



SUSTAINABILITY CONSORTIUM

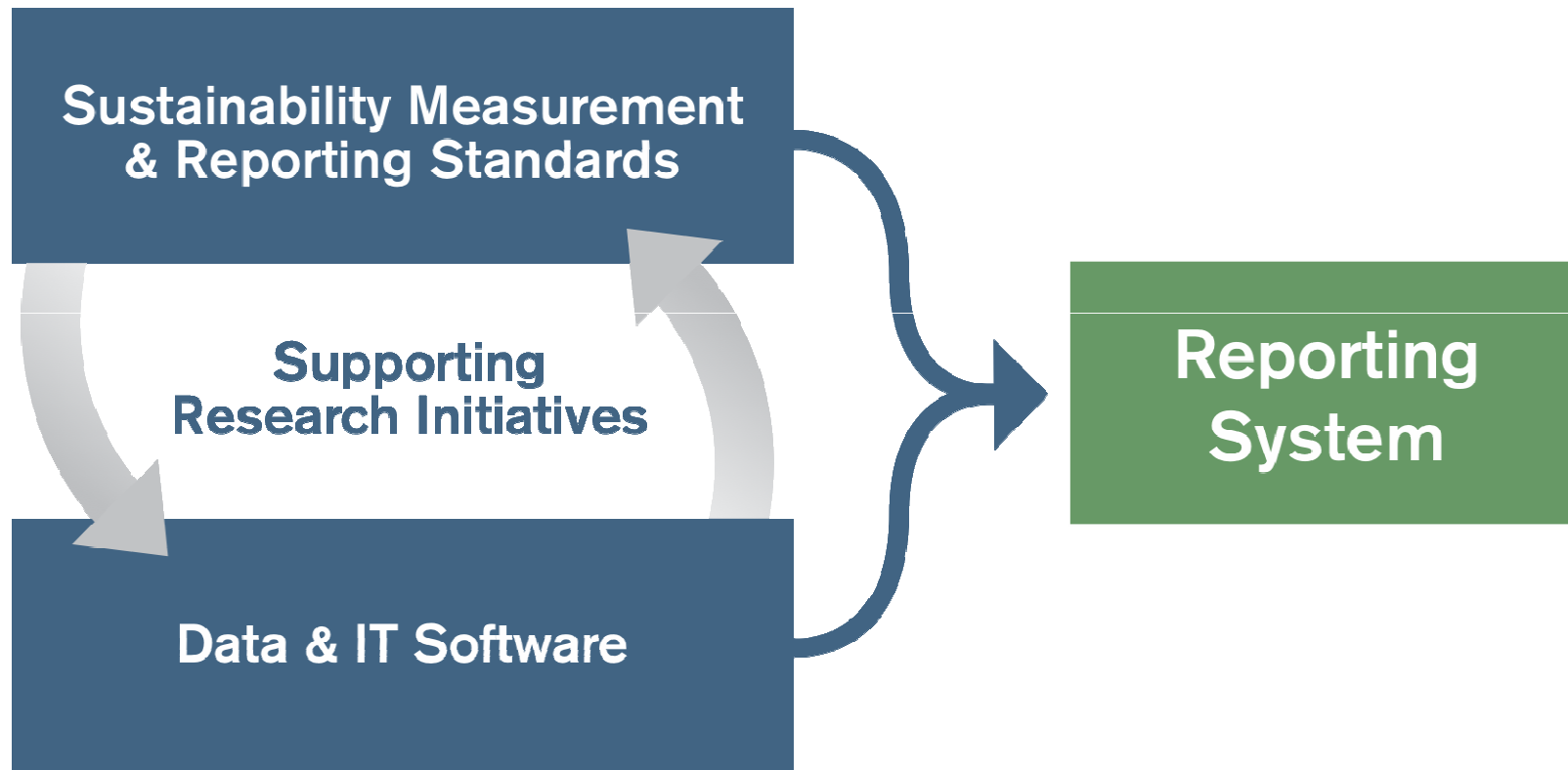
A PROPOSED APPROACH TO SUSTAINABILITY MEASUREMENT AND REPORTING

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Purpose

- Introduce concept of a Sustainability Measurement and Reporting Standard
- Show how Sector Working Groups will develop SMRS's
- Propose how SMRS's should be structured to enable rapid implementation

Reporting framework



What is a SMRS?

- SMRS = Sustainable Measurement and Reporting Standard
- Establishes a foundation that allows business to business, business to retail and business to consumer reporting.
- It addresses the questions:
 - What sustainability measures or attributes should be captured?
 - How should they be measured?
 - How should they be reported?
- Initially applied to product category or higher

