



Autostrada del Brennero SpA
Brennerautobahn AG

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BOZEN
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ALTO ADIGE


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GOVERNMENT POLICIES ON AIR QUALITY AND CLIMATE CHANGE

LIFE15 IPE IT 013 PREPAIR - LAUNCH CONFERENCE

«Brenner Lower Emissions Corridor»

Project LIFE15-ENV-IT-000281





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THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT

Partners	A22 (coordinator) APPA - Provincia Autonoma di Bolzano APPA - Provincia Autonoma di Trento Università degli Studi di Trento CISMA IDM Südtirol / Alto Adige
Duration	01.09.2016 – 30.04.2021
Overall budget	€ 4.018.005
Eligible budget	€ 3.311.365
LIFE co-financing	€ 1.922.772 (approx. 60% of the eligible budget)





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THE BRENNER MOTORWAY



ALPINE SECTION



PLAIN SECTION



Length: 314 km

Difference in altitude: 50 - 1375 m above sea level

145 overpasses

131 bridges and viaducts

30 tunnels

DIFFERENT CLIMATIC AND MORPHOLOGICAL CONDITIONS



THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT



To develop a «Low Emissions Corridor» concept to be applied to the A22 by means of the experimental and scientific study of an integrated set of dynamic policies to manage traffic on the basis of a proactive logic

To define the modalities to exploit the concept to the whole Alpine corridor («Alpine BLEC»)



AlpineBLEC: Kufstein (A) - Affi (I)





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THE «BRENNER LOWER EMISSIONS CORRIDOR» PROJECT



maximum environmental
benefits,
minimum inconvenience for
users,
optimal use of the existent
infrastructure,
maximum safety level



AlpineBLEC: Kufstein (A) - Affi (I)



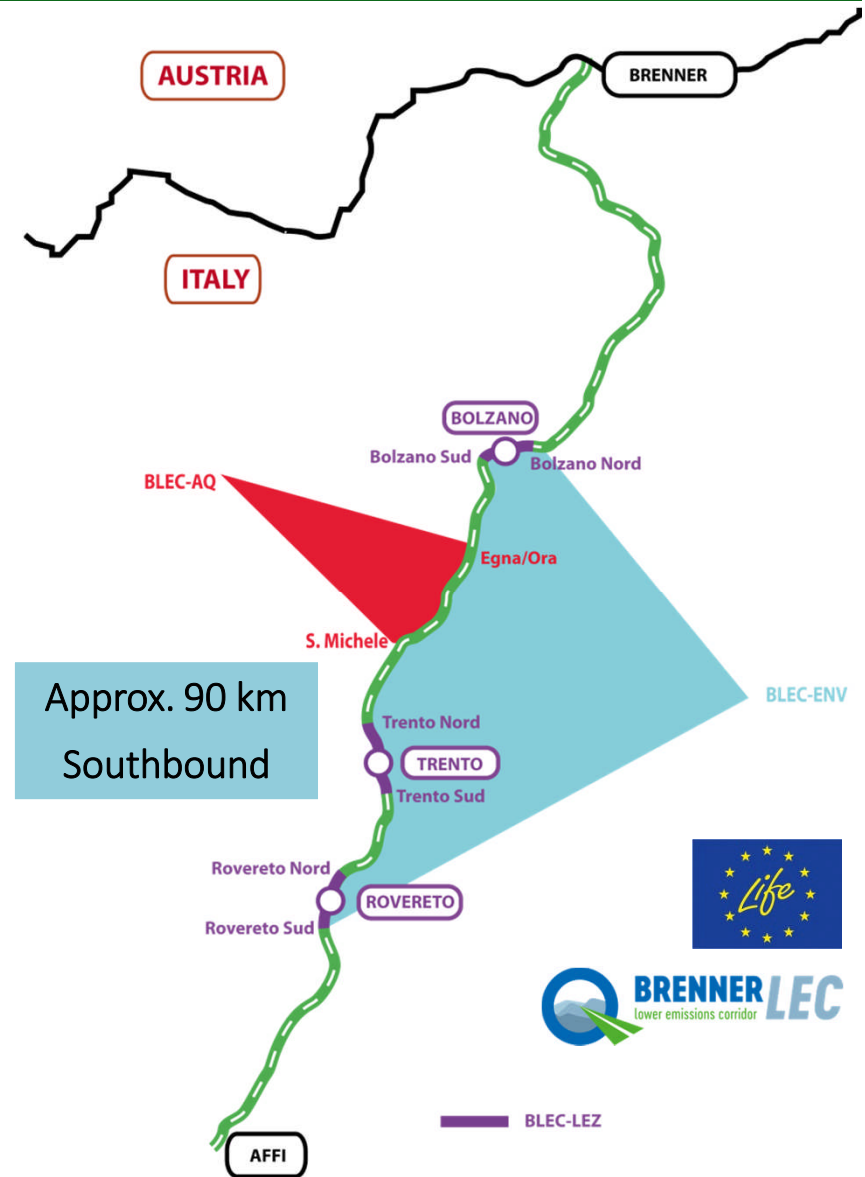
EXPERIMENTAL POLICIES APPLIED WITHIN THE PROJECT

- ❑ Under heavy traffic conditions: **dynamic reduction of speed limits**
- ❑ Under almost saturated conditions: **temporary use of the hard shoulder as additional transit lane**

