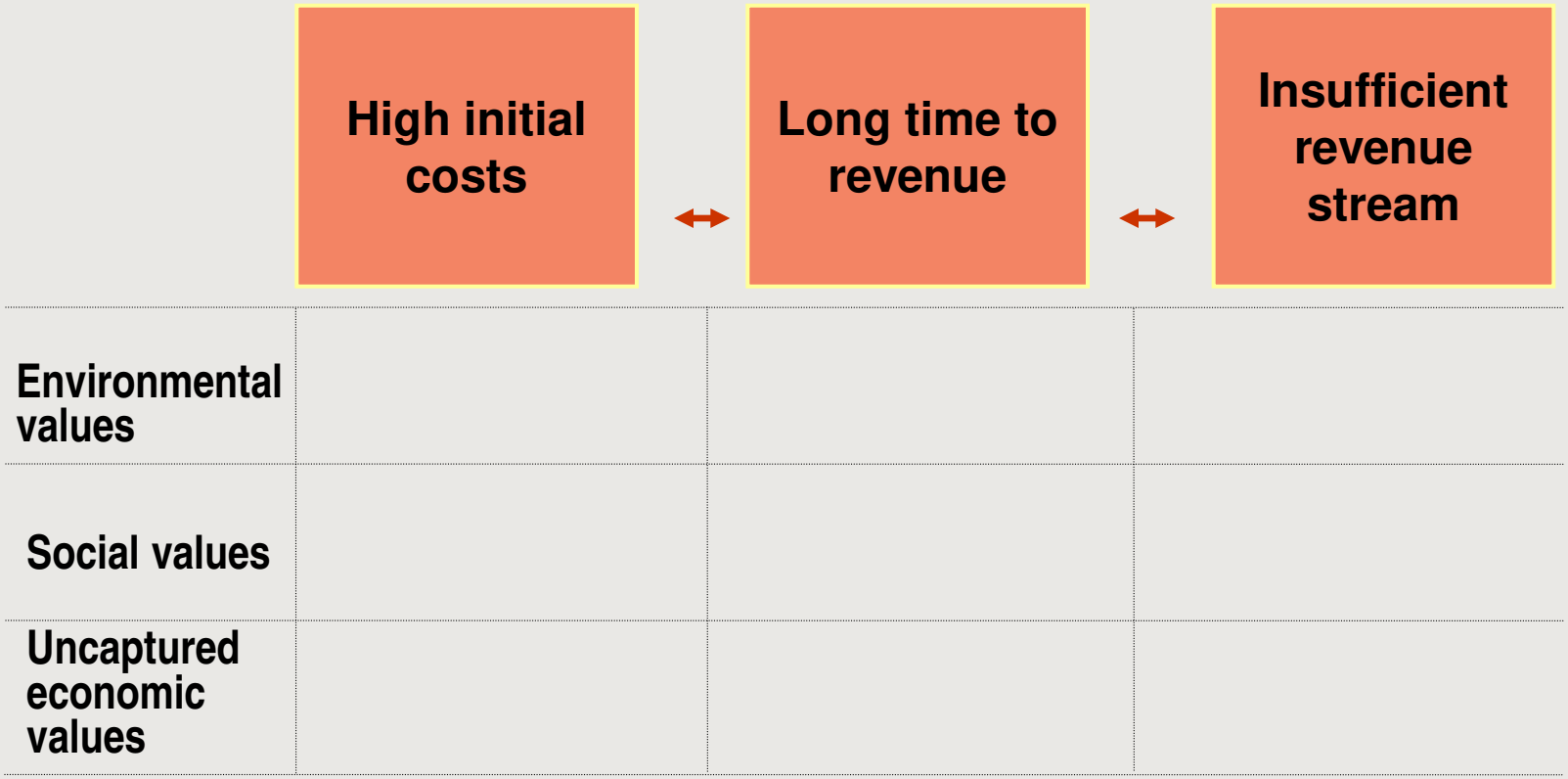
For FWPA

Outline

- An image
- The problem
- Phase 1 report: values worth considering?
- Phase 2 report: policies worth implementing?

