



Your eco-social commitment to your transport choices
is a key factor in your economic performance



The *Ton.Kilometer'Blue*



Rating and Labelling Agency of Transport



Agenda

TK'Blue core mission and value

GHG methodology

TK'Blue in short

TK'Blue is an **extra-financial rating and transport labeling** agency which measures, rates and values the eco-responsible performance of each player (contractors and carriers), in compliance with the mandatory and regulatory requirements relating to CO₂ /GHG emissions and CSR.

TK'Blue provides a global and recognized service platform to select, value and measure the accurate societal impact of their eco-responsible choices and to share, collectively, the benefits in a dynamic and sustainable way.



OUR VISION

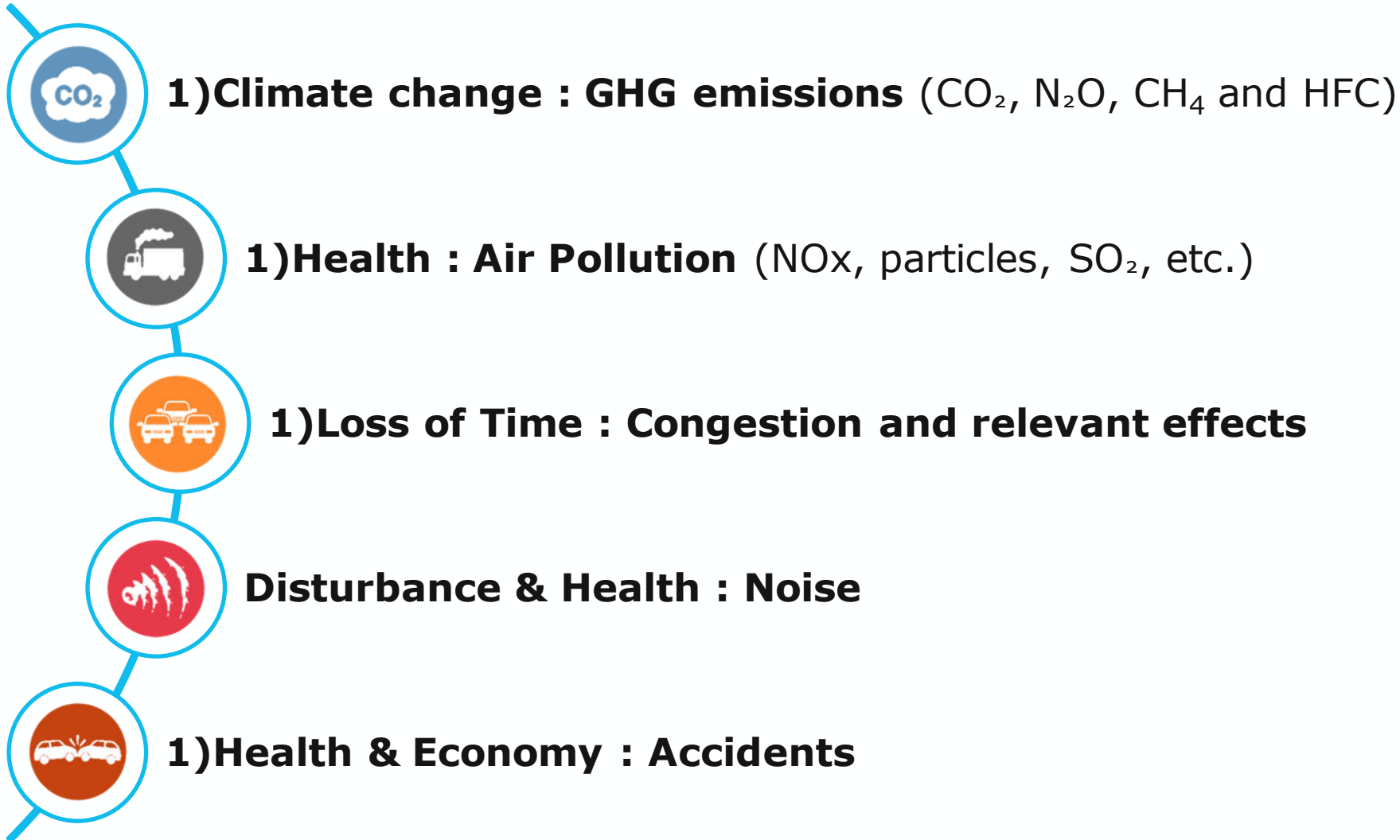
Companies that measure the impacts of their transport activities will be able to best control them and take all their social responsibilities in a context of sustainable development and increasing regulatory constraints.