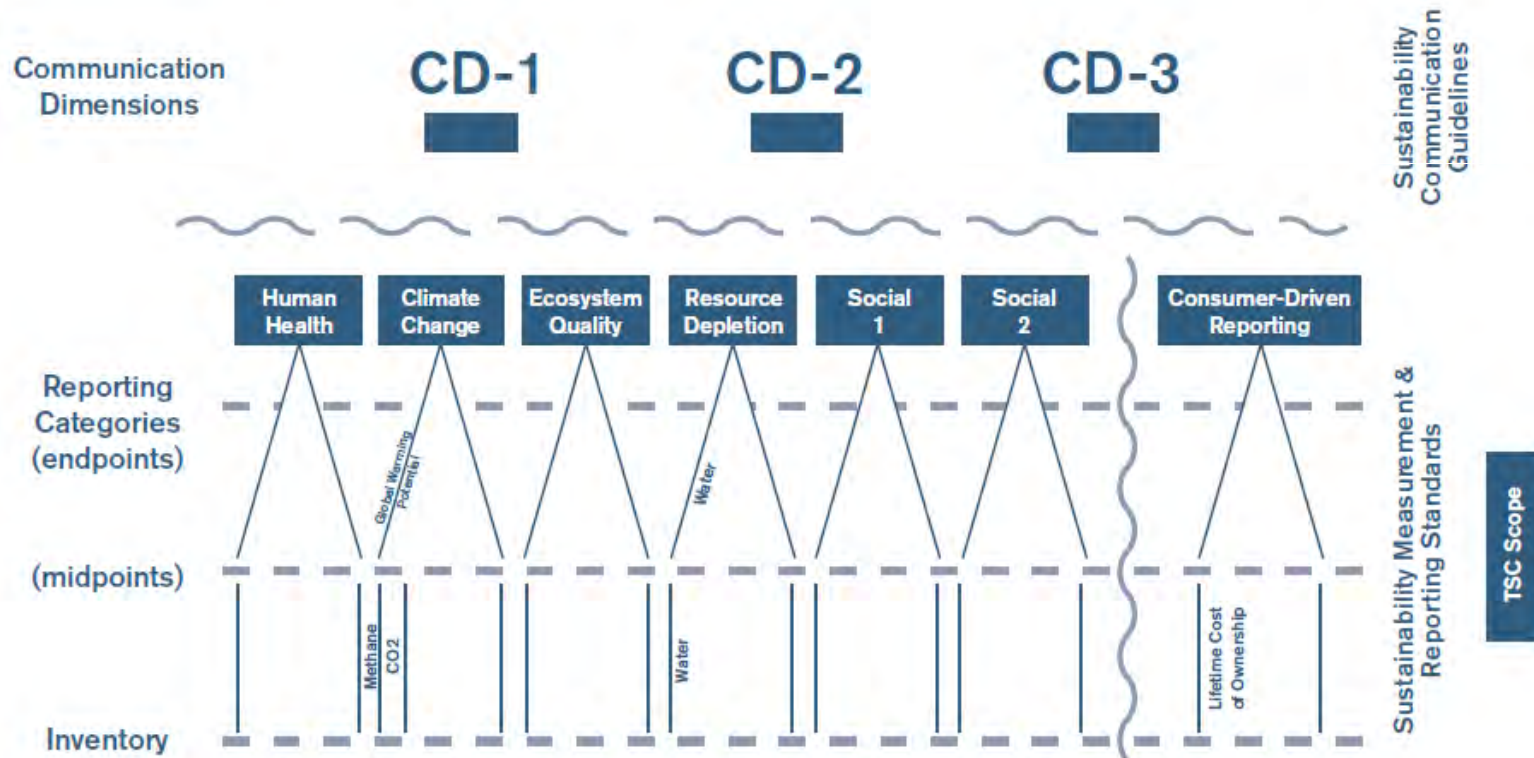
Reporting categories

- A SMRS defines measurement and reporting standards for each specified Reporting Category
- A Reporting Category is defined as set of an area of impact or concern where measures can be aggregated in common units
 - For example, “Climate Change” aggregates numerous impacts by Greenhouse Gas (GHG) and Global Warming Potential (GWP)
 - “Energy” aggregates by kWh
 - “Human toxicity” aggregates to Disability Adjusted Life Year (DALY)
 - Could be unit-less in the case of attributes
- Reporting Category may additionally include other information that cannot be quantified in any manner
- Reporting Categories Workshop
 - Multi-day workshop of experts
 - Date: TBD (anticipated for June-July 2010)

