

Summary of SAB findings for Question #3

Divergent perspectives.

All are included for consideration.

Are existing approaches adequate?

- Yes. Facility accountability is not necessary when total forest stocks in a given region remain the same or increase.
 - For example, decreasing forest stocks in one part of the region while increasing in another part of the region is OK.
 - As long as total regional forest stocks don't decrease, then we are not increasing regional emissions due to use of biogenic C for energy purposes.
- Adequate empirical estimates of leakage and anticipatory forest expansion are unattainable.

Categorical exclusion (contingent upon total forest stocks remaining the same or increases). EPA Inventory subdivided into regions meets this need.

Are existing approaches adequate?

- No. The framework should be based on potential feedstock area not the total regional forest area.
 - For example, total regional forest stocks could be increasing while the facility feedstock supply area is decreasing.
 - If there is a decrease in long-term C stocks in the feedstock supply area (e.g., biomass, soil C), these need to be captured.
- Leakage across US borders is important and is not accounted for in the current EPA Inventory.

The new framework moves from “monitoring” to “management” of biogenic C. Inventory monitors C stocks and flows. Attribution is needed for management.

Based on this perspective, we move on to Charge Questions →

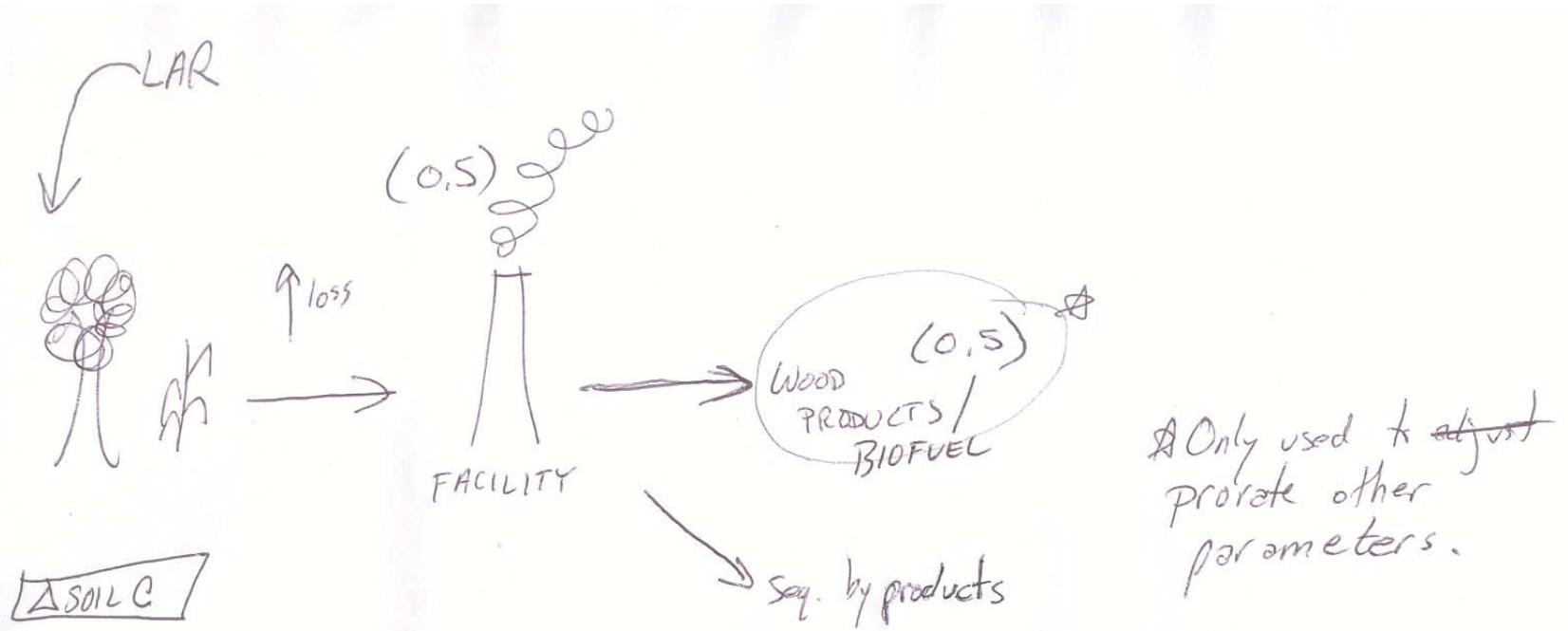
Parameters the in framework equation represent additions and subtractions of emissions in a way that sufficiently represent net emissions associated with emissions at the stationary source (i.e., “facility”).