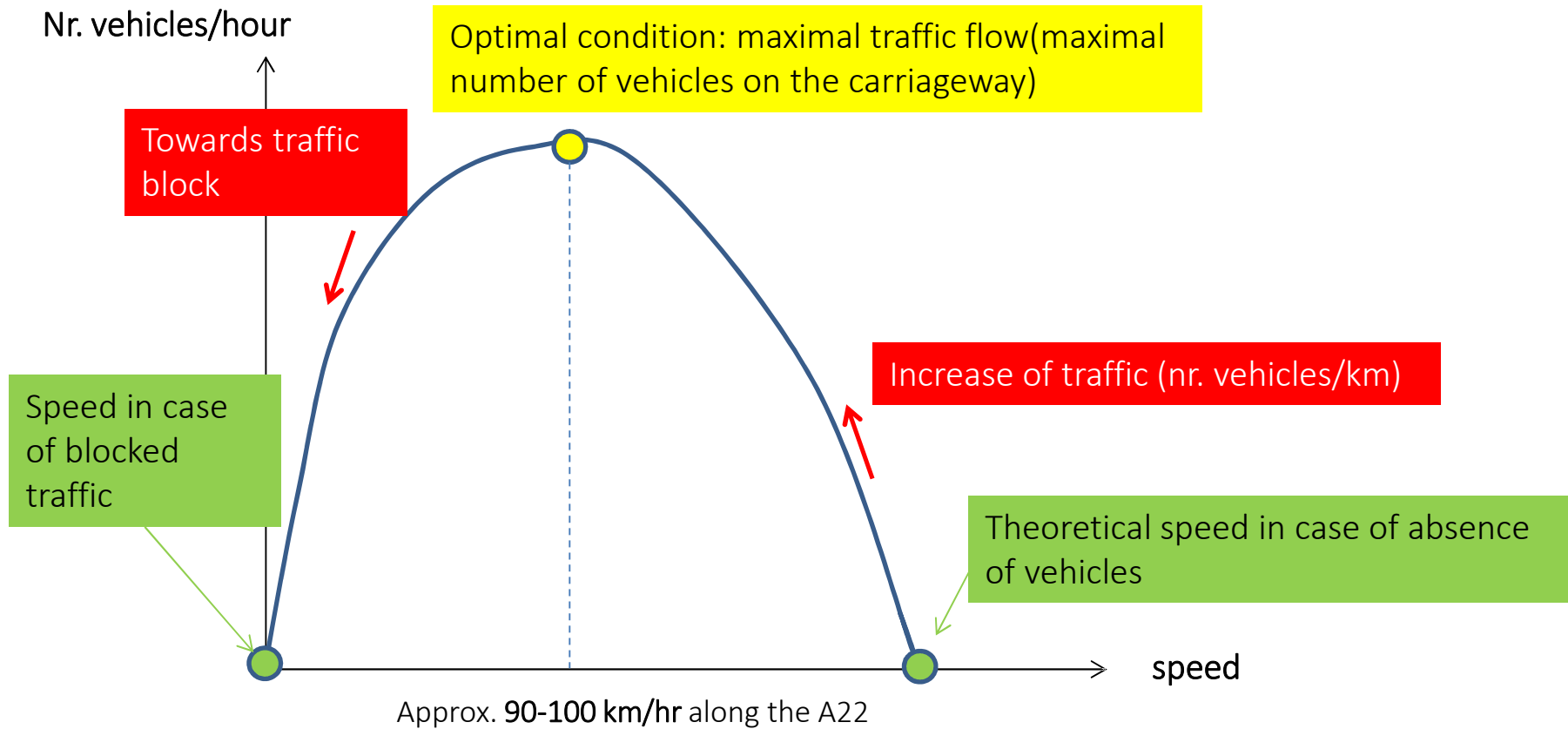


REDUCING SPEED LIMITS WITH HEAVY TRAFFIC...

- ... to increase the motorway capacity
- ... to smoothen traffic
- ... to reduce pollution



WHY REDUCING SPEED LIMITS WITH HEAVY TRAFFIC?



EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-ENV

PHASE 1 (da marzo 2017 a maggio 2018)

Tests with dynamic speed limits and temporary use of the hard shoulder on a short experimental section (Trento South – Rovereto South)

Speed limit reduction:

12 days / year (almost 40% of all critical events)

Dynamic lane activation:

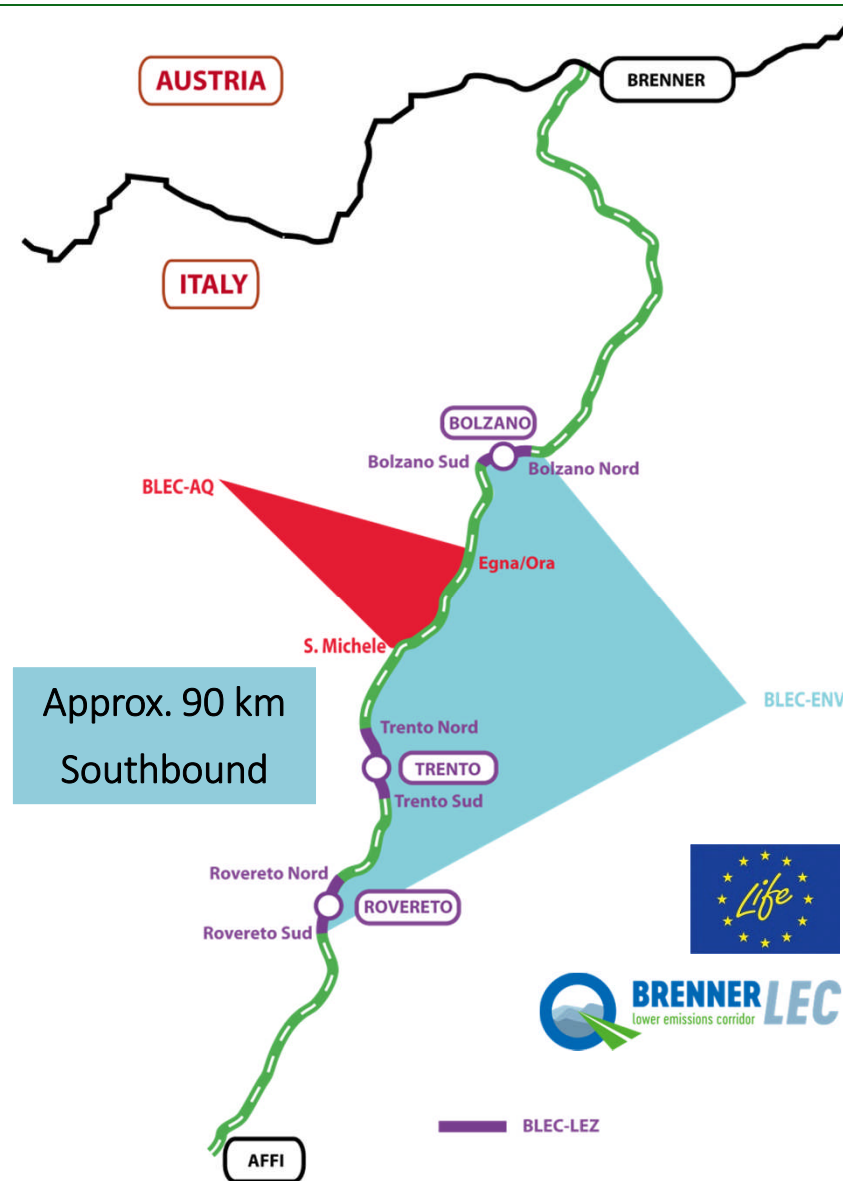
3 days / year

PHASE 2 (from March 2018 to December 2019)

Assessment of dynamic speed limits on the whole project section

PHASE 3 (from October 2019 to April 2021)

Optimization of combined policies



HOW ARE SPEED REDUCTION MEASURES APPLIED?



Speed reduction to 90 km/h (maximal motorway capacity) in two steps



Tests start when traffic begins slowing down north of Trento – before traffic congestions take place – to smoothen traffic flows



