The Ecological Footprint And... (120 mins w/ 15 min break)
    <u>Carbon</u>
        1. Does carbon belong in the Footprint? I think yes - but different
            First, draw cow in a snowglobe
                Can measure from resource side or waste side
            Second, draw house with tree
                Have broken cycle with extra input of fossil carbon
            Third, draw arrow circle w/ extra input on waste side
        2. Current method based on forest absorption
            3 other methods - all land absorb, biomass, land inundated

    <u>Nuclear electricity</u>
        1. Need a different tool for nuclear - issues not biocapacity
    <u>Global hectares</u>
        1. What does a gha really mean? Normalized, like currency conversion
            Done so we can add together - if didn't, cropland herder example
            Want footprint to represent a measure of quality land, not raw land
        2. Is a global hectare a measure of stock, or flow? Flow!
        3. Are global hectares normalized to inherent or actual productivity? Does
        the number of gha's represented by a hectare change if mgmt changes?
    <u>Uncertainty</u>
        1. Three levels of error
            Data points (source data) - unknown, not reported by third parties
            Constants - animal feed factors, C sequestration factor
            Philosophical - are we making right accounting decisions?
        Constants only one I can really speak to - +/- 5% overshoot, more nations

    <u>Toxics</u>
        1. We cannot calculate a Footprint for toxics, undefined/infinite! No yield
        2. No possible way release of a long-lived toxic can be sustainable
        3. Might think about measuring lost biocapacity - but very site specific
    <u>Non-renewables</u>
        1. Non-renewable depletion not in EF - fossil fuel stocks
        2. What about carbon/fossil fuels? Special case b/c carbon biological
material released into biosphere, so we can calculate a Footprint
    <u>Water</u>
        1. Water enters the Footprint indirectly as control on biocapacity
        2. But similar to a toxic, can't calculate Footprint of water, the compound,
directly
        3. Water footprint in LPR is something else, first type of footprint

    <u>Future</u>
        1. Two aspects to future - doing scenario planning for future activities that
occur in the future (in!) - not talking about this - and the ability within the method to
account for today's activities that have consequences into the future
        2. EF does not look forward to future consequences of today's actions

3. Two classes of things not included as a result - (a) decrease in biocapcity in the future (land degradation) - crops that are farmed 'sustainably' have same footprint as 'unsustainable', all else equal, (b) entrained future Footprint (nuclear waste storage)

4. This is not in EF because it's not an accounting question, it's a modeling question - predicting future behavior, technology, etc.

5. Incidentally, this is why EF different from carrying capacity - carrying capacity is a model of behavior (what could happen), EF is accounting of past activities (what did happen)

Biodiversity

1. Footprint measures human consumption, not impacts of that consumption on ecosystems - VERY IMPORTANT

2. But in a standard indicator framework Pressure, State, Response, people tend to only remember State (LPI), Response - favored by policymakers

3. Footprint a Pressure (or Driver) indicator - in CBD and SEBI for that reason

Appropriate Policy Use

1. Footprint too high level for policy making, right? Same as GDP for a nation, or net profit number for business - it's a headline indicator in a pyramid

Draw two pyramids, GDP and EF

2. GDP inspires action, but does it tell you whether to cut interest rates or buy mortgage securities? No, there are other layers for that

3. How far down pyramid does the EF data go? Below top, but not all the way to the bottom - always ask question whether EF is appropriate indicator for project, or better what's its appropriate role within my project

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Tool summary (15 mins)
Partner Tools
        Footprinter
        Bottomline3
        FootprintScanner
        EPA Victoria

Standards (if time) (15 mins)
Walk through intent, structure, read through
        No certification yet