

Reducing carbon emission through optimizing traffic signal timing

2004 - North America

Portland (USA)

Thématiques

TRANSPORTATION - MOBILITY

Traffic regulation

PRIVATE / PUBLIC / CHARITY-BASED PARTNERSHIPS

Summary : Associated with Climate Trust, the City of Portland implemented a project to improve traffic, leading to a 157,000 tons of CO2 saved in less than 6 years.



In 2002, The Climate Trust, a Portland-based non-profit organization investing in projects that generate CO2 offsets, contracted to buy carbon credits from the City of Portland through the implementation of a project designed to improve the timing of traffic signals at congested intersections.

The project finally came to light in 2004, when the City of Portland (540,000 inhabitants) decided to optimize traffic signal timing in 17 streets, representing 135 intersections. In this framework, the city used a computer software programme (Trafficware Synchro Studio), which manages timing parameters of green lights according to traffic movements and the timed relationships between signalized intersections, also taking into account pedestrian requirements. The traffic parameters are hence adjusted as traffic patterns change throughout the day and week.

The approach resulted in a smoother traffic with less acceleration and deceleration phases, saving over 6.6 million litres of fuel per year, with an amazing 157,000 tons of CO2 saved less than six years into the project, the equivalent of more than 30,000 passenger vehicles off the road for an entire year.

Such improvements in traffic flow and emissions reductions led to extend the contract through to December 31st 2012, with the aim to reduce an additional 21,000 tons of CO2.

Cost \$533,000 (provided by the Climate Trust of Oregon).

Contact

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Liens

<http://www.portlandonline.com/transportation/>

Factsheet published on 23-02-2010

Factsheet's web address : http://www.urbiz.fr/fiche_BP43

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