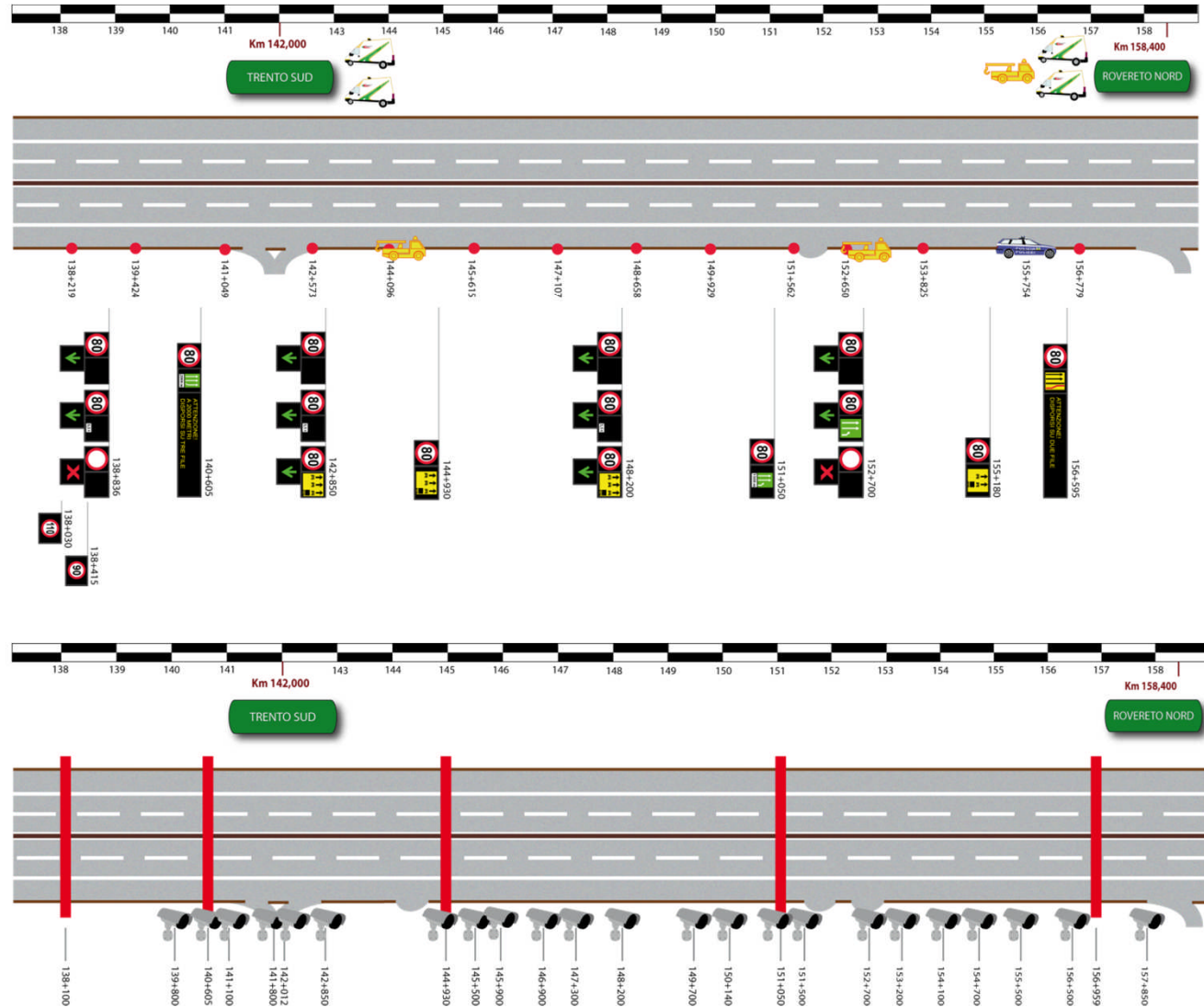


HOW IS DYNAMIC LANE ACTIVATION APPLIED?

Dynamic lane activation – in order to increase the motorway capacity from 3,000 vehicles/hr to 4,000-4,200 vehicles/hr

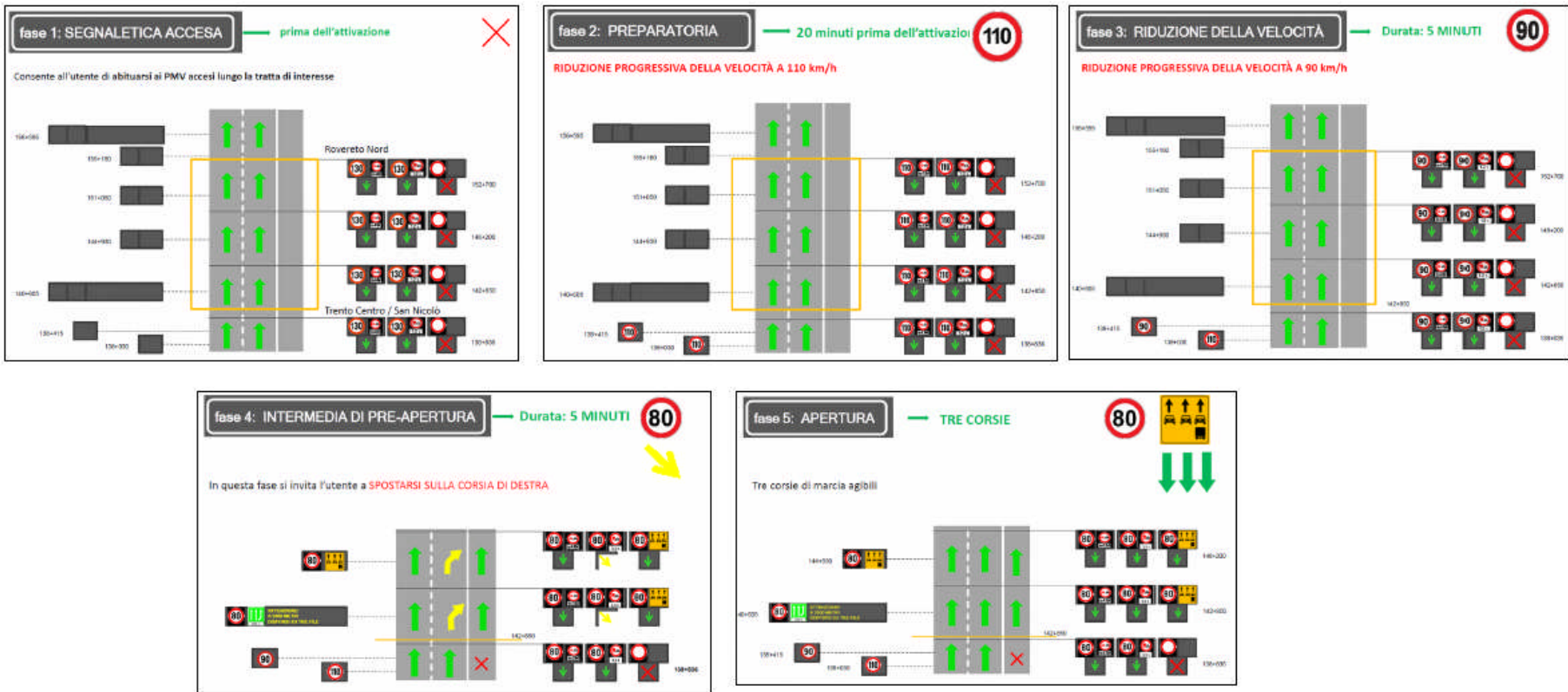


Already infrastructured motorway section



HOW IS DYNAMIC LANE ACTIVATION APPLIED?