Deliverables

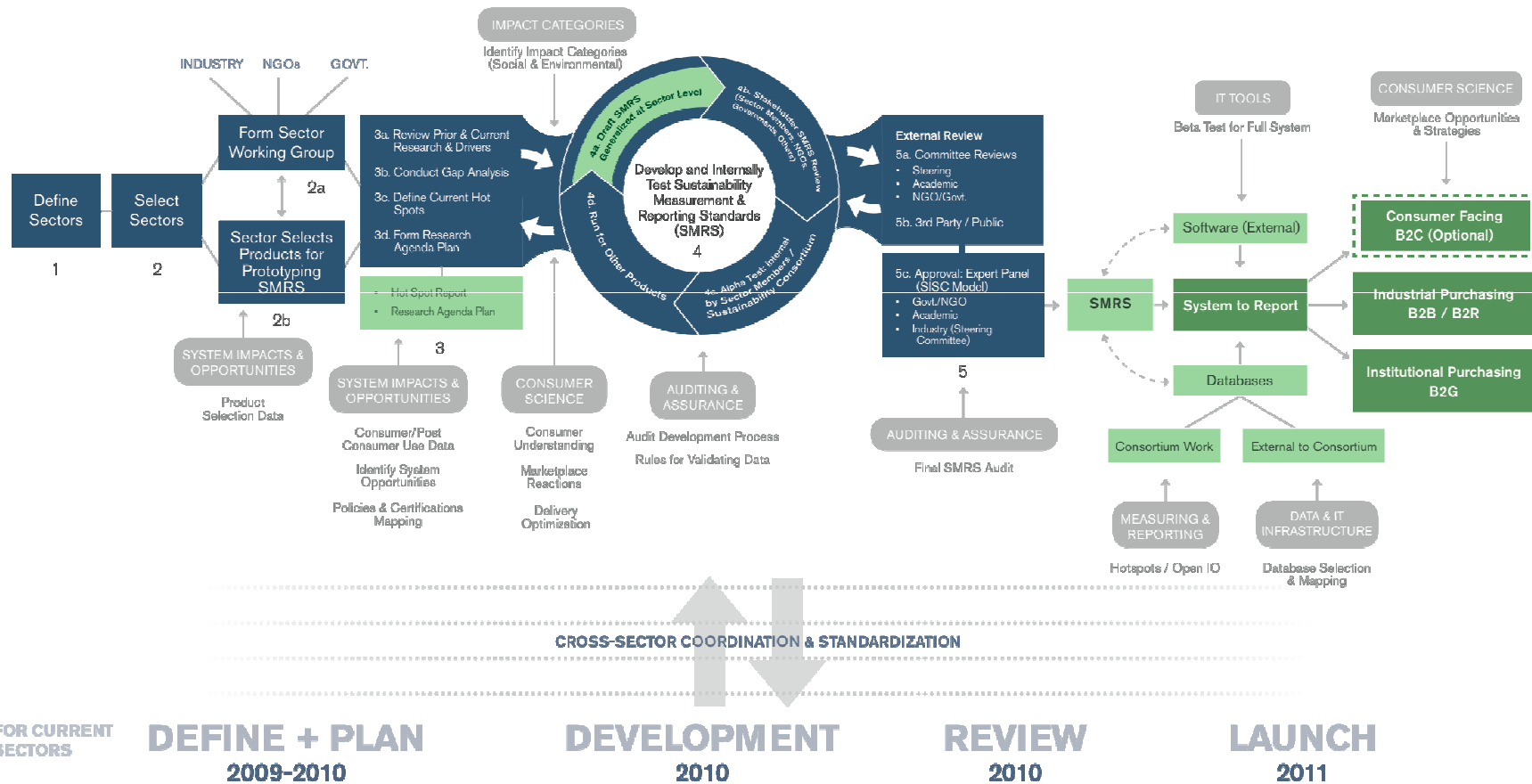


DRAFT REPORTING STRUCTURE

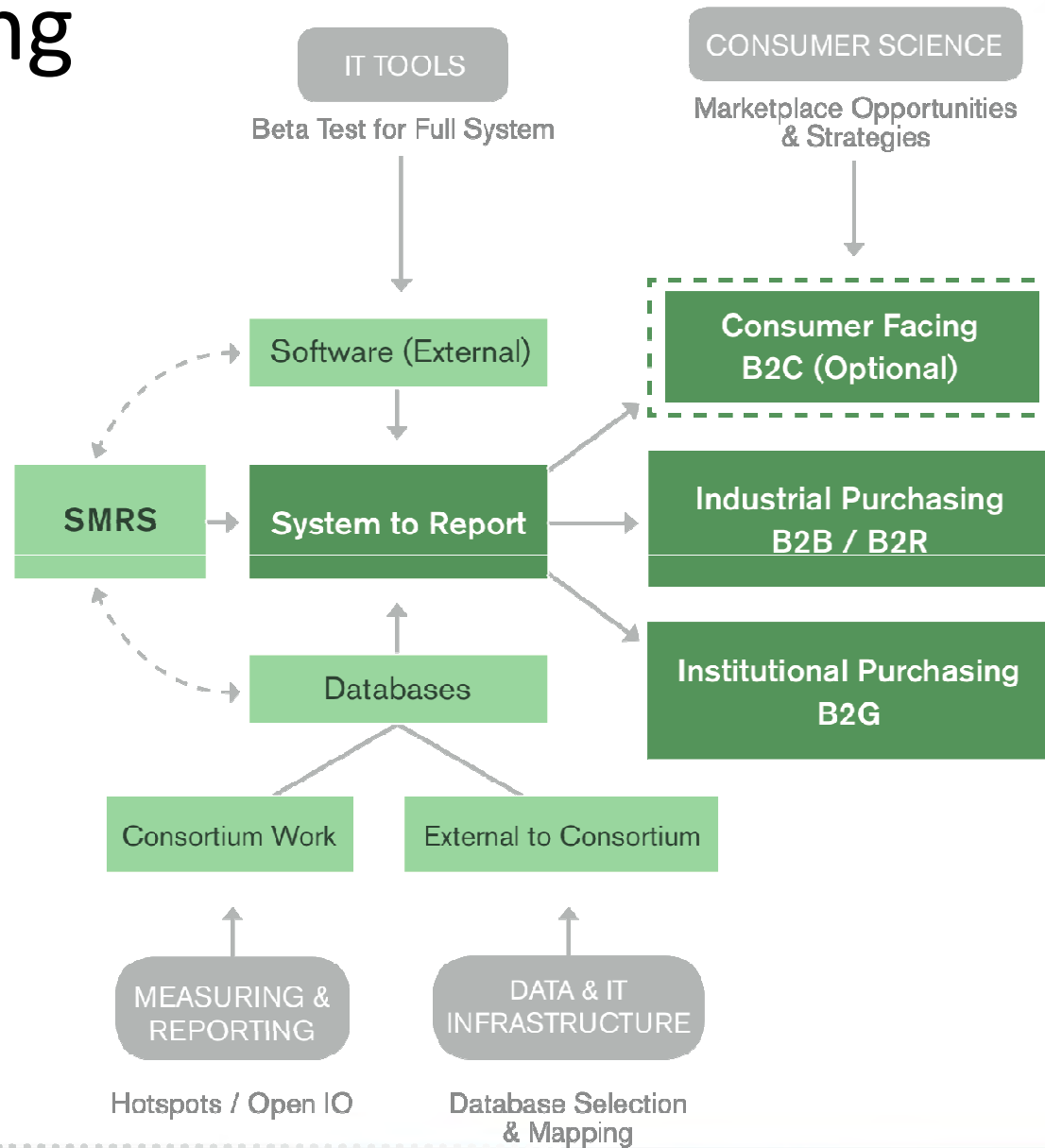


DRAFT SECTOR OUTCOMES PROCESS FLOW

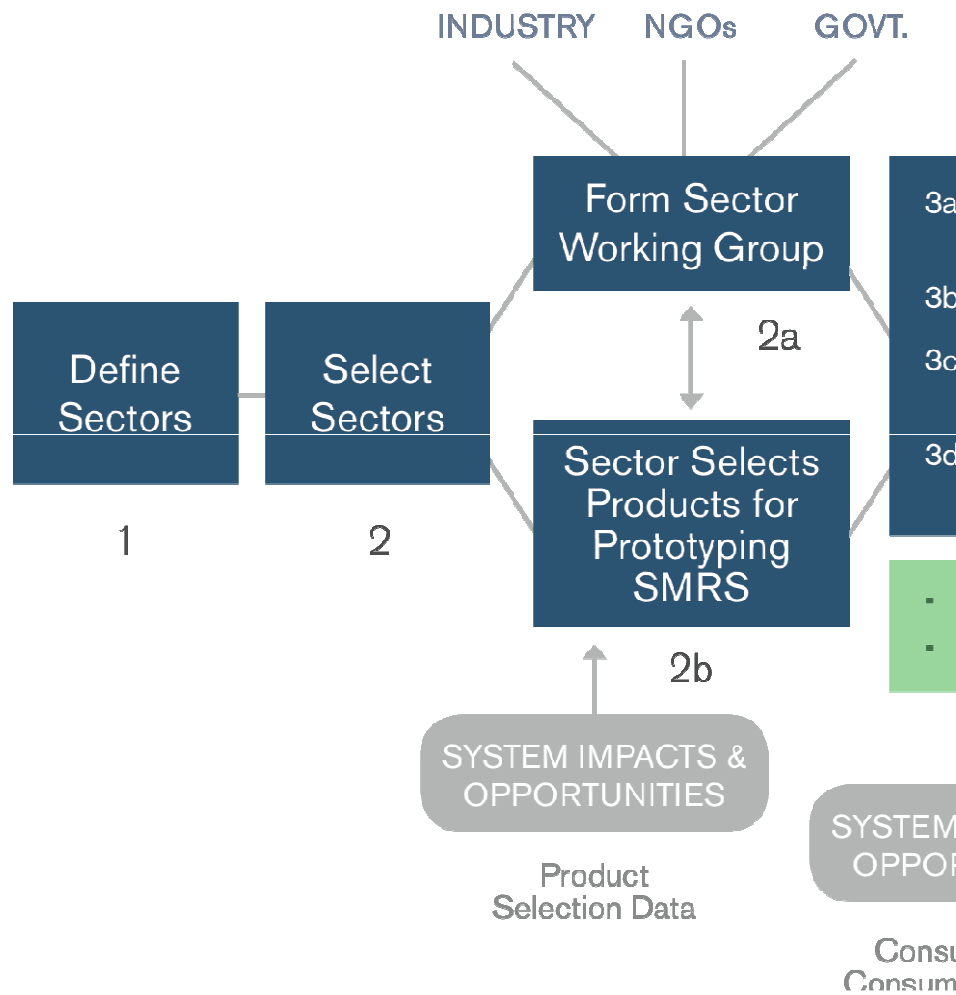
CURRENT AS OF 3/29/2010



Reporting



Define & plan



Electronics
Laptops, desktops, & monitors
TVs

Food, Beverage & Agriculture
Dairy product
Fruit juice
Breakfast cereal

Home & Personal Care
Detergent
Air Freshener
Surface Cleaner
