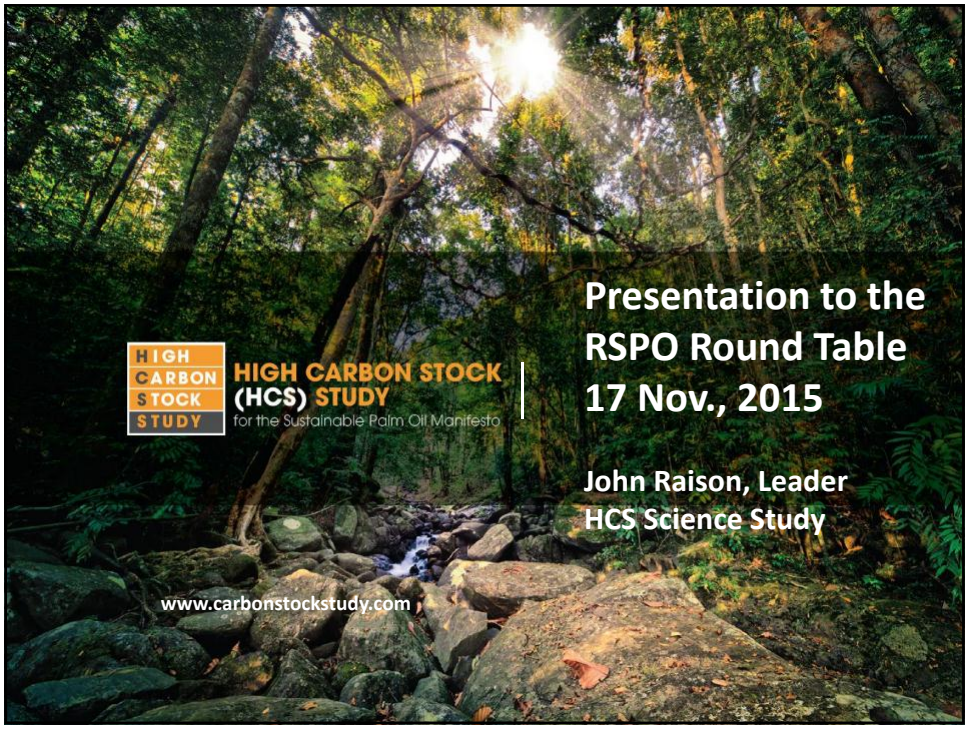


HCS+ - *A new pathway to sustainable oil palm development*

The HCS+ methodology, which significantly extends the HCS Approach, can deliver palm oil development that:

- Ensures carbon neutrality and contributes to protecting essential **non-carbon** forest values
- Better protects human rights and improves welfare
- Is economically viable and acceptable to key stakeholders including governments, local communities and companies undertaking new developments

2

The HCS+ methodology covers much more than Carbon

HCS+ takes account of all the elements required to support planning for sustainable development of oil palm, and provides a framework for integrating these key inputs to guide land use decisions

3

Sustainable development of oil palm

- Protects important forests (HCV, HCS, riparian)
- Achieves C neutral development – no C debt, planning flexibility, strengthened protection of set-asides
- More effective application of existing standards to protect rights and livelihoods, and new approaches to ensure improved welfare for local and regional communities
- Integrates key inputs via multi-stakeholder planning – producing a agreed land management plan with clear implementation steps, and well specified social contract
- Monitoring for compliance and agreed outcomes, reporting [Monitoring Reporting and Verification (MRV) framework]

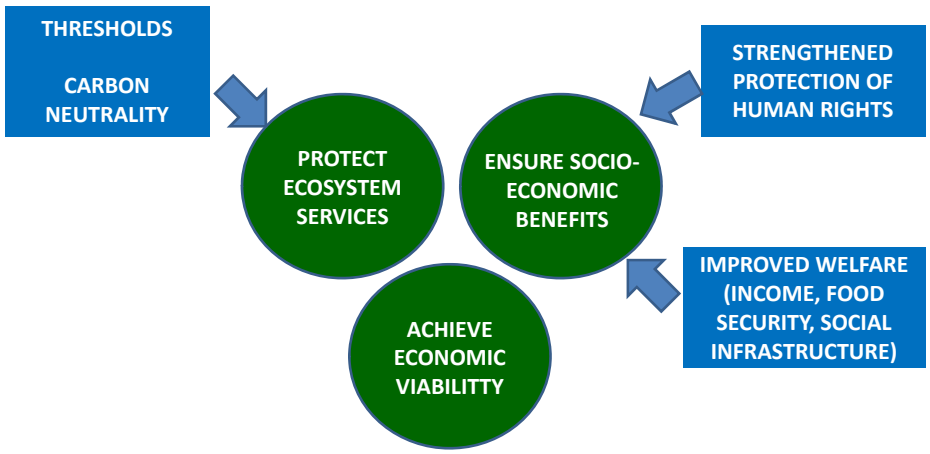
4

Sustainable oil palm development must be based on three pillars:

- **Pillar 1** – Land conversion must maintain critical ecosystem services
- **Pillar 2** – Oil palm development must deliver socio-economic benefits for local communities
- **Pillar 3** – Oil palm development must be economically viable

These three pillars must be constructed independently, avoiding trade-offs between them 5

Mechanisms for achieving Sustainable Oil Palm



6

Application of Remote Sensing

The HCS+ methodology is underpinned by advanced remote sensing:

- To map **at high spatial resolution** above-ground carbon using airborne LiDAR
- To map vegetation and land use in the concession and adjacent areas using **high resolution** optical satellite data
- To help map peatlands and other organic soils

7

Thresholds have been set to achieve the following goals:

- **No clearing** of Old-Growth forests, forests regrowing after selective harvesting, and secondary forests where Above-Ground carbon (AGC) is **> 75 t C/ha**
- **No development** on organic soils (peat and other) where the organic layer **exceeds 15 cm in depth**
- **Well planned development** by conversion of some forests with AGC of < 75 t C/ha, provided that development is **C neutral**
- **Focus development on low C lands - currently unused already cleared or degraded lands** where these are suitable for oil palm

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Above-ground Carbon

First Threshold Applied

AGC (t C/ha)	Description	Zone
~200	Old growth forest	No development
75-125	Logged, degraded forest	
75	30 year secondary forest	
~40	Highly degraded forest	Development (C losses)
~ 30-75	Regenerating forest including early-stage secondary forest	
30	**Oil Palm average**	
~5-20	Very Young regenerating forest, and Grassland/ scrub	Development (C gains)

Soil

Second threshold independently applied if biomass threshold NOT exceeded

Emissions from Soil [t C/ha over 25 years]	Zone	
> 75	No development	• All peat • All organic layers > 15 cm deep
0 (mineral soils) – 75 (thin organic soils)	Development (C losses)	
Zero point		
Negative (gain of C)	Development (C gains)	• Unlikely or small

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Making development C neutral at the concession scale

- Balancing C emissions from forest conversion against C sequestration in protected set-asides within the concession [or in other concessions managed by the developer in the same biogeographic region]
- Protected set-aside can be **HCV, HCS or non-HCS** forests
- C sequestration must be both additional (resulting from active management) and verified (using reliable methods). And is binding on the developer, and subject to penalties if obligations not met

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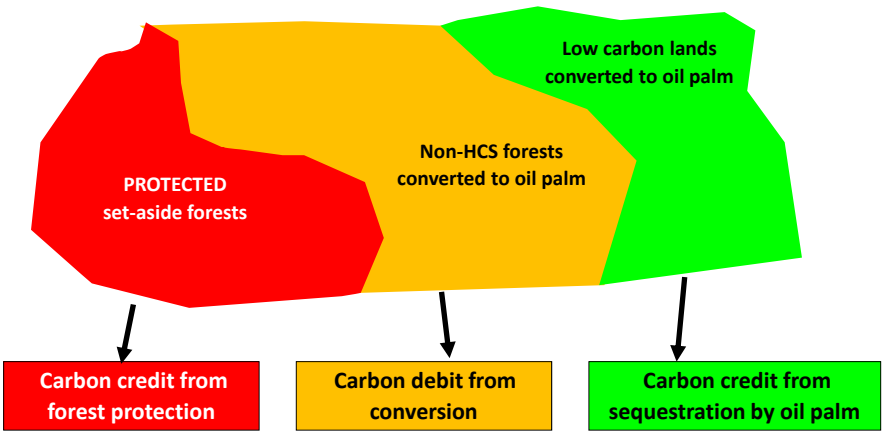
An Approach to Carbon-Neutral Conversion to Oil Palm



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What to do in heavily forested regions?

- Firstly look to **locate** new concessions in lower C landscapes
- The HCS+ thresholds should be applied in all countries/regions. Provided sufficient land is available for development, there are more opportunities in such landscapes to set aside forests to achieve C neutrality
- In regions where most land is HCS, regional planning by governments should determine how best to achieve conservation and development goals, whilst still maintaining carbon neutrality (via protection of set-asides).