According to a special regulation



EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-AQ

Under conditions of high pollution: **dynamic reduction of speed limits for passenger cars**

PRE-PHASE (from February 2017 to April 2017)

Testing the correct functioning

PHASE 1 (from May 2017 to April 2018)

Comparison of speed limits 130 km/h - 100 km/h

PHASE 2 (from May 2018 to April 2019)

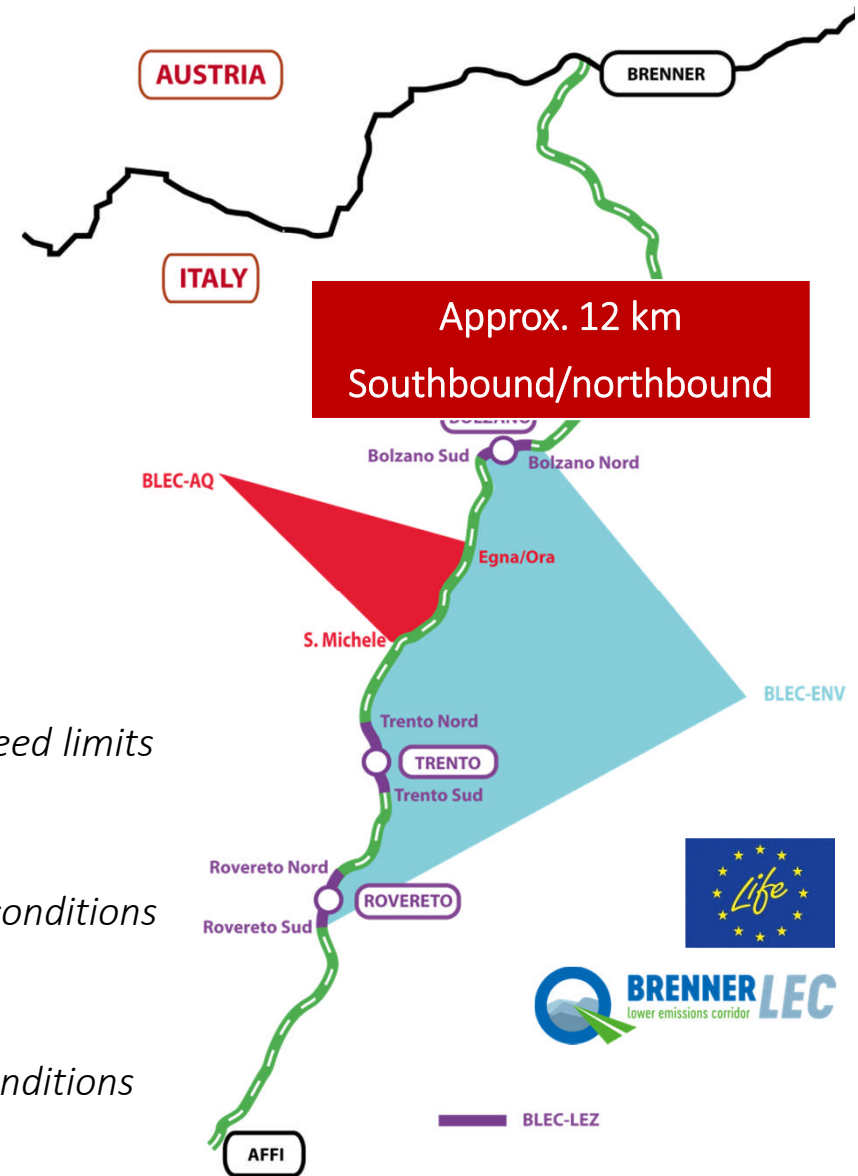
Comparison of speed limits up to 90 km/h (even variable speed limits within the same motorway stretch)

PHASE 3 (from May 2019 to December 2019)

Speed management according to the measured air quality conditions (reactive system)

PHASE 4 (from October 2019 to April 2021)

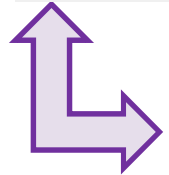
Speed management according to the foreseen air quality conditions (proactive system)





EXPERIMENTAL POLICY APPLIED WITHIN THE PROJECT - BLEC-LEZ

Under traffic conditions in urban areas:
**integrated use of information channels (VMS,
apps, etc.)**