"What is not measured does not exist"
Niels Bohr, Nobel Prize in Physics 1922

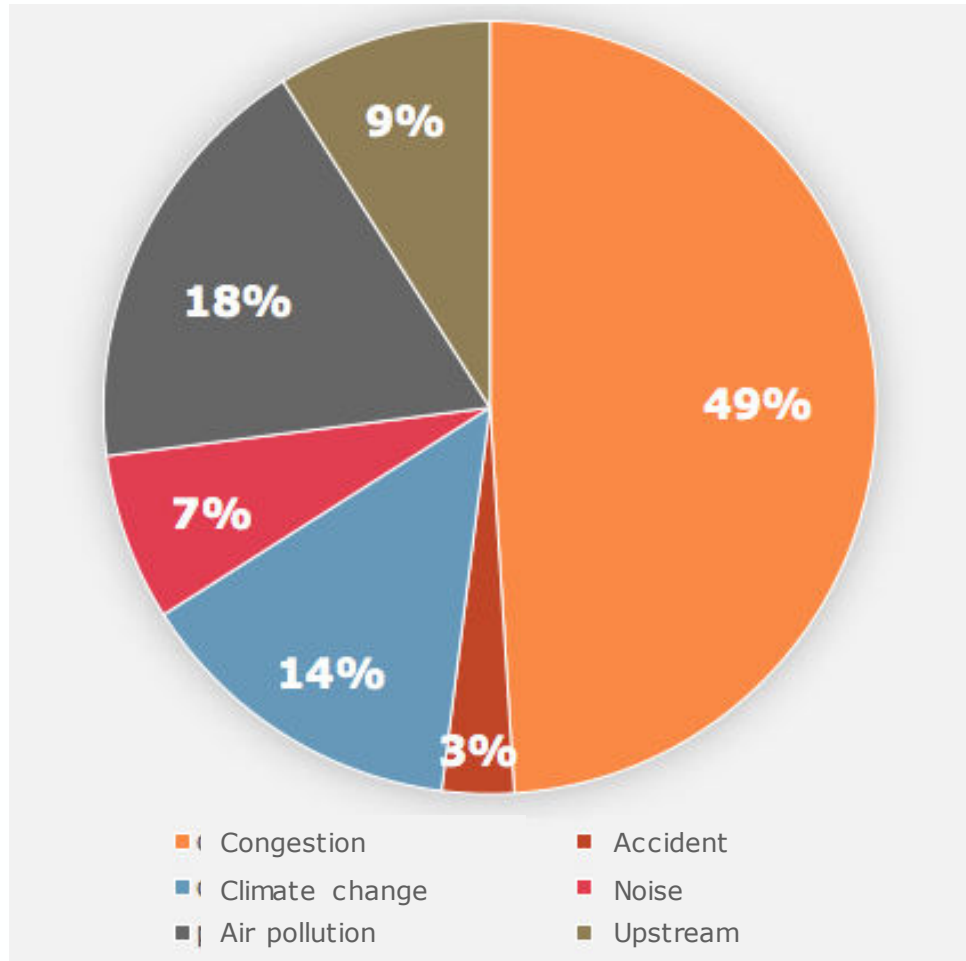
OUR MISSION

Enhance shippers, freight forwarders and carriers who choose eco-friendly transportation solutions that deliver economic, environmental, societal and social benefits.

Transport is at the origin of many disturbances for populations and the Planet



Freight transport contributes €200 billion (excluding infrastructure) to these external costs in Europe



Share calculated according to TK'Blue methodology

Imputation of the costs of externalities in "ton.kilometers" from the EUROSTAT 2015 freight transport statistics for the EU-28

TK'Blue, worldwide coverage as of now



WORLDWIDE GEOGRAPHICAL COVERAGE FROM AND TO:

- ▶ Asia-Pacific, Africa, Europe, Americas, Australia

ALL TRANSPORT FLOWS:

- ▶ upstream & downstream
- ▶ From raw materials to points of sale
- ▶ 5 transport modes:
 - ▶ Road, rail, air, sea, barge
- ▶ Single and multimodal mode
 - ▶ e.g. truck-sea-train

COMPLETE SUPPLY CHAIN:

