

Integrating biodiversity and carbon:
Examples of 'stacking' and 'bundling'

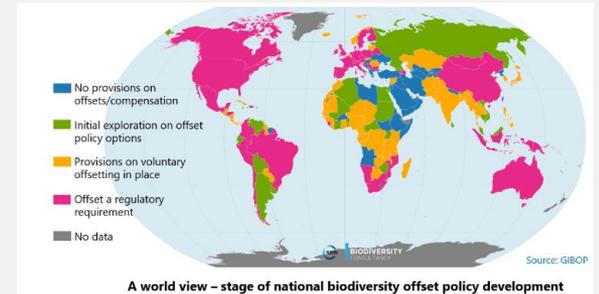
Amrei von Hase

Land Use 2021: A Place for Biodiversity Offsets

A Series of Web Events Presented by the Alberta Land Institute,
Canada

Context

- NNL/NG and mitigation policies on the rise
- Safeguards are crucial: Initiatives like BBOP, IMEC and others provide guidance on best practice
- Parallel trends relating to carbon offsets and their role in climate change mitigation
- Lots of controversy around offsets: what if combine bio and C offsets?
- More broadly – how to incentivize, reward multiple benefit approaches (i.e. beyond individual ecosystem services), promote synergies and limit risks and trade-offs?
- ‘Stacking’ & ‘Bundling’ as possible approaches



Screenshot of the BBOP (Business and Biodiversity Offsets Programme) website. The page features the BBOP logo and the text: "Business and Biodiversity Offsets Programme". Below the logo, it states: "An international collaboration between companies, financial institutions, governments and civil society organizations working towards a net gain of biodiversity." The URL <https://www.forest-trends.org/bbop/> is displayed at the bottom.

Screenshot of the IMEC (Impact Mitigation and Ecological Compensation) website. The page features the IMEC logo and the text: "IMPACT MITIGATION AND ECOLOGICAL COMPENSATION (IMEC)". Below the logo, it states: "Guiding best-practice application of the mitigation hierarchy, and improving alignment of impact mitigation and ecological compensation practice with biodiversity targets." The URL <https://www.impactmitigation.org> is displayed at the top.

Theory and Practice of 'Stacking' and 'Bundling' Ecosystem Goods and Services: A Resource Paper

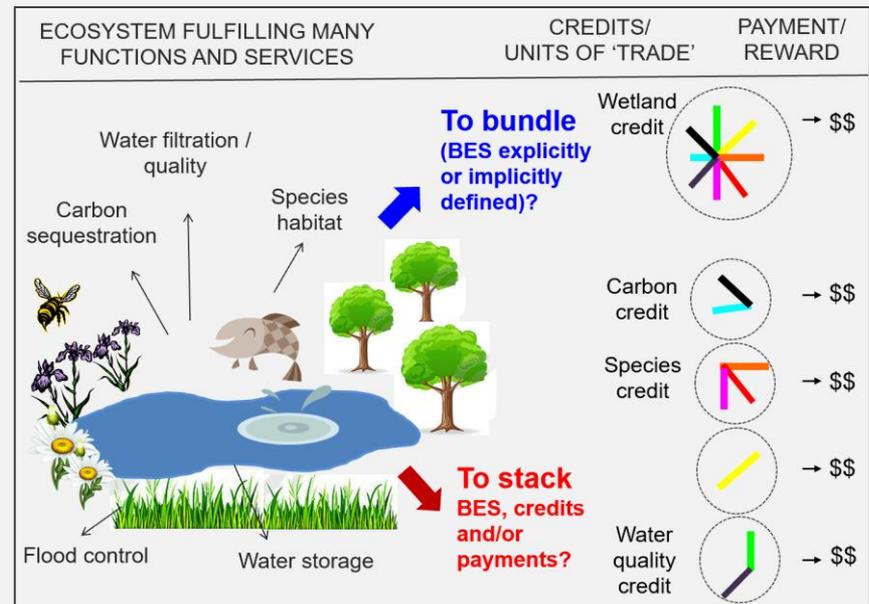


https://www.forest-trends.org/bbop_pubs/stacking_and_bundling/

 Schweizerische Eidgenossenschaft
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Swiss Agency for Development and Cooperation SDC

- Review of the concepts in the literature
- Set out definitions, benefits, risks
- Looked at what is happening across the world in practice: selected projects and policies (> 20)
- Focus on stacking given greatest interest, also risk



Forest Carbon Markets & Bio (voluntary)