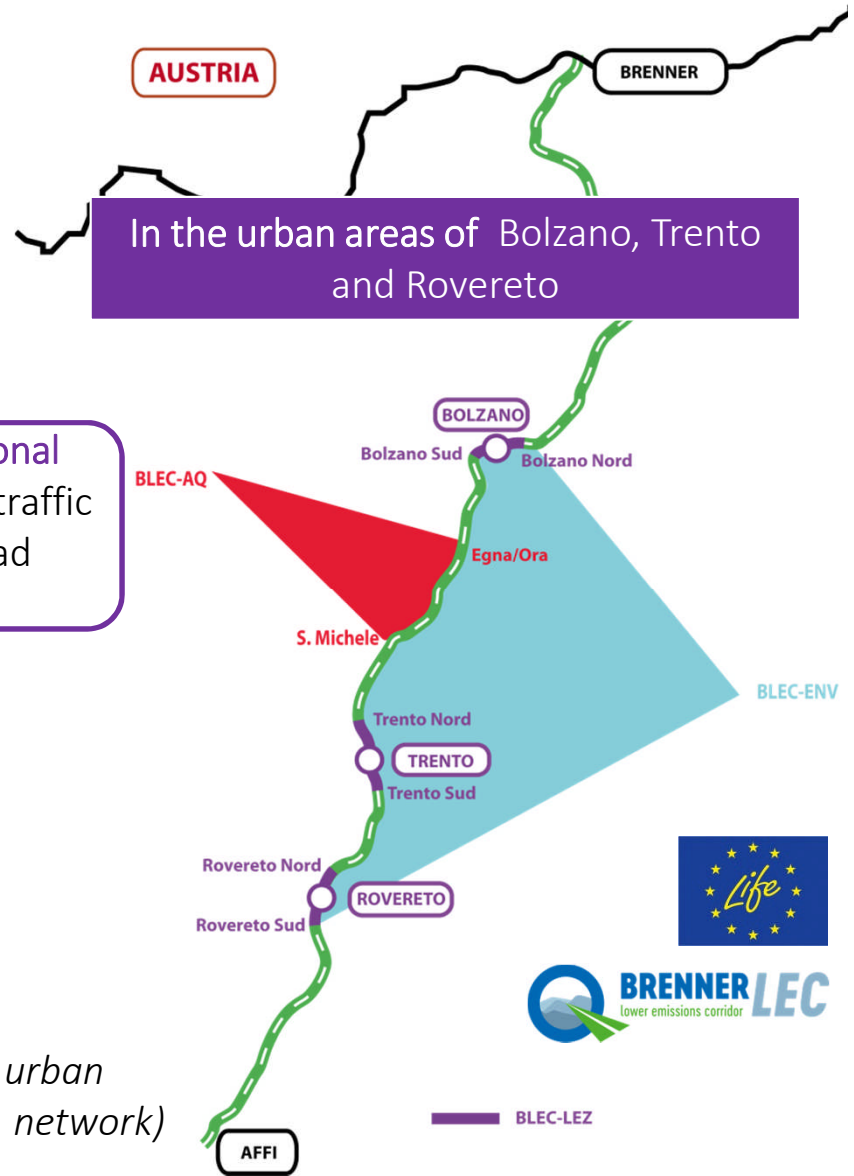


Real-time analysis of **travel times** along the **National Road 12** and monitoring possible dangers of high traffic flows from the motorway to the suburban road network

PHASE 1 (from September 2017 to March 2018)
Operative interaction between traffic management centers

PHASE 2 (from April 2018 to October 2019)
Technological integration of traffic management centers

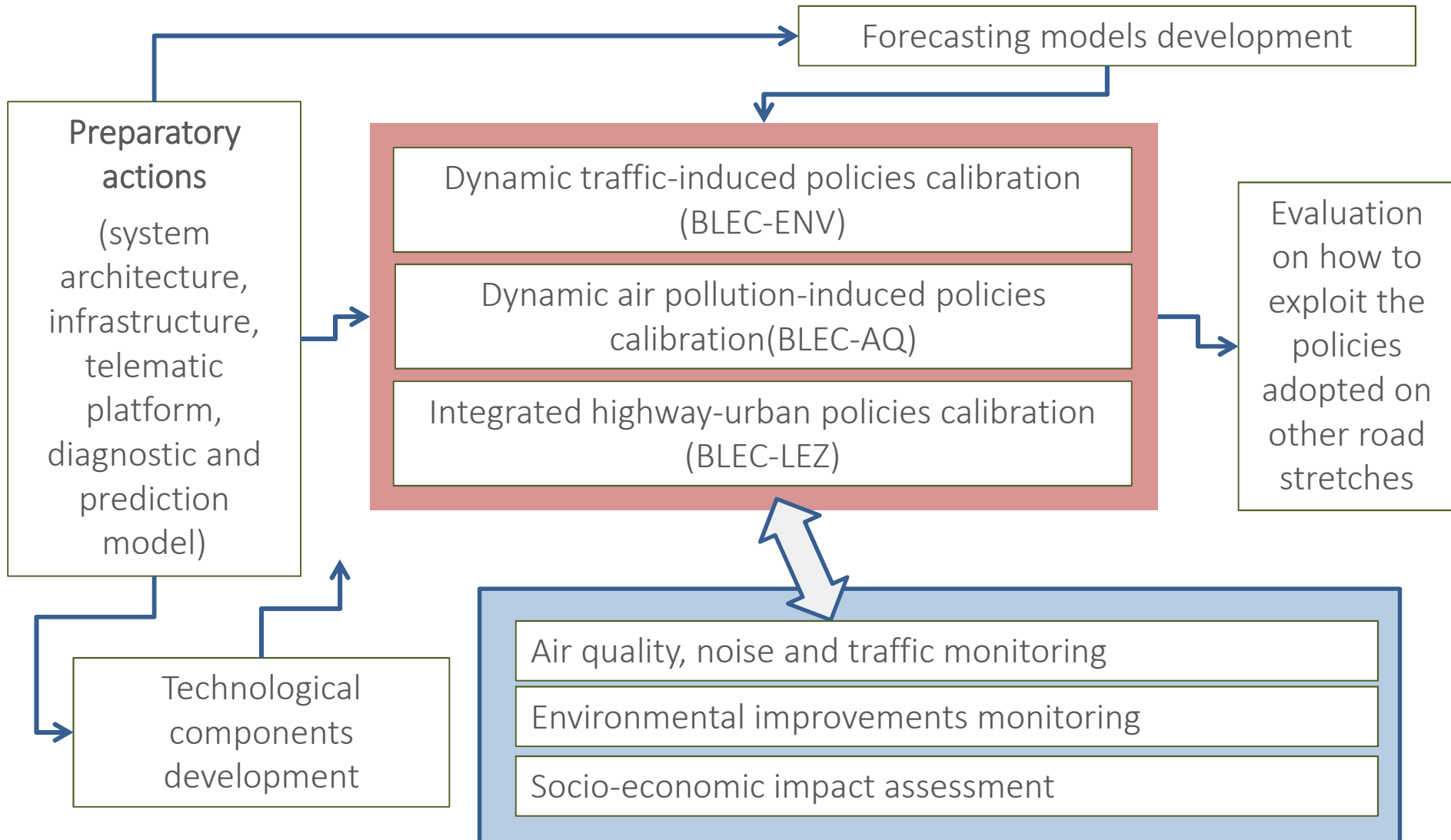
PHASE 3 (from November 2019 to April 2021)
Creation of joint dynamic corridors for traffic flows crossing urban areas (optimized use of the motorway, urban and suburban network)