$$\begin{aligned} \text{NBE} = & [\text{PGE} \times (1+\text{L}) \times (1-\text{LAR}) \times (1-\text{PRODC})] \\ & - [\text{PGE} \times \text{SEQP}] \\ & + [\text{SITE_TNC} \times (1-\text{PRODC})] \\ & + [\text{LEAK} \times (1 - \text{PRODC})] \end{aligned}$$

Leakage is important, but not adequately addressed.

- Suggest analysis for default values per feedstock.

Perspective 3



*Requires record of land management provided by resource supplier.

Restructuring of the framework equation and clarification of concepts and terminology

Perspective 4

$$\begin{aligned} \text{NBE} = & [\text{PGE} \times (1+\text{L}) \times (1-\text{LAR}) \times (1-\text{PRODC})] \\ & - [\text{PGE} \times \text{SEQP}] \\ & + [\text{SITE_TNC} \times (1-\text{PRODC})] \\ & + [\text{LEAK} \times (1 - \text{PRODC})] \end{aligned}$$

Use of equation must be scale robust.

DEBIT

- Emissions
- Loss

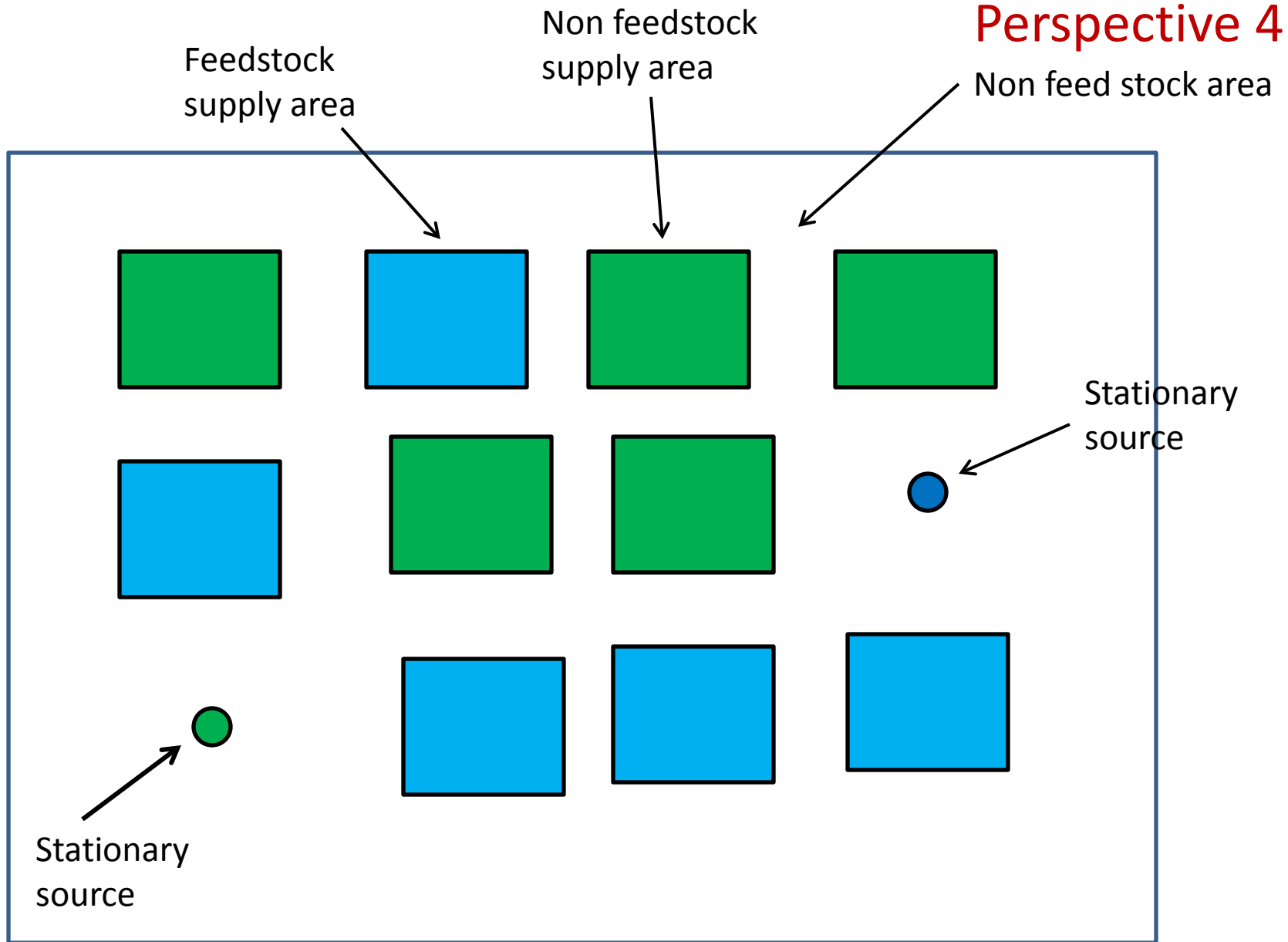
CREDIT

- Feedstock regrowth
 - On existing base
 - On new base
- Avoided emissions
- Sequestration

DEBIT/CREDIT

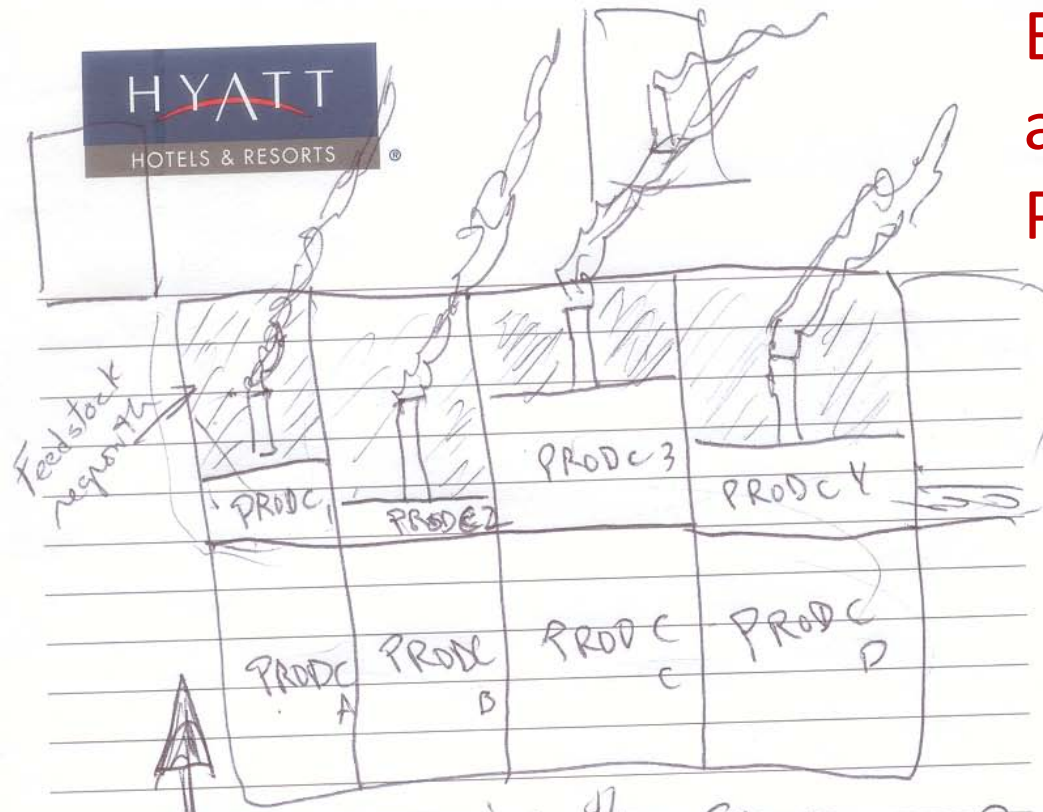
- Leakage
- Non-feedstock
 - On existing land base
 - New land base

