Sibyl

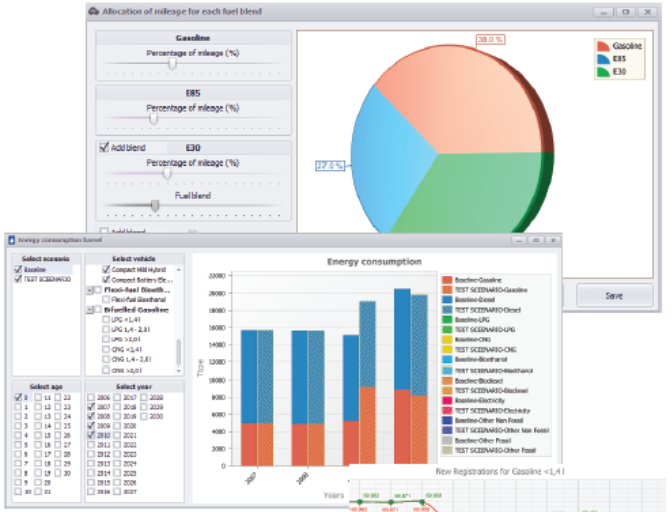
Vehicle Stock, Air Pollutants, and GHG Projection Policy Evaluation Tool

EMISIA WORKSHOP, Zurich, 2017-11-17

What is SIBYL for?

What can SIBYL do for you?

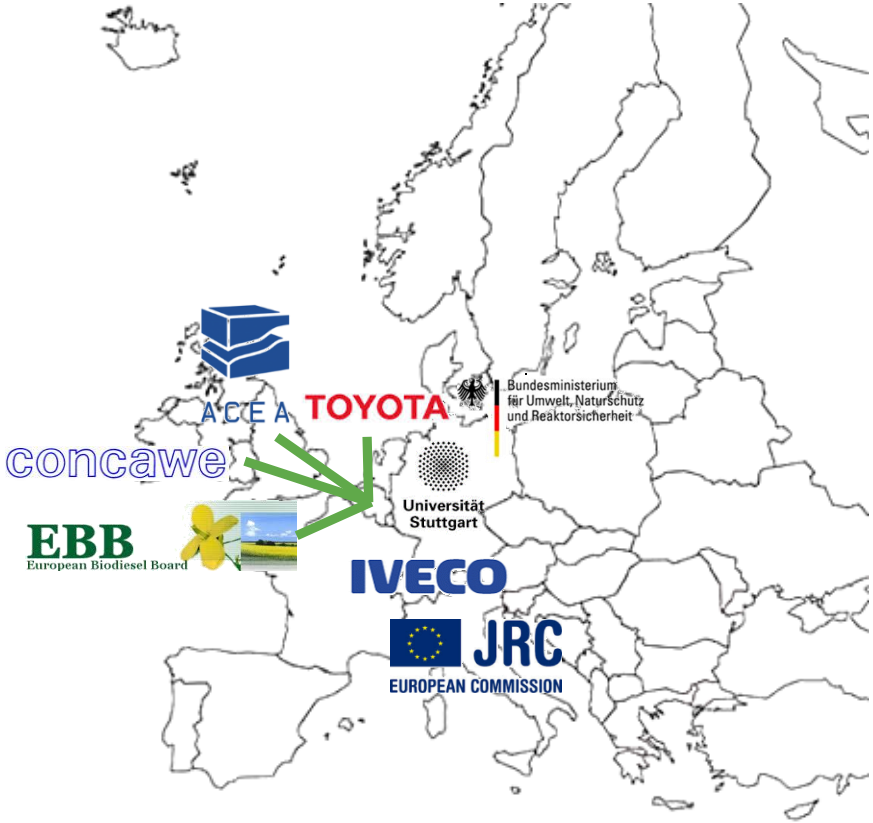
- Provide you with state-of-the art baseline projections, established at an EU level
- Assist you in developing alternative scenarios
- Produce ready-to-use tables and graphs for your reports



What can SIBYL offer?

- Coverage of all EU MSs individually and EU27 as a whole
- Detailed information on vehicle stocks and activities
- Fully-interactive graphs that greatly accelerate your work
- Flexible scenario creation and presentation
- Access to updates and revisions of the baseline and the model capabilities