- Carbon offset projects (eg. REDD+) adopting best practice multiple benefit standards (eg. CCB & VCS)
- Focal service and credit: CO2 emissions reduction aimed at climate mitigation
- Co-benefits for biodiversity and people are explicitly evaluated and demonstrated
- **Bundle** of services is traded, cannot be disaggregated / separately sold
- NB Discussions around stacking biodiversity offsets & REDD+ projects – **lack of additionality**



Social and Biodiversity Impact Assessment (SBIA) Manual for REDD+ Projects

PART 1 – CORE GUIDANCE FOR PROJECT PROPONENTS
SEPTEMBER 2011



CCBA
The Climate, Community & Biodiversity Alliance

FOREST TRENDS

In collaboration with:
The logos of the Rainforest Alliance and another partner organization, indicating their collaboration on the manual.

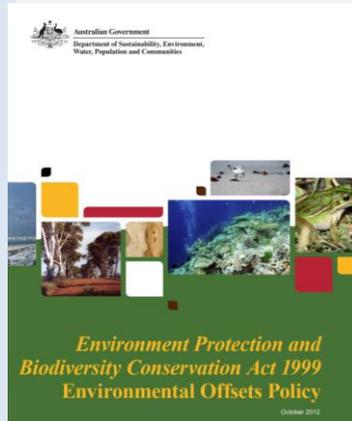
Biodiversity and Carbon offset policy

- Australian example: Two federal and one state policy with different provisions on stacking
- **Carbon Credits Act** (CFI, 2011) enables land managers to obtain carbon credits (e.g. through reforestation).
 - Must demonstrate additionality.
- **EPBC Biodiversity Offset Policy** (2012) sets out role of offsets for developments affecting biodiversity of national significance.
 - No stacking of bio offsets & C offsets allowed.
- **NSW Offset Policy for Major Projects** (2014)
 - Explicitly allows stacking of bio credits and C credits produced through the same actions.
 - Criticism: lack of additionality, double dipping, risking net loss of biodiversity



Carbon Credits (Carbon Farming Initiative) Act
2011

No. 101, 2011



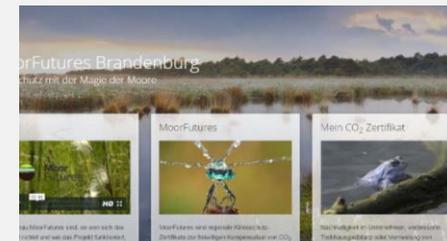
Biodiversity offset policy (reg) & C (vol)

- Impact assessment and mitigation in Germany regulated under federal law (under the Nature Conservation Act).
- Flaechenagentur Brandenburg provides compensation pools that supply compliance driven ecological credits to developers needing to offset their biodiversity impacts
- Agency interested in selling voluntary carbon credits ('Moorfutures')
- Stakeholder discussions led to 2 models:
 - Ecological and C credits on different lands and from different management actions (no overlap)
 - Stack but don't unbundle
- Reasons: Assure additionality, safeguard integrity of credits, credibility of the agency



Flächenagentur

Brandenburg GmbH



Willamette Partnership Ecosystem Credit Accounting System



WILLAMETTE PARTNERSHIP

<https://willamettepartnership.org>

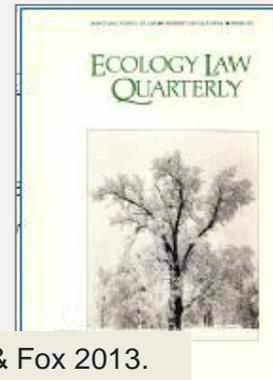
- Provides a protocol for transparent accounting of different credit types (eg. water quality, habitat)
- Stacking but no unbundling
- Used in compensation and voluntary incentive schemes

General Crediting Protocol Version 2.0
November 1, 2013

Updated January 2017

Some insights and recommendations

- Plan early & well:
 - clarify objectives and desired outcomes,
 - investigate options, interactions with other programmes,
 - understand implications, including for the environment.
 - then design scheme/ policy.
- Pilot
- Bundle don't stack.
- When considering stacking, some useful options and 'rules of thumb' have been set out



Gardner & Fox 2013.
The Legal Status of
Environmental Credit
Stacking.
<https://ssrn.com/abstract=2375858>



Robertson et al. 2014 Stacking
Ecosystem Services
<https://esajournals.onlinelibrary.wiley.com/doi/abs/10.1890/110292>

Thank you.

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**Swiss Agency for Development
and Cooperation SDC**

Kerry ten Kate and Jan Cassin

Amrei von Hase

amreivonhase@outlook.com