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Ensuring good socio-economic outcomes

- **Avoid negative impacts** - A more robust and comprehensive implementation of **the existing rights-based framework. Independent audit** (verifiers) and reporting. A central role for communities themselves
- **Boost positive impacts** - A greater focus on community livelihoods and value-sharing. Social contracts specifying measurable outcomes, and fairer small-holder models. Co-management (with communities) of set-asides, with well defined guidelines for use of such areas

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The HCS+ socio-economic methodology

- Specifies the information/actions required by companies to demonstrate that human rights have been protected and that planned socio-economic outcomes have materialized.
- Metrics are needed to be able to track socio-economic impacts (positive or negative), and to underpin adaptive management
- HCS+ proposes a new measure, the Palm Oil Welfare Index (POWI) to establish socio-economic conditions before development, measure subsequent impacts on welfare and to identify adaptive actions

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HCS+ socio-economic methodology

- ***Clear, measurable, and objective criteria to verify adherence to existing socio-economic standards*** (e.g. labour, FPIC, set-asides for livelihoods, participation, grievances, social infrastructure, fairness for small-holders)
- ***A socio-economic auditing process*** Socio-economic auditing should be carried out prior to land conversion to ensure informed consent and adequate livelihood set asides for local communities.
- ***Clear procedures for companies to establish favourable small holder models and provide social infrastructure*** Assistance to small holders with improved technologies and market access, as well as social infrastructure such as educational and health facilities, are likely to boost the positive socio-economic impacts of oil palm development.
- ***A procedure to monitor socio-economic outcomes of oil palm development for local communities*** Companies should use established methods, such as those recommended for POWI (Palm Oil Welfare Index) to monitor food security, income, and access to clean water and social infrastructure.

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Integration of key inputs and processes

HCS+ proposes a better integrated planning approach to facilitate sustainable oil palm development. This involves HCV and HCS+ assessments as well as FPIC processes and other inputs to produce development plans that take into account socio-economic, carbon and bio-diversity considerations.

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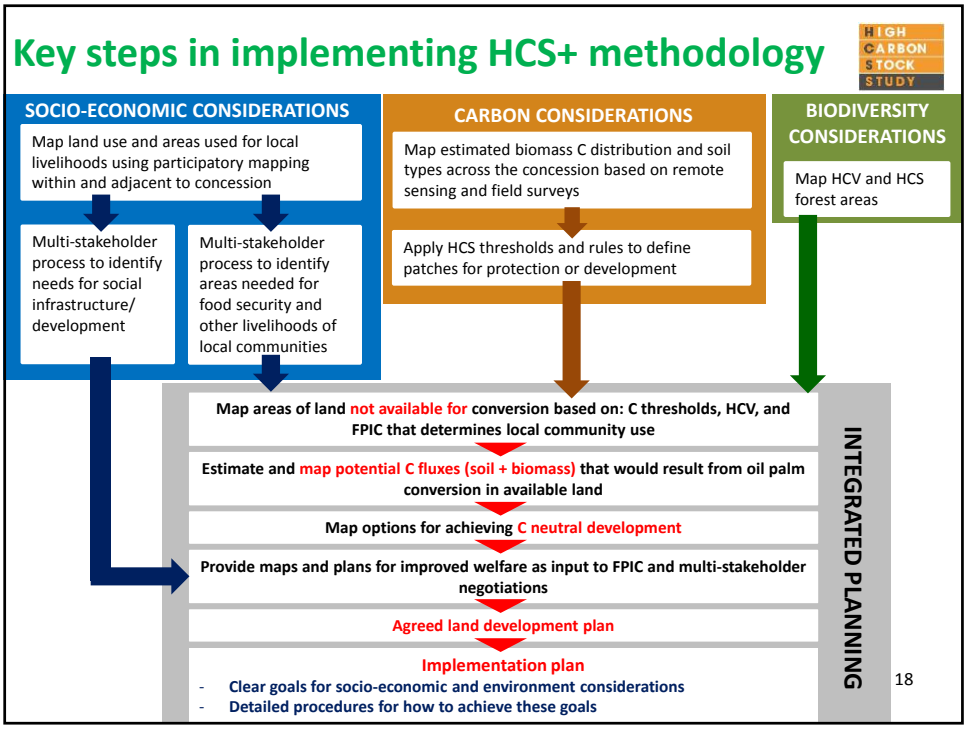
Key steps in implementing HCS+ methodology



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Conclusions

- HCS+ contains all required elements to support planning for sustainable development of oil palm, and provides a framework for integrating key inputs
- It builds on and enhances existing processes, especially RSPO P&C, HCV and FPIC
- Allows development without C debt, and provides a **strong mechanism for protection of set-aside forests.** Thus allowing some forest conversion to oil palm, is likely to lead to better long-term conservation outcomes
- Much can be implemented quickly, some parts require field testing to evaluate cost-effectiveness

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- Considerable potential for convergence with the HCS Approach