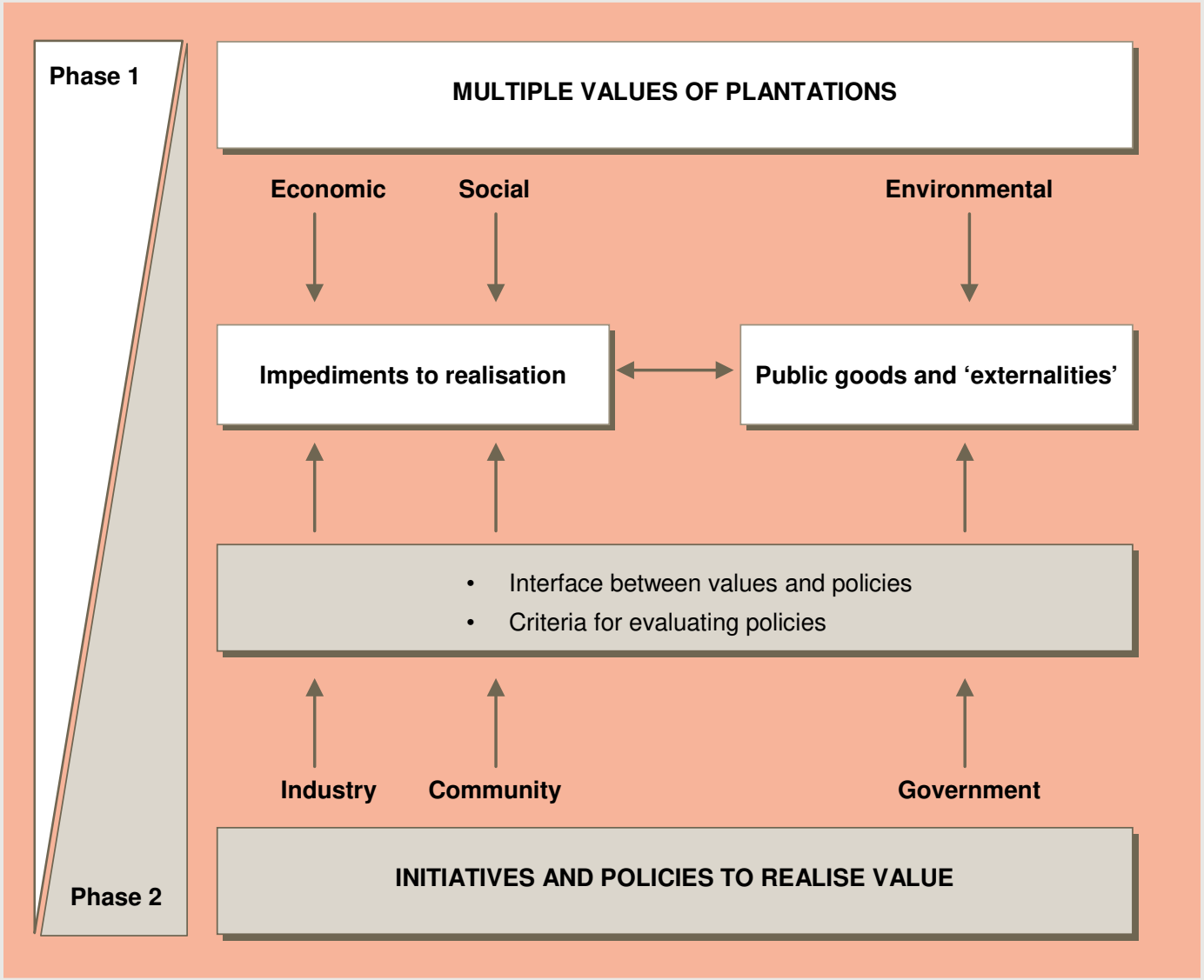
An image

The problem

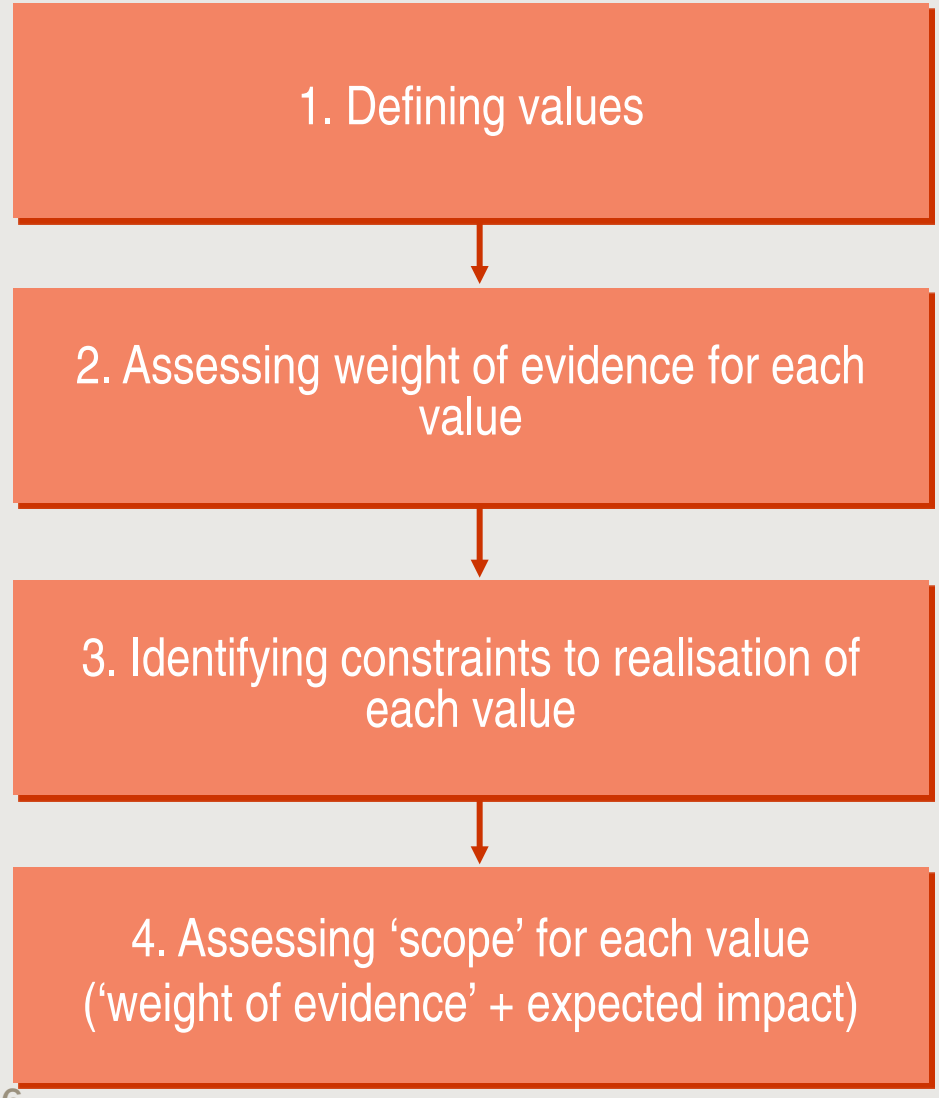


There is no silver bullet

Two phases


Phase 1
MULTIPLE VALUES OF PLANTATIONS
Economic
Social
Environmental
Impediments to realisation
Public goods and 'externalities'
• Interface between values and policies
• Criteria for evaluating policies
Industry
Community
Government
INITIATIVES AND POLICIES TO REALISE VALUE
Phase 2

Values worth considering?



- Identify public good or market failure
- Target
- Instrument
- Benefits > Costs?
- If no, go back to start

Thinking about values where…

- A policy intervention solves a coordination failure…
- Eg. Pubic good or externality (market failure)
- Not making a case for ‘ungrounded’ subsidies…
- …it’s true that this is ‘unfair’…
- …although not that unfair:
  - Forestry and Wood products gets subsidies of 10c per $ value added
  - Forestry alone is 11c per $ value added
  - Motor Vehicles gets 12c per $ value added