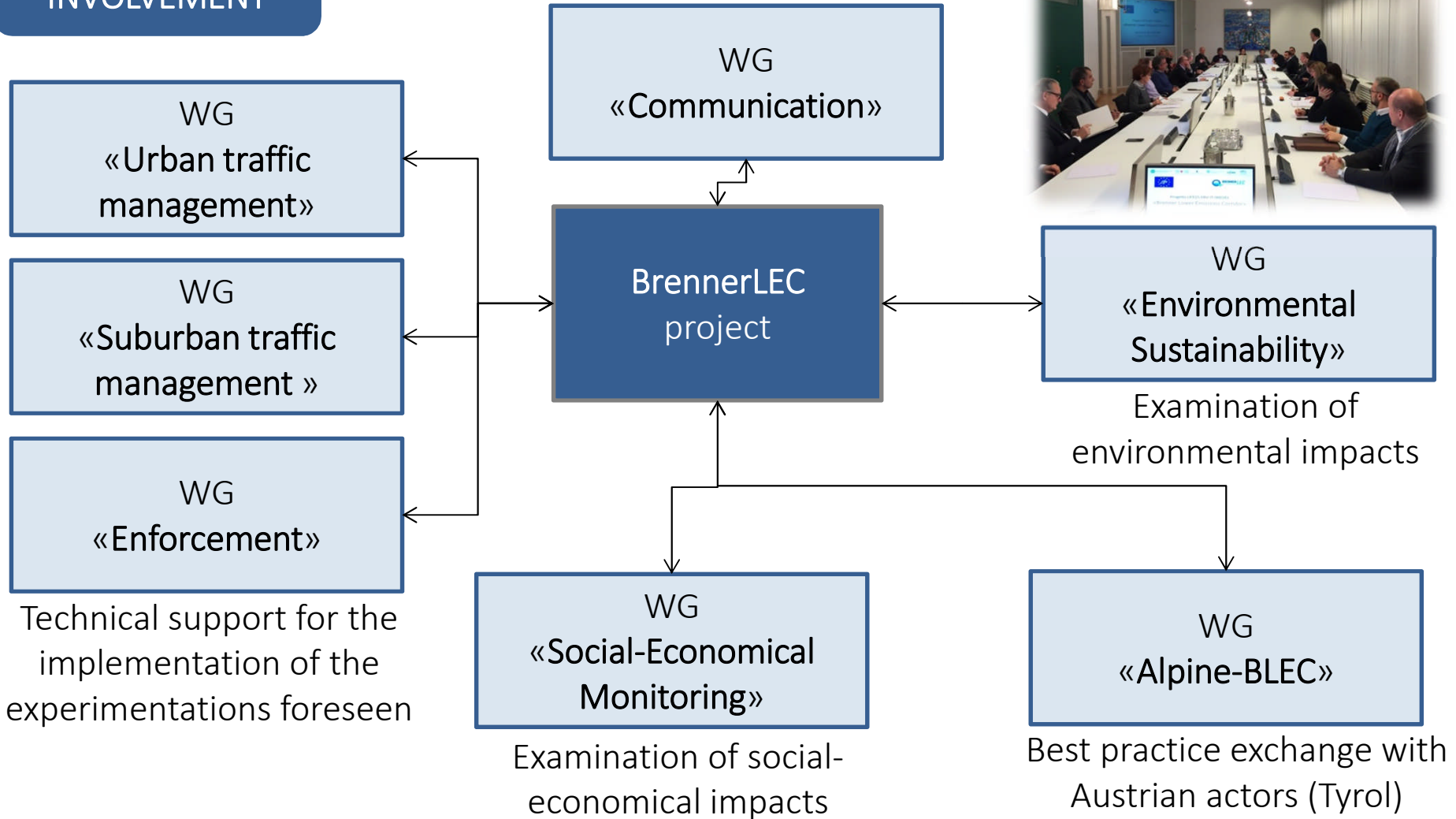
BLEC-LEZ



ACTIONS PLAN – technical part



STAKEHOLDERS INVOLVEMENT

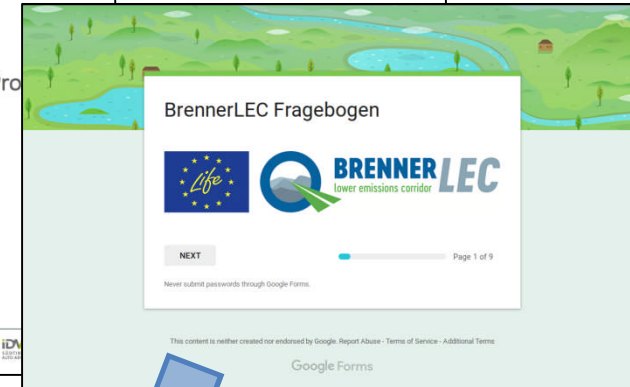
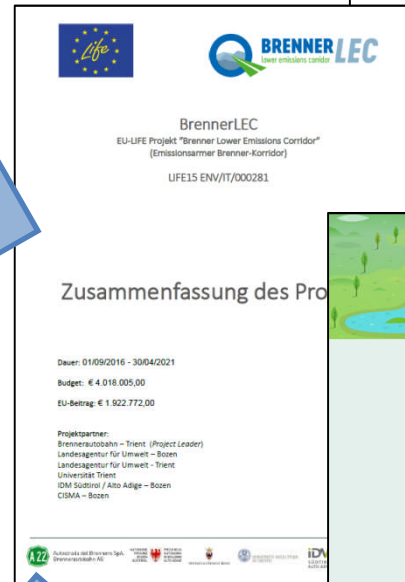


USERS' INVOLVEMENT



28.11.2016
Press conference

Project factsheet



Questionnaire

Project page on the A22 web site
<http://www.autobrennero.it/it/la-rete-autostradale/ricerca-tecnologica/brennerlec/>



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USERS' INVOLVEMENT

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MARKETING & PUBBLICITÀ



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USERS' INVOLVEMENT

Posters

**ALZA IL PIEDE!
PER EMISSIONI RIDOTTE
FUSS VOM GAS!
FÜR WENIGERE EMISSIONEN**

low emissions
improve air
Quality

www.brennerlec.life

Flyers

Il problema
Da aprile 2016 in alcune località vicine alla Autostrada del Brennero si sono registrati livelli elevati di inquinamento atmosferico, in particolare per quanto riguarda le particelle sottili (PM10 e PM2.5). La causa di questo inquinamento è principalmente il traffico veicolare che transita sulla strada.

La strategia
L'obiettivo è quello di ridurre il traffico veicolare e di migliorare la qualità dell'aria. Per raggiungere questo obiettivo, è necessario adottare misure che riducano il numero di veicoli in circolazione e che migliorino l'efficienza dei motori.

Una migliorata situazione
Una migliorata situazione si registrerà quando il traffico veicolare sarà ridotto e la qualità dell'aria sarà migliorata.

Lo sapevate?
Da aprile 2016 in alcune località vicine alla Autostrada del Brennero si sono registrati livelli elevati di inquinamento atmosferico, in particolare per quanto riguarda le particelle sottili (PM10 e PM2.5).

Das Problem
Seit April 2016 sind in einigen Ortschaften in der Nähe der Brennerautobahn erhöhte Luftschadstoffkonzentrationen zu beobachten, insbesondere für Feinstaub (PM10 und PM2.5). Die Ursache für diese Verschmutzung ist vor allem der Verkehr auf der Straße.