SIBYL clients



emisia

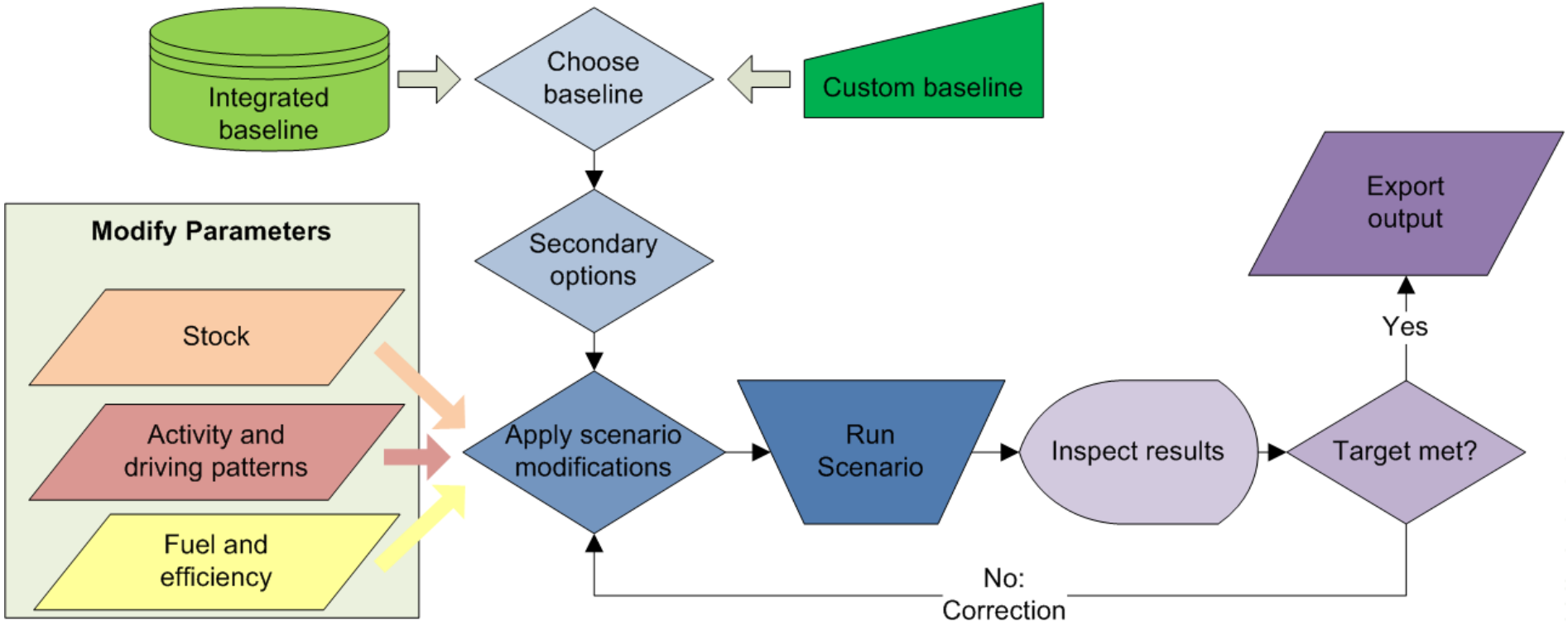
Fleet dataset: historical years

- EMISIA actively maintains up-to-date datasets used in COPERT/SIBYL
- Up to 2010, data are based on FLEETS and TRACCS projects funded by EC
- Latest update in 9.2017 covering the period 2010-2016

Different sources of historical data

Source	Information provided
Eurostat	Stock and new registrations per fuel and engine capacity
EC Statistical Pocket Book	Stock and new registrations
ACEA/ACEM	New registrations per fuel, sper segment
ANFAC Motor Vehicle Parc	Stock of vehicles per fuel
CO_2 monitoring database	New registrations with details for every single vehicle sold
EAFO (European Alternative Fuels Observatory)	Stock and new registrations of alternative fuels
NGVA Europe (Natural Gas Vehicle Association)	Stock of natural gas vehicles
NGV Global (Natural Gas Vehicle Knowledge Base)	Stock of natural gas vehicles
National statistics web sites	Stock and new registrations (level of detail country-dependent)
Other literature, studies, reports	Various information

Scenario building and testing



Coverage

WtW analysis

- TtW
- WtT

Trip patterns

- Urban/ rural/ highway
- eMobility

Vehicles

- Conventional (COPERT)
- Electricity-based
- Flex-fuel
- Bi-fuel
- User-defined

Fuels

- Fossil
- Electricity
- Bioethanol/ Biodiesel
- LPG/CNG
- Hydrogen

Emissions

- CO2, CH4, N2O, BC
- NOx, NO
- VOC, NMVOC
- PM10, PM exhaust
- OC
- NH3
- SO2

Latest features (Sibyl 5.0 – Dec. 2017)

- Baseline updated to latest historic data (2016) and total activity projection based on PRIMES 2015
- Methodology updates
  - Fleet structure identical to COPERT 5
  - Improved fuel flexibility (primary fuels and blends)
  - Customizable Euro standards (add new, impl. dates & emission factors)
- Software updates
  - Create fleet scenarios at different vehicle category levels
  - Interchangeable type-approval with real world energy/CO_2 factors
  - Comprehensive exporting capabilities