Values	Evidence of value	Constraints to realisation of value	Scope
1. Carbon sequestered in trees	Strong	Domestic market non-existent, carbon legislation prevents recognition of values - political rather than scientific constraints	√√√
2. Carbon sequestered in wood and soil	Strong	Excluded from international framework	√√
3. Low carbon emissions intensity relative to alternative land uses	Strong	Emissions from major alternative land use (agriculture) excluded from policy framework	√
4. Salinity mitigation including water quality improvements	Strong	Highly fragmented exchanges, non-existent markets Opportunities are in low and medium rainfall areas, which are less commercially viable than higher rainfall areas Demand from CMAs in medium rainfall area less consistent, coordination difficulties for industry Significant R&D challenges in low rainfall area	√√
5. Biodiversity from commercial plantations	Mixed	Lack of consensus in scientific literature of biodiversity value	√
5a) General biodiversity value compared to alternative land uses	Mixed	Some consensus that biodiversity values better than agricultural land uses, but community preferences for expenditure on protection of more mature natural assets	√
5b) Biodiversity corridors and landscape-scale networks or other specific biodiversity management strategies	Some evidence	Valuation techniques still developing. R&D required on role of plantations in broader landscape	√
6. Public benefits from farm forestry (salinity mitigation, biodiversity)	Some evidence	Landholder reluctance to plant trees due to commercial reasons, alternative competing uses for trees involving alternate or limited management of trees, resistance to grant rights to harvest to companies, fragmented and small resource pockets	√√
7. Environmental benefits from trees in Streamside Management Zones (SMZs) (water quality improvements, aquatic and biodiversity benefits)	Strong	Regulations may be unnecessarily prescriptive or impose excessive constraints on harvesting in SMZ due to low risks shown in research from harvesting in riparian areas	√
8. Future productive capacity and biodiversity in private native forests (avoidance of degradation to private native forests)	Evidence of forest degradation. Linkages with biodiversity values less well defined.	Regulations contain uncertainty around future rights to harvest, depending on jurisdiction (greater security in QLD and Tasmania) Incentive framework does not reward sustainable forest management and biodiversity	√√
9. Bioenergy as a low emissions alternative to other energy sources	Strong	R&D needed to improve commercial viability, insufficient market signals plus cheap access to fossil fuels, established markets on a knife edge in terms of viability, significant challenge to secure the necessary resource to ensure viability due to cost of transporting the resource, bioenergy markets cannot compete with woodchip for export markets	√√√
10. Second generation biofuels as an alternative, less energy intensive fuel to first generation biofuels and reduce GHG emissions relative to liquid fossil fuels	Strong		√√√

