BSM-Public

High-level summary of changes from previous public release

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## Purpose

This document provides a high-level summary of changes to BSM-Public, relative to the version released to the public via GitHub in September 2017 (commit e62598a3f09cab57a5c0f3f87bbe6ffe693fd650). Since that time, the internal version of BSM has changed through bug fixes, small structural changes, and data updates. Additionally, the underlying STELLA software used to run the simulation has been updated. As of 2019-08, the current version of STELLA, available from isee systems at [www.iseesystems.com](http://www.iseesystems.com), is STELLA version 1.9.1

This update to BSM-Public includes revised model files, a revised set of default input data spreadsheets, and a revised searchable definition spreadsheet. Model changes are summarized here. A detailed list of changes to the model can be found in the file BSM-Public Difference 2019.xlsx

## Overview of revision activities

This update includes revisions to model files, default input data spreadsheets, and a searchable definition spreadsheet. Preparation of the revision involved the following activities and tasks:

* Review of units used in model equations
* Anonymization of non-public data
* Review and revision of data in the searchable variable definitions spreadsheet
* Update of default inputs spreadsheet pages

### High level differences and changes from 2017 release of BSM-Public

* Addition of generic structure to represent up to two co-products along with a primary biofuel product (Cellulose to ethanol and Cellulose to Hydrocarbon modules).
* Revision of ethanol import/export structure to allow exports based on differentials between endogenously-generated US ethanol prices and assumed exogenous ethanol prices outside the US.
* Addition of structure to capture evolution of starch ethanol facilities to include production of cellulosic ethanol from current co-products
* Incorporation of input data from 2019 USDA baseline agricultural projections, and re-calibration of feedstock supply parameters to reflect
* Simplification/streamlining of transportation cost logic in feedstock logistics module.