Perspective 4





Extra slides
associated with
Perspective 4



LAR remains the same
regardless of sequence

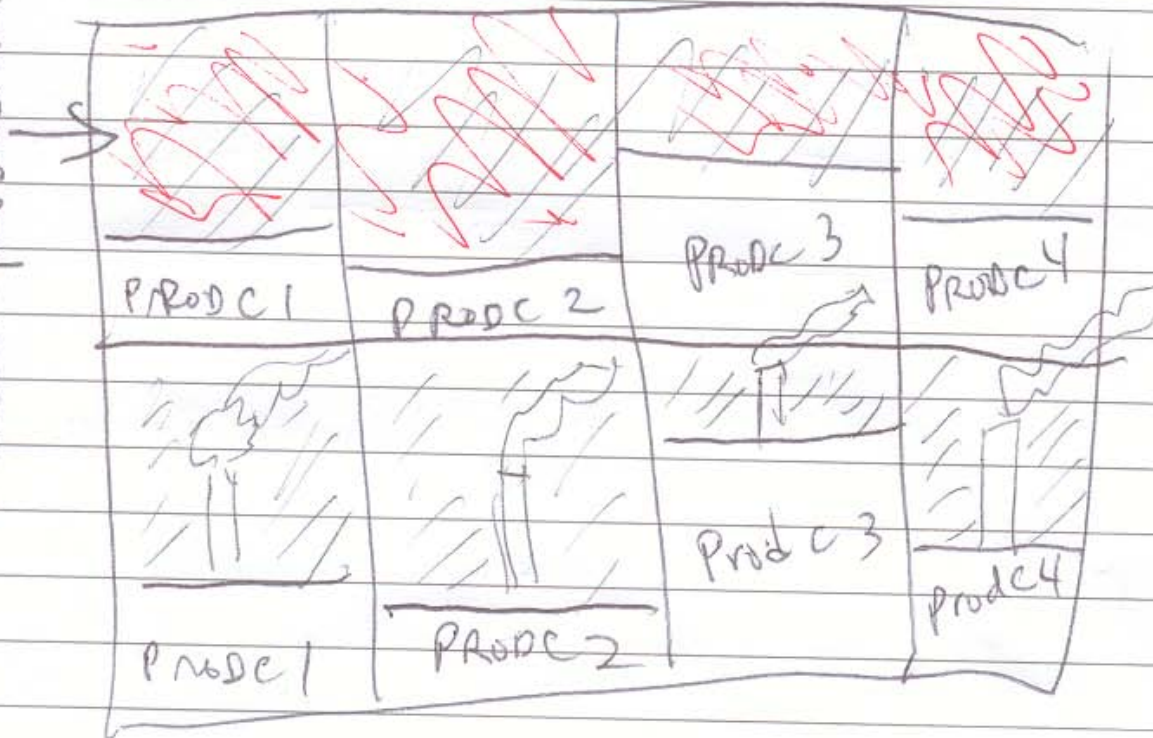


LAR



Extra slides associated with Perspective 4

no plant
feedstock production added



yet another value of LAR