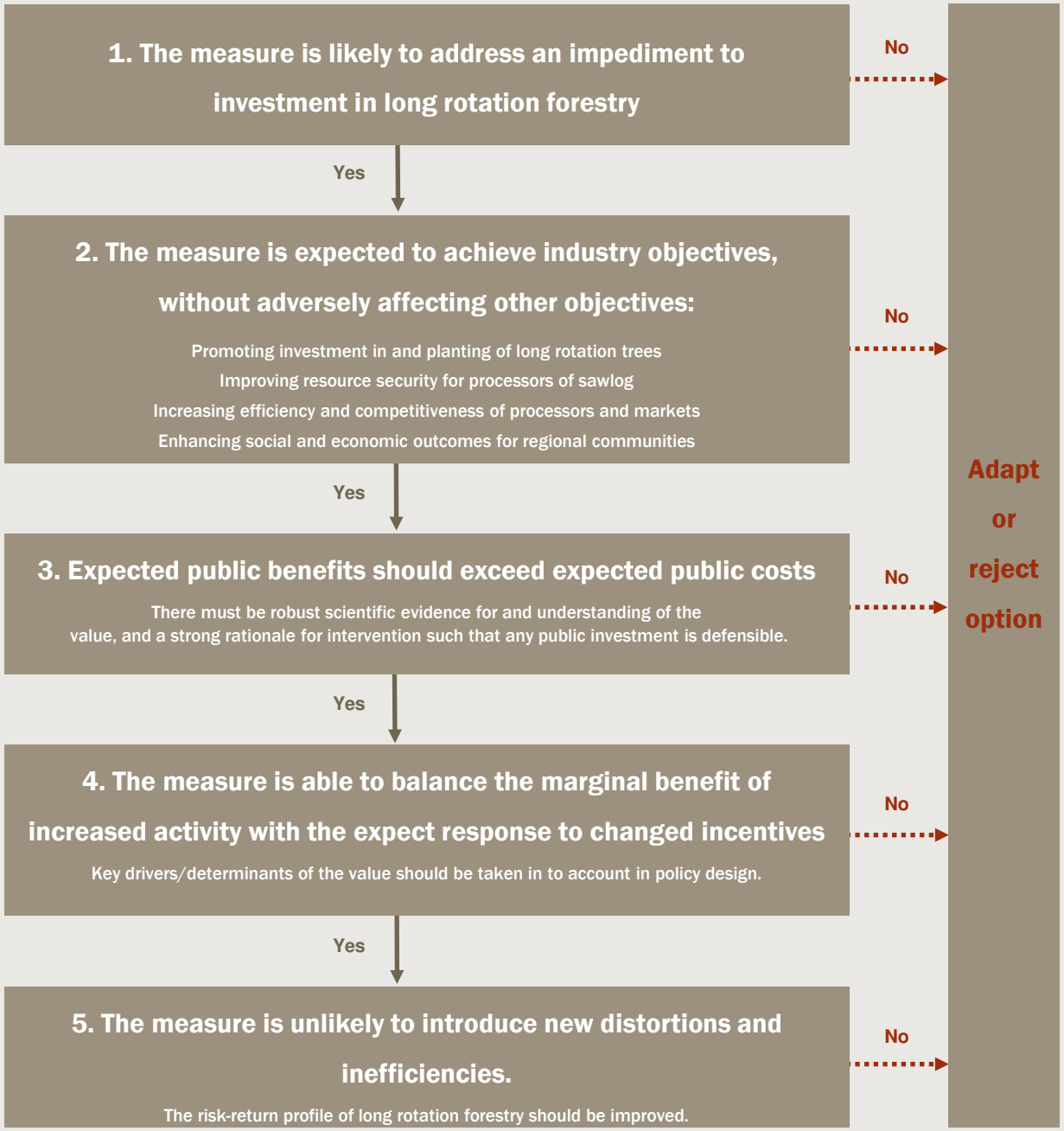
Values	Evidence of value	Constraints to realisation of value	Scope
11. Biochar (soil productivity and carbon storage benefits)	Uncertain	R&D barriers still high, limited data for model verification purposes, too many unknowns to develop GHG accounting methodology, pyrolysis plant used to produce biochar only viable if other products are developed	√√
12. Removal of market and pricing distortions (impact on risk, pricing, transparency, market access)	Significant documentation of issue, but extent of impact difficult to assess	State forestry agencies need further reform to improve price transparency and promote competitiveness and transparency Industry solutions required to broaden and deepen markets, particularly in low rainfall areas and for low value product	√√
13. High value markets	Some evidence	No significant resource base or processing capability for high quality hardwood plantation resource R&D required for tree and wood quality improvement	√√
14. Taxation	Evidence that taxation rates overseas have played a significant role in investment level and structure	Hidden taxation and superannuation barriers: taxation discriminates against long term savings — not all investors can access superannuation, superannuation funds do not typically invest in Greenfields (alignment issue between tax structure and investor needs), small holders and private individuals not always in a position to deduct income up front, lumpy returns impose higher tax rates than other more steady income	√√
15. Improved risk-return profile of investment in forestry and reduce reliance on native forest harvesting	Evidence that these factors affect social values	Return is insufficient to attract individuals and communities to grow long rotation trees and perception of volatility reduces attractiveness High R&D hurdles to replace native forest harvesting with plantations for high quality appearance grade timber. Significant appeal among community	√√
16. Socio-economic benefits from forestry compared to alternative land uses	Weak	Agriculture is significantly more socially acceptable than plantations. Higher employment multipliers only represent a case-by-case and politically determined 'value' in near-full employment economy Social perceptions are a barrier — generally forestry is not recognised as environmentally positive in cleared rural landscapes	√
17. Benefits from reducing negative perceptions: more conducive policy environment	Strong		√√

Key values

- Carbon
- Bioenergy/biofuels
- Salinity
- Selected elements of biodiversity
- Uncaptured economics (related to tax)

	Evidence of value		
	Strong	**Some evidence**	**Limited/uncertain**
Problem amenable to a general market solution	Carbon stored in trees and wood products Bioenergy/biofuels	Carbon stored in soil High value markets	Biochar Removal of pricing distortions in domestic market
Problem not (currently) able to be generalised	Salinity Farm forestry Sustainable management of private native forests Price transparency for smallholders Conservation values for semi-natural and natural forests	Biodiversity corridors and landscape-scale networks	Generalised biodiversity value Rural development (social) value