Cleaning Aid
Shampoo
Face Make Up

Sector Working Groups

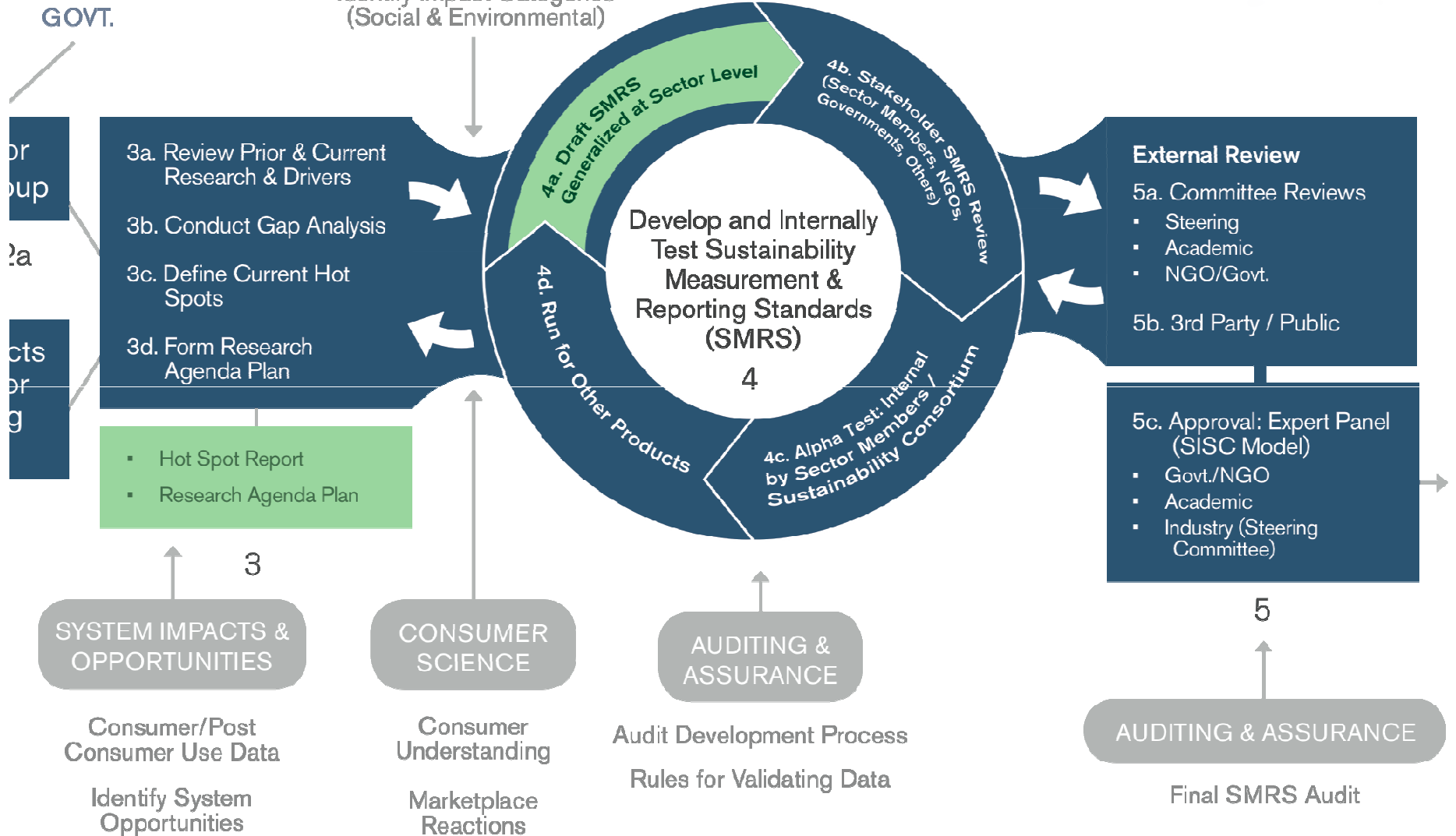
- Comprised of TSC Sector Coordinator and stakeholders including industry members, academics, NGOs and Government agencies.
- ISO 14020 (Environmental labels and declarations — General principles)
 - Valid, verified, scientifically-based, transparent, life-cycle based, innovation focused, multi-stakeholder developed, accessible
- Federated approach