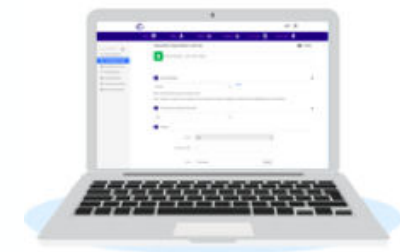
- ▶ Transport
- ▶ Storage

ALL THE NUISANCES:

- ▶ CO₂/GHG
- ▶ Particles, NO_x, SO_x
- ▶ Noise, accidents, congestion

A Methodology which includes

- ▶ Regional specificities (technical standards and regulations), global distance calculators
- ▶ New energies, or vehicles/motors
- ▶ Multiple allocation units : t.km, TEU.km, ...
- ▶ Large compatibility of TK'Blue platform data import tools with formats used by carriers, forwarders or regulatory databases (Thetis MRV ..)



TK'Blue at a glance : a robust solution



**+200
millions**

Transport segments



+1.000 users



R&D + IT :

20% of T.O.



120.000

Registered vehicles



2.284.819* t

CO2e emissions



Trips :

38.693.101.715** ton.km

2015
Operating

2012
founded

**équivalent to 2 days of France CO2 emissions*

*** almost 1 million times around the world for a 1 ton pallet*

Some of our clients...

RETAIL-FOOD



HEALTH-COSMETICS



MANUFACTURING





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Carrier declaration for calculating GHG emissions



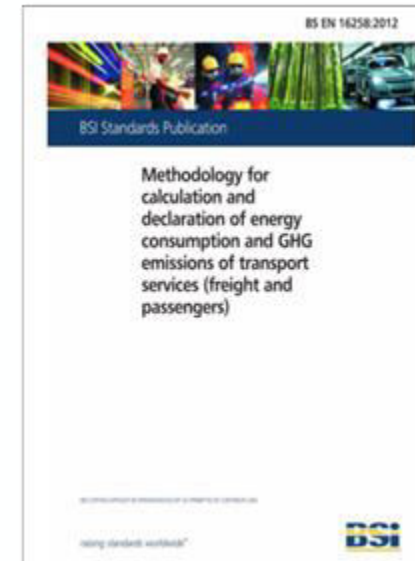
Carriers are requested to report their fuel consumption, the average tonnage transported and the empty journey rate of their fleet (s) in order to establish their CO₂ / GHG index (s).

TK'Blue calculates the TK' GHG index which quantifies the mass of GHGs emitted for each ton.Kilometer traveled (or any other authorized allocation unit) by the carrier.

The calculations are carried out in accordance with the European standard CEN EN 16 258.

The TK'GHG is expressed:

- ▶ in **gCO₂e / t.km** or for another allocation unit (TEU ...)
- ▶ includes **all GHGs** covered by Annex A of the Kyoto Protocol
- ▶ the "Well to Wheel" (WTW) and the "Tank to Wheel" (TTW) according to the European standard
- ▶ taking into account empty journeys and the loading rate of vehicles



CEN 16258 Norm
December 2012



GHG declaration: 3 possible levels – targeting actual primary data from carriers

LEVEL 1: DEFAULT VALUES

Calculated by means of transport or type of activity.

LEVEL 2: ACTUAL AVERAGE VALUES OF ALL CARRIER FLEETS

Based on the carrier's observed energy consumption over the last 12 months, as well as its average tonnage transported and its empty journey rate

LEVEL 3: ACTUAL AVERAGE VALUES SPECIFIC TO A PORTION OF CARRIER VEHICLES

Based on the carrier's observed energy consumption over the last 12 months, as well as its average tonnage transported and its empty run rate, specific to each type of means of transport

A
C
C
U
R
A
C
Y

A shipper has a detailed view of the accuracy of its carriers in their GHG reporting

The TK'T index: technical and organizational performance of the carrier



TK'T Index

The TK'T index:

- ▶ Represents the **technological and organizational performance** of the carrier's fleet
- ▶ Is the index given to a **carrier**, it indicates its degree of eco-responsible commitment
- ▶ Allows the eco-responsible **performance of the carriers to be compared** with each other
- ▶ Lets **trends** appear in time and the impact of the action plans

Example of TK'GHG and TK'€ index

Combined GHG index and resulting TK'€ index

Combined level 2 index

GEStructeurs (11/09/2017) / A0
 Index per kilometer | Tonnage allocation



FR



EN_Gw

EN_Gt

Combination reliability



The combination is reliable because the declared **consumption** for the combined GHG index reflects the declared performances of the TK'Blue fleet.