Policy options


1. The measure is likely to address an impediment to investment in long rotation forestry
No
Yes
2. The measure is expected to achieve industry objectives, without adversely affecting other objectives:
Promoting investment in and planting of long rotation trees
Improving resource security for processors of sawlog
Increasing efficiency and competitiveness of processors and markets
Enhancing social and economic outcomes for regional communities
No
Yes
3. Expected public benefits should exceed expected public costs
There must be robust scientific evidence for and understanding of the value, and a strong rationale for intervention such that any public investment is defensible.
No
Yes
4. The measure is able to balance the marginal benefit of increased activity with the expect response to changed incentives
Key drivers/determinants of the value should be taken in to account in policy design.
No
Yes
5. The measure is unlikely to introduce new distortions and inefficiencies.
The risk-return profile of long rotation forestry should be improved.
No
Adapt or reject option

Option	Instrument	Scoring against criteria				
		1 (Removes an impediment)	2 (Meets objectives)	3 (Public net benefit)	4 (Adequate policy design)	5 (No new distortions)
1	Carbon offset mechanism	√√	√√	√√	√√	√√
2	Upfront grants for carbon sequestration	√√	√√	√*	√*	√
3	Adoption of carbon accounting for wood products	√√	√√	√√	√√	√√
4	Policy review to incorporate transport fuels in to the Carbon Tax	√√	√	√√	√√	√√
5	National blueprint for bioenergy and second generation fuels					
6A+6B+6C	Salinity mitigation research phase, project funding and ongoing R&D	√√	√√	√√*	√√	√√
7A	Revolving debt facility for mixed environmental benefits excluding carbon sequestration	√	√√*	X	X	X
7B	Grant for mixed environmental benefits excluding carbon sequestration	√	√	√*	√*	√
8A+8B	Review to establish appropriate rate of grant, plus direct incentives for the public benefits from farm forestry and native vegetation improvement	√√	√√*	√√*	√√*	√√
8A+8C	Review to establish appropriate rate of tax deductibility, introduction of tax deductibility for the public benefits from farm forestry and native vegetation improvement	√√	√√*	√√*	√√*	√√
9	Taxation reform to promote neutrality for landholders	√√	√√√	√√	√√	√√√
10	Review of research and development funding amount and allocation (Mixed public and private benefits)	√√	√√√	√√		√√
11A+11B	Future productive capacity and biodiversity - Legislative reform, research to establish metric and direct incentives (as appropriate)	√√	√√	√√*	√√*	√√*
12	Seed funding for a Hardwood Pricing Index	√√	√	√√	√√	√√
13	Pricing distortions in international markets - Range of instruments	√√√	√√			√√