Develop

IMPACT CATEGORIES

Identify Impact Categories
(Social & Environmental)

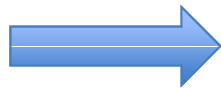


Policies & Certifications
Mapping

Delivery
Optimization

HOW SHOULD SMRS BE DEVELOPED?

SMRS requirements



- Promotes innovation
- Scientifically valid
- Is performance based
- Accounts for impacts across life cycle
- Incorporates existing standards
- Incorporates attributes and LCAs
- Supports distributed reporting
- Allows a range of reporting options
- Deals with complexity
- Can be developed in a timely manner

LCA or best practices?

Given that sustainability information needs to be reported, in what form should it be reported?

Quantitative (numerical) approaches such as LCA have higher information content but are more costly.

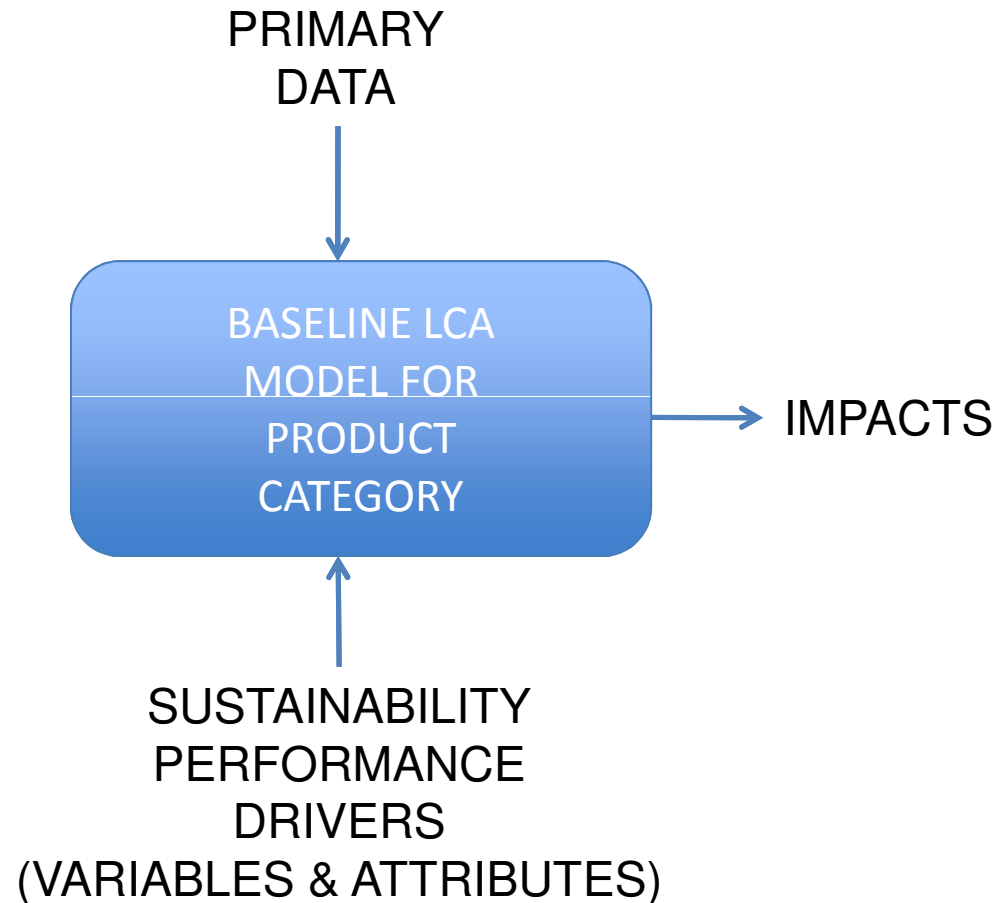
Attribute approaches such as a check-list of best practices have lower information content and may not be performance driven, but are generally less costly. Attributes can include NGO & government labels and certifications.