Index c€/t.km

0,71 c€/t.km

	Noise	0,02 c€/t.km
	Congestion	0,21 c€/t.km
	Accidents	0,04 c€/t.km
	Pollution	0,07 c€/t.km
	Climate change	0,24 c€/t.km
	Upstream-downstream	0,13 c€/t.km

Collaborative principle between carriers and shippers

COMBINING QUANTITATIVE LOGISTIC DATA FROM SHIPPERS WITH QUALIFIED INFORMATION FROM CARRIERS

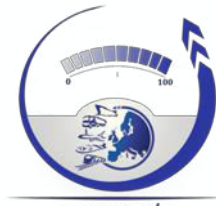
TK'BLUE CARRIERS

GHG DECLARATION LEVEL 1, 2 ou 3 :

Average consumption, load rate



Verification of consistency



Carriers declaration:

actions plan, innovations, training, standard

TK'BLUE SHIPPERS

Data flows

Logistic data

Verification of consistency

Tonnes, km

Webservice
TMS – ERP
Excel or CSV Files



GHG emissions and Negative external costs of the shippers transport activities

Index TK'T,
TK'GHG and TK'€

A third-party rating entrusted by both supplier and customer

TK'Blue, a reliable and trusted Third party

- ▶ relying on a unique methodology validated by an international scientific college
- ▶ methodology of calculation and transmission of GHG information compliant with the European Norm EN 16258
- ▶ Pan-European governance (74 people, 3 Councils)

TK'Blue enrich the usual selection criteria

- ▶ Capacity leadtimes, security, price, etc.
- ▶ Adding 1 environmental score: TKBlue

TK'Blue allows collaborative work between carriers and shipper, with shared access to data



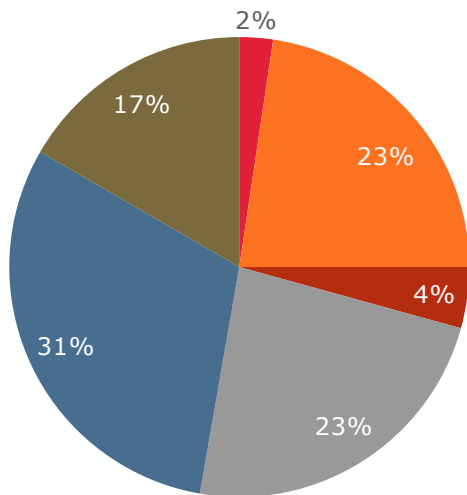
Primary data and collaborative work allows to capture improvement from technology or better organization

PL ≥ 32t EURO IV
50% loaded
2,33 c€/tkm

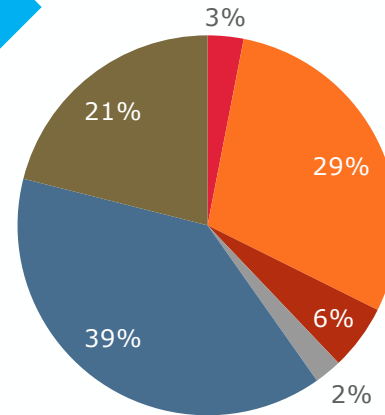
PL ≥ 32t EURO VI
50% loaded
1,80 c€/tkm

PL ≥ 32t EURO VI
80% loaded
1,13 c€/tkm

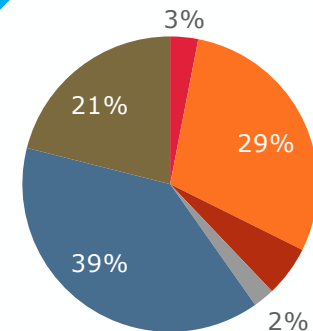
- Noise
- Congestion
- Accidents
- Pollution
- Climate Change
- Upstream and Downstream



From EURO IV to EURO VI



Increased loading rate





Feedbacks from shippers

- ▶ **Access to data is not a problem**, even if from multiple sources (internal / external) and multiple formats
- ▶ **Access to data from carriers** : on GHG, but also the TK'T information allowing to evaluate them on precise grounds
- ▶ **Full service solution** : simplicity, flexibility, personalized services
- ▶ **Our project manager takes in charge datas cleaning and any settings** in order to avoid misunderstandings, lack of information, errors ...
- ▶ **We provide quick first calculation with default factors, followed by carriers labelling and improvement of calculation with carriers primary datas**



TK'Blue makes the eco-social commitment of transport stakeholders a vector of their economic performance

« What you can't measure does not exist »
Niels Bohr Nobel Prize in Physics - 1922