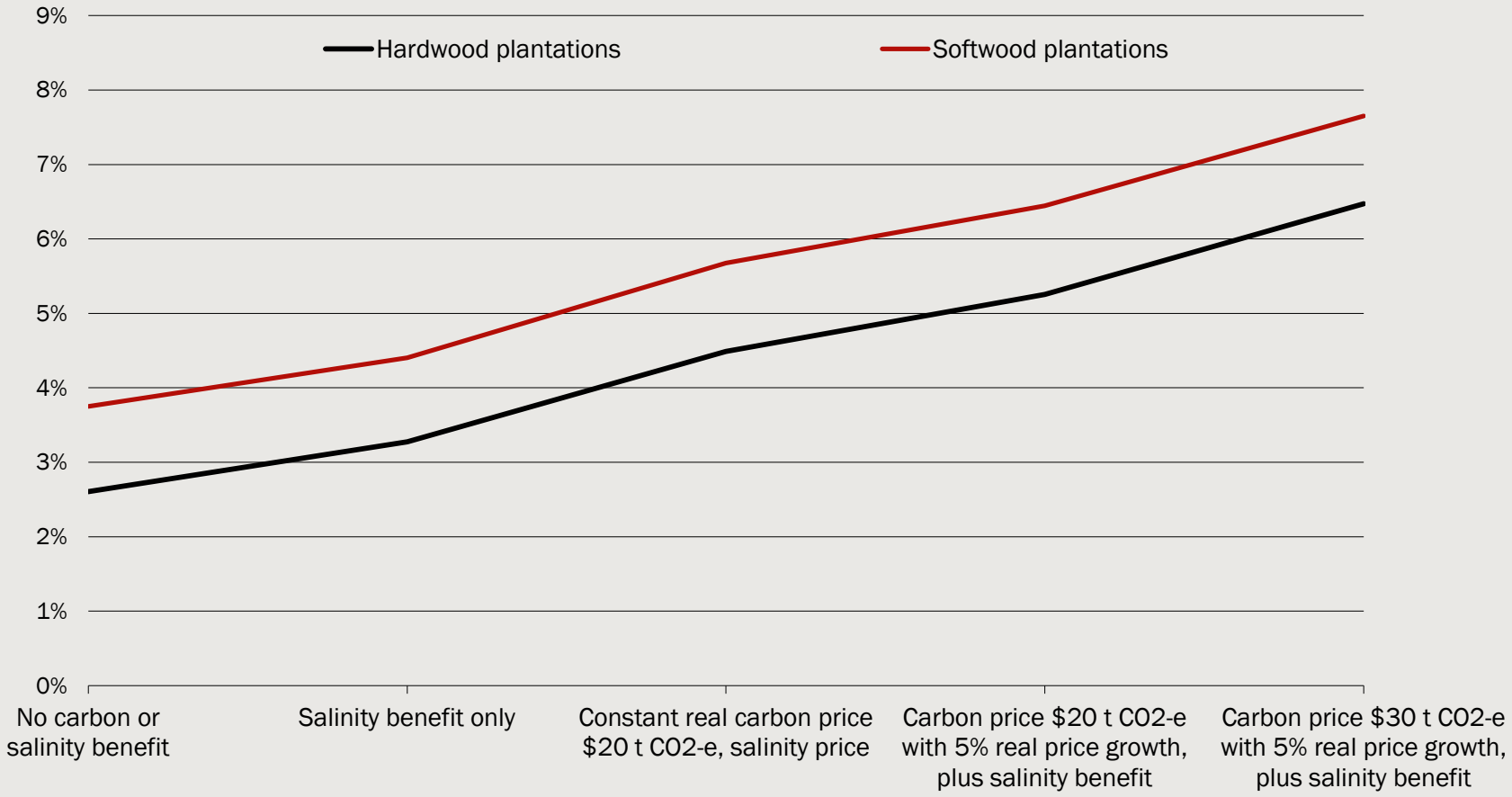
Carbon is central

- Need to modify CFI
- Incorporate wood products
- Find ways of bringing benefits forward
- Carbon price is platform for other benefits

Carbon is central

- Need starting price $30/t to $40/t (growing at 5 per cent real) to get IRR around 7%
  - Recognition of wood products increases this to around 8%
- BUT…
- Forward price in EU currently around $7/t
- Budget Papers expect $12/t in 2015-16 and $18/t in 2017-18
- *Direct Action* expects forestry price of $15/t