A hybrid approach

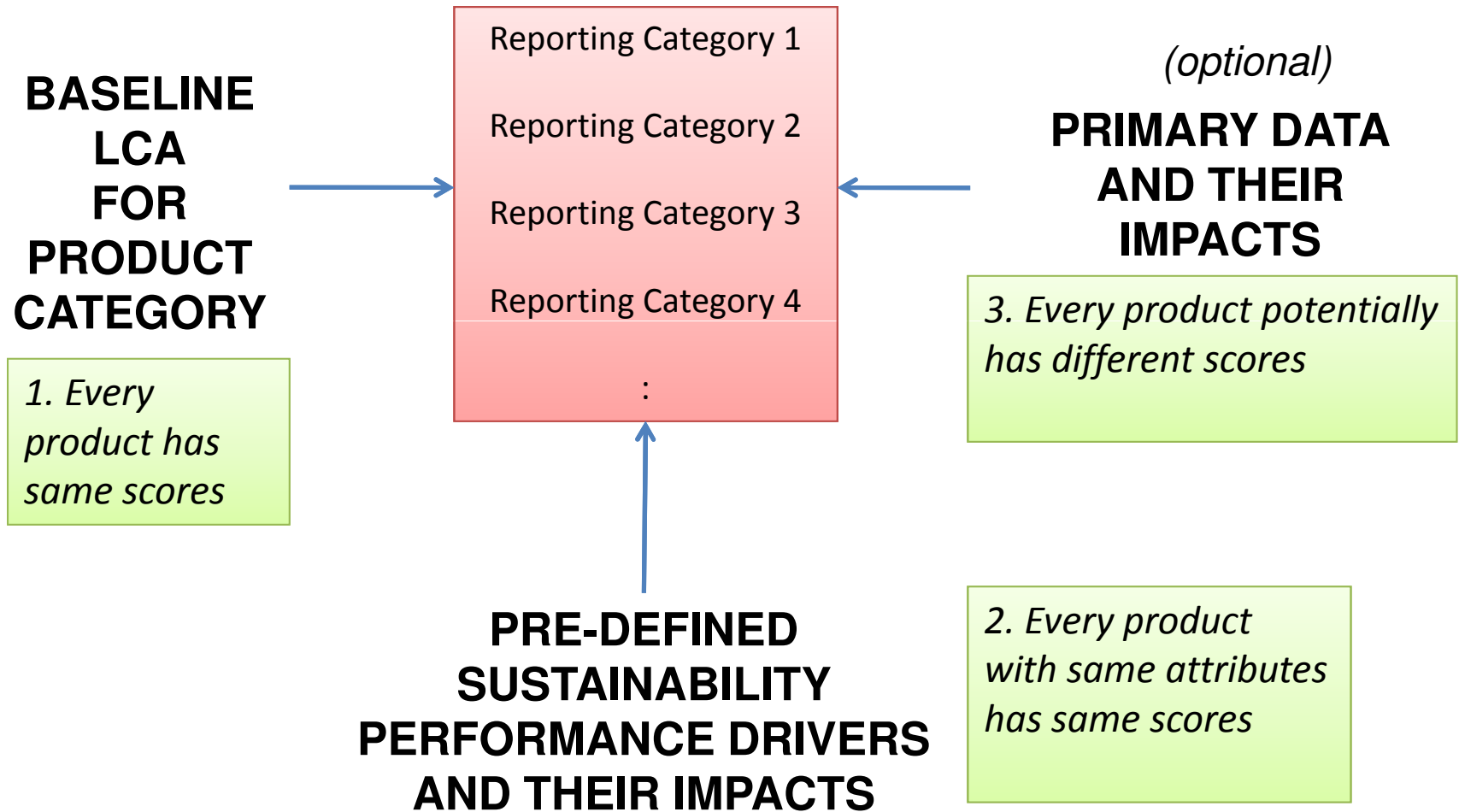
A pure LCA approach is not economically scalable across all consumer products

A pure "best practices" approach lacks precision and tends to weigh each best practice equally, regardless of impact

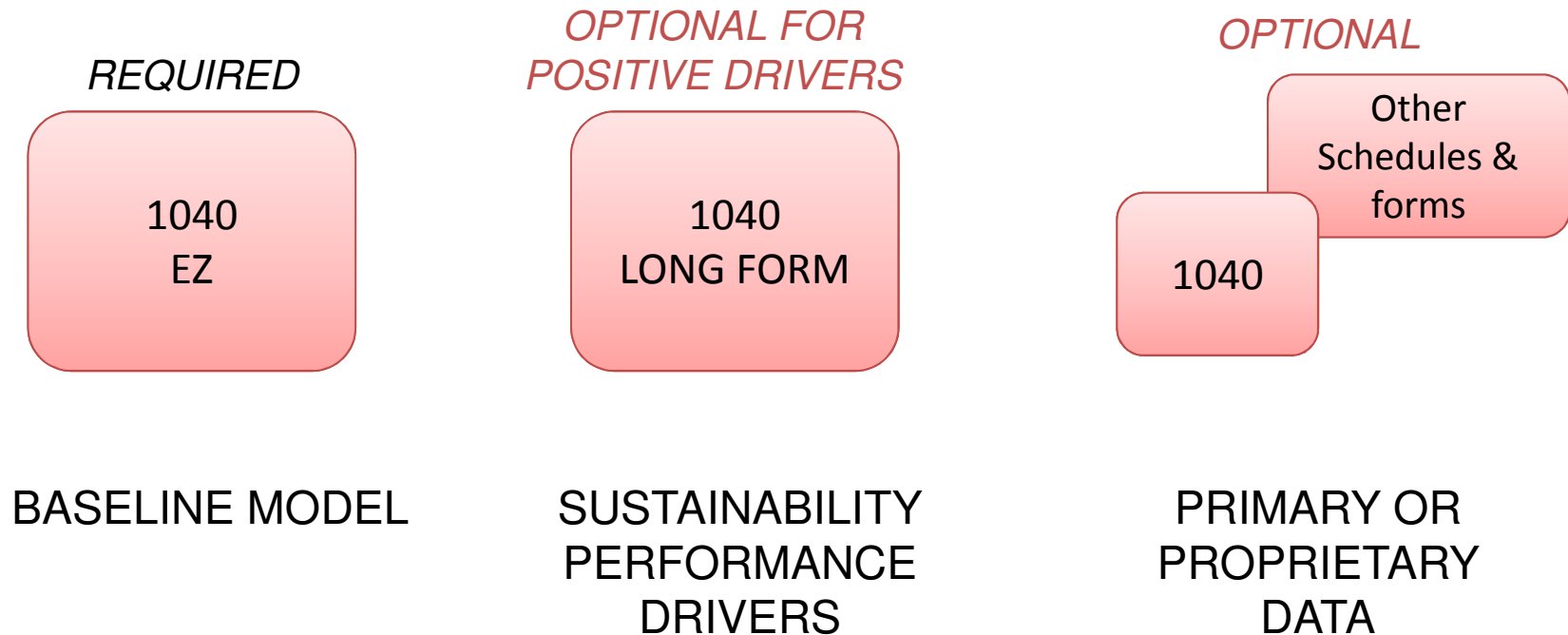
SWG needs to address how Baseline model and drivers get updated



Three step reporting



A US Tax Code analogy



A SMRS should support all three reporting alternatives

HOW WILL SUSTAINABILITY PERFORMANCE DRIVERS WORK IN A SMRS?