Die Strategie
Ziel ist es, den Verkehr zu reduzieren und die Luftqualität zu verbessern. Um dies zu erreichen, sind Maßnahmen erforderlich, die den Verkehr reduzieren und die Effizienz der Motoren verbessern.

Eine verbesserte Luftqualität, verringerte Treibhausgase und weniger Lärm... und somit eine Win-Win-Situation für alle!

Schon gewusst?
Die erhöhte Luftverschmutzung in einigen Ortschaften in der Nähe der Brennerautobahn ist vor allem auf den Verkehr auf der Straße zurückzuführen.

The problem
From April 2016, elevated levels of air pollution have been recorded in some locations near the Brenner motorway, particularly for fine particulate matter (PM10 and PM2.5). The main cause of this pollution is road traffic.

The strategy
The goal is to reduce traffic and improve air quality. To achieve this, measures are needed to reduce the number of vehicles on the road and improve engine efficiency.

Did you know?
The increased air pollution in some locations near the Brenner motorway is primarily due to road traffic.

Partners
Autostrada del Brennero SpA, Provincia Autonoma di Bolzano, Provincia Autonoma di Trento, Università degli Studi di Trento, IDM, CISMA.

BrennerLEC
Co's
Definizione
Traguardo
Was ist das?
Definition
Ziel
What is this?
Definition
Objective

Glossario
LIFE-Programma
Wie wird...
Dynamische Geschwindigkeitsempfehlung
Stapelplan
Dynamische Fahrer*in
LIFE-Programma
Wie wird...
Dynamische Geschwindigkeitsempfehlung
Stapelplan
Dynamische Fahrer*in

low emissions improve air Quality

www.brennerlec.life

Large-scale dissemination

- Notice boards
- Web site
- Media activities and public events
- Dissemination material
- Advanced Traveller Information Services + questionnaires for users
- Short technical reports





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