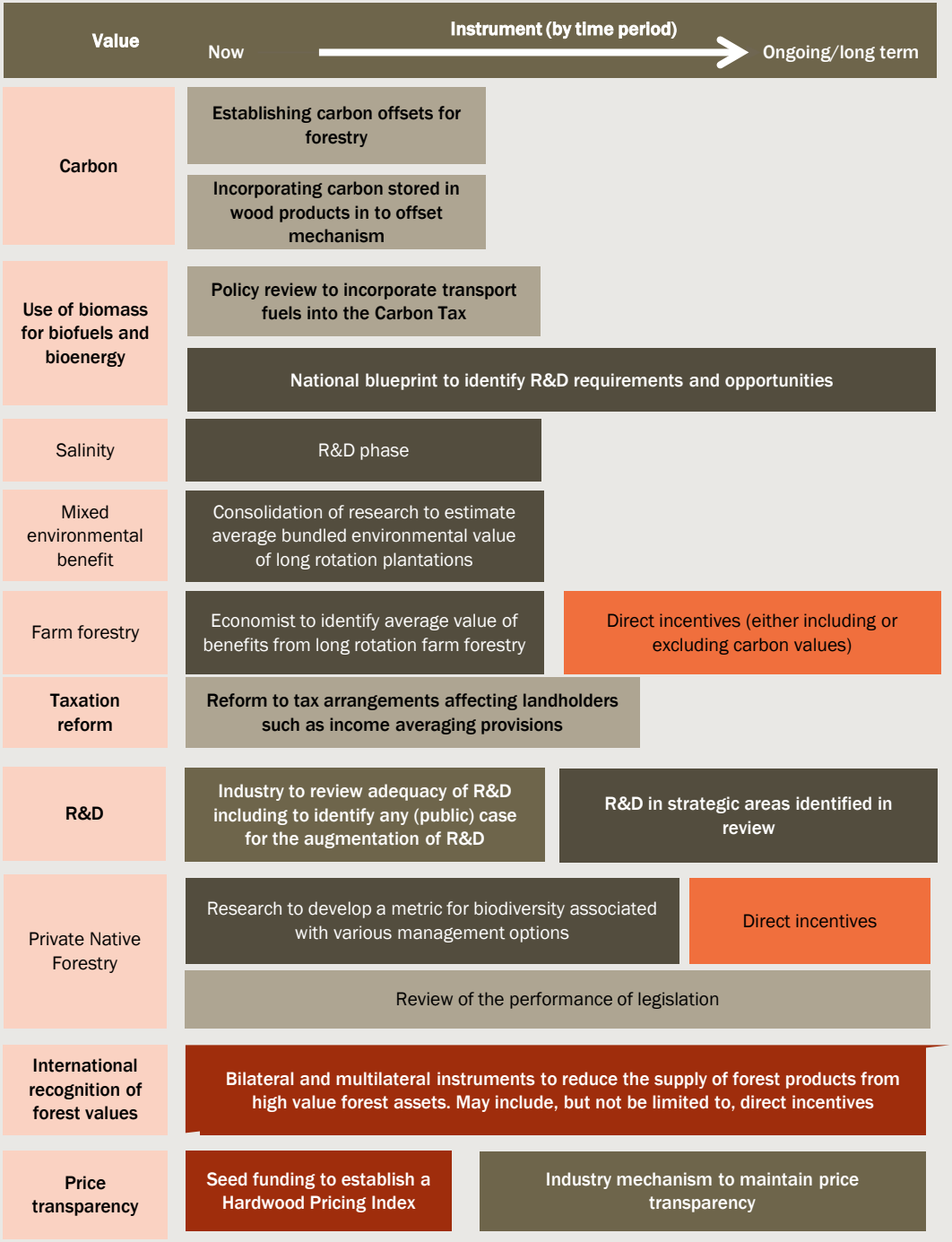
Salinity


9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
Hardwood plantations
Softwood plantations
No carbon or salinity benefit
Salinity benefit only
Constant real carbon price $20 t CO2-e, salinity price
Carbon price $20 t CO2-e with 5% real price growth, plus salinity benefit
Carbon price $30 t CO2-e with 5% real price growth, plus salinity benefit

Biodiversity values

- Need carbon price in place
- Could be considered as small additional funding to help otherwise unviable projects
- Values vary considerably by location
- Blunt instruments

Timing


Value
Now
Instrument (by time period)
Ongoing/long term
Carbon
Establishing carbon offsets for forestry
Incorporating carbon stored in wood products in to offset mechanism
Use of biomass for biofuels and bioenergy
Policy review to incorporate transport fuels into the Carbon Tax
National blueprint to identify R&D requirements and opportunities
Salinity
R&D phase
Mixed environmental benefit
Consolidation of research to estimate average bundled environmental value of long rotation plantations
Farm forestry
Economist to identify average value of benefits from long rotation farm forestry
Direct incentives (either including or excluding carbon values)
Taxation reform
Reform to tax arrangements affecting landholders such as income averaging provisions
R&D
Industry to review adequacy of R&D including to identify any (public) case for the augmentation of R&D
R&D in strategic areas identified in review
Private Native Forestry
Research to develop a metric for biodiversity associated with various management options
Direct incentives
Review of the performance of legislation
International recognition of forest values
Bilateral and multilateral instruments to reduce the supply of forest products from high value forest assets. May include, but not be limited to, direct incentives
Price transparency
Seed funding to establish a Hardwood Pricing Index
Industry mechanism to maintain price transparency

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