Drivers are key to simplicity

Dilemma:

- The key to timely and cost effective reporting is to modify baseline scores using attributes that act as sustainability performance drivers.
- But we still need to maintain the quantitative backbone for optional, more detailed reporting

Solution:

- SWG will create a list of common sustainability performance drivers that can be reported to
- Drivers may reflect positive or negative impacts on one or more Reporting Categories
- Key is to determine how much each sustainability performance drivers is “worth” for a given Reporting Category

Example: Electronics

Baseline model-Laptop

NO ENERGY STAR

ROHS COMPLIANT

NOT EPEAT CERTIFIED

< 30% RECYCLED MATERIAL

HARD DRIVE TECHNOLOGY-A

Sustainability performance drivers

ENERGY STAR

ROHS NON-COMPLIANT

EPEAT SILVER CERTIFIED

> 30 % RECYCLED MATERIAL

HARD DRIVE TECHNOLOGY-B

Example: FBA

Baseline model-Beverage

NO SUSTAINABLE SUGAR FARMING

SECONDARY DATA FOR WATER
USAGE

PACKAGE < 10% RECYCLED
MATERIAL

PET CONTAINER

Sustainability performance drivers

CERTIFIED SUSTAINABLE SUGAR
FARMING

PRIMARY DATA FOR WATER USAGE

PACKAGE > 10 % RECYCLED
MATERIAL

BIO-BASED CONTAINER

Example: HPC

Baseline model-Detergent

NOT CONCENTRATED

REQUIRES HOT WATER

NOT DFE CERTIFIED

SURFACTANT-A

Sustainability performance drivers

CONCENTRATION LEVEL

COLD WATER CAPABLE

DFE CERTIFIED

SURFACTANT-B

Drivers that matter



Not Energy Star



Energy Star



10" screen



13" screen

*WISH TO INCENTIVIZE
THESE DIFFERENCES*

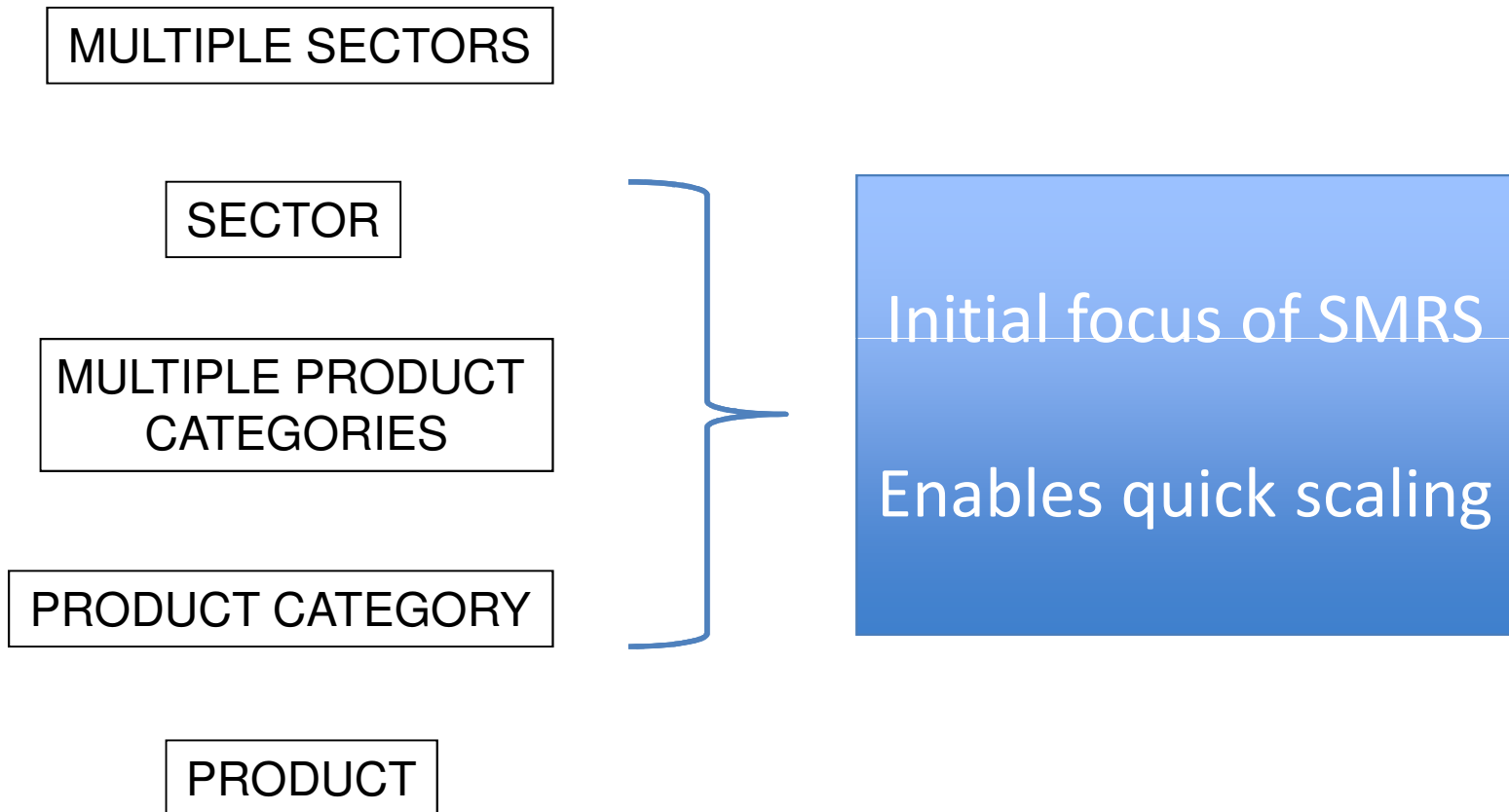
PRIMARY FOCUS—USE THESE
DRIVERS FOR CATEGORY

*FUNCTIONAL CONSIDERATIONS—
NEEDED FOR ACCURATE TOTAL
FOOTPRINTS*

SECONDARY FOCUS—
DEVELOP THESE DRIVERS
FOR MORE ACCURACY

Drivers that scale

Sustainability Performance Drivers



Mapping drivers



Possible approaches to determine impact of driver

One driver at a time:

- Estimate change in inventories from driver and use LCIA to determine impacts, or
- Estimate percent change in baseline impacts using previous research.

Multiple drivers at a time

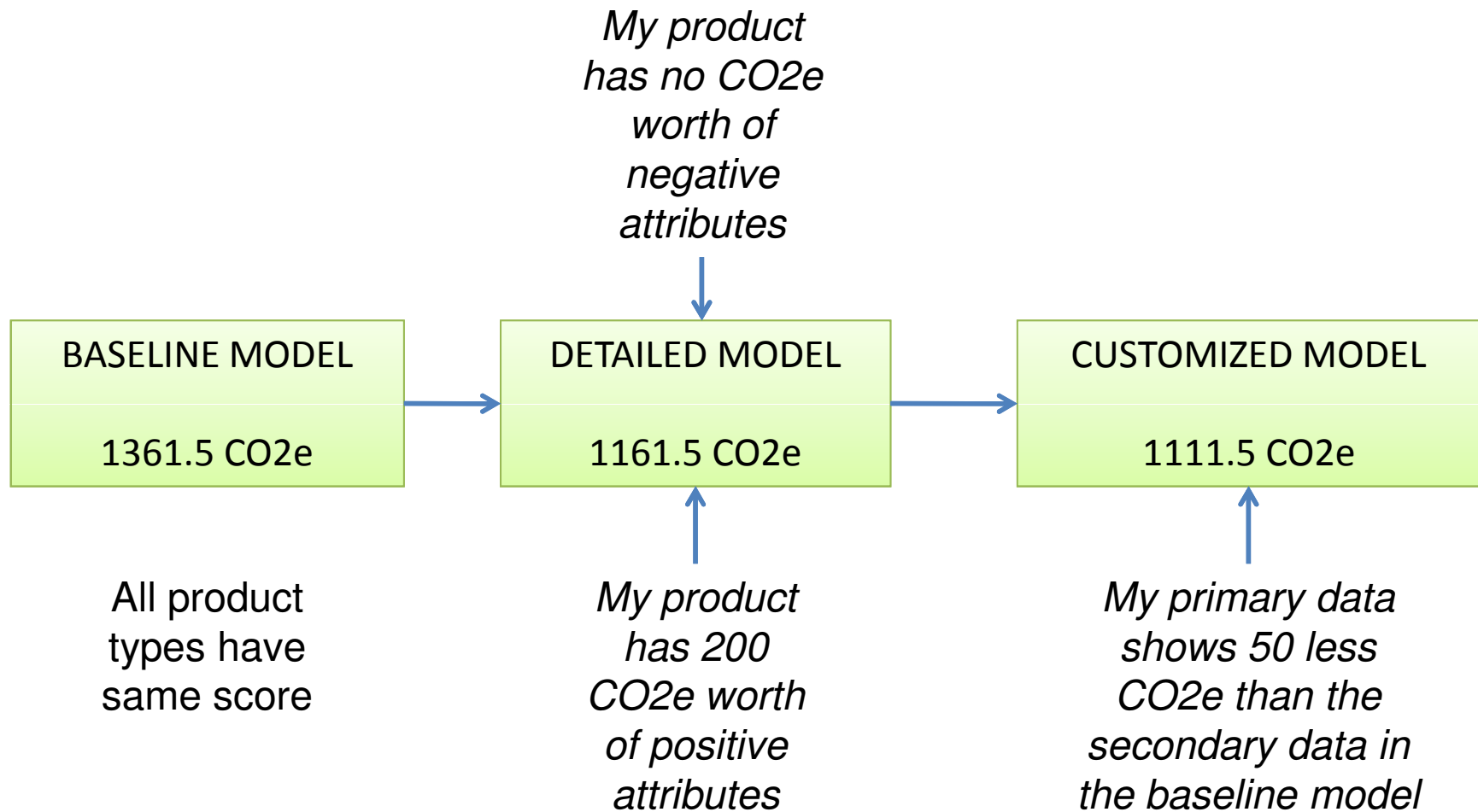
- Estimate percent change in baseline impacts using previous research and allocate to drivers based on expert opinion, or
- Use unit-less measure for Reporting Category (e.g. fraction of supply chain that is certified)

Customization (optional)

Reporting companies may customize their report in two ways:

- Substitute primary data for secondary data in the baseline model
 - Example: Our primary data for baking shows 265 kg CO₂e instead of 300, representing a change of -35
- Customize the baseline LCA model according to (proprietary) processes or materials
 - Example: An LCA model of our waste management processes show 110 CO₂e instead of 125 as estimated by the Baseline Model and the “100% recyclable packaging” attribute, representing a change of -15
- Any custom changes to the data or model must be transparent, adherent to SRMS guidelines and able to be audited by third party

Distinguishing similar product types



Summary

- Proposed approach enables rapid implementation and bootstrapping from existing standards and initiatives
- Maintains ability for more quantitative modeling of life cycle
- Creation of sustainability performance drivers enables simple reporting and is key to scaling across product categories