

Lessons learned from case studies implemented in practice - Identification of success parameters

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One of Europe's leading companies in the field of **mobility research**, AMOR has extensive experience (since '93) in cooperating with EU research and promotional institutions. Austrian Mobility Research offers state of the art know-how and access to the latest European research results as well as the latest examples in the field of **mobility management**.

Austrian Mobility Research works for **sustainable environmental-friendly and people-friendly traffic** development. The range of activities includes research, consulting, training, and project implementation in the field of mobility management. Customers of AMOR profit from the flexible and interdisciplinary teams, offering years of international and national experience.

FGM-AMOR Projects – Clean and Sustainable Transport

Research

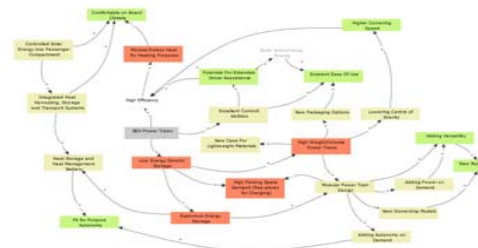
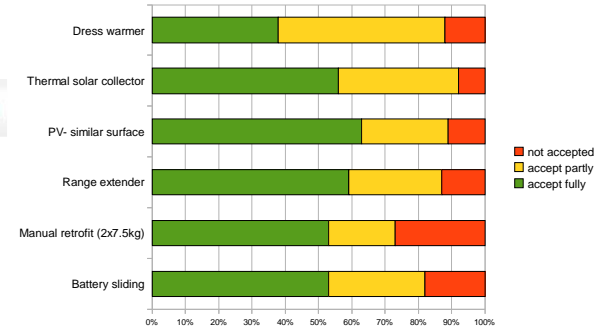
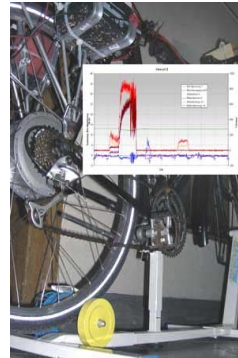
Foresight Analysis
Innovation
Assessment/Incubation

Application / Usage

Market Research
Project Development
Project Management
Technical Consulting/
Technology Validation

Strategy/ System Design

Air Quality /Noise
Accessibility/
Fairness
Safety &
Information




Strategy and Targets Project Work WP4

Exploit experience of stakeholders when implementing alternative fuel or propulsion projects


80 case studies (all fuels) were collected (presented on the ALTER-MOTIVE website)

- update cases available from the ELTIS.ORG website
- New cases found in a wide variety of media (newspaper, internet, television etc.)
- 3 types of adapted questionnaires were collected by the partners – mostly from those cases



Substitution of conventional fuels with LPG/bio-diesel fuels, used in the public transport vehicles in Sofia/Bulgaria

A programme of the Sofia Municipality for introduction of natural gas into the public buses, operated by the municipal transport company.



Background

In 1999 the Sofia Municipality started a programme for introduction of LPG into the public bus fleet. The programme is carried out through the municipal company Sofia Autotransport EAD, with co-financing by the Bulgarian Ministry of Environment and Waters. The programme is implemented through a number of projects, including conversion of diesel engines into methane ones, purchase of new methane-fueled buses, construction of natural gas distribution pipeline and compressor stations.

Major results and lessons learned

Currently, 55 buses on diesel-methane and 13 buses on methane are in operation. The exploitation of these buses in 2008 reduced the year consumption of conventional fuel by 4.53%. Construction of a distribution gas pipeline and of two gas compressor stations was carried out. The acceptance of the measure has been quite positive. The future plans of the transport company include increasing of the number of the green buses, however, due to a lack of funds, this process might delay.

Major targets

Sofia, the capital of Bulgaria, is the biggest civic and industrial centre of the country. The number of the motor vehicles is constantly increasing, which contributes to the high enough air pollution of the city. The main target of the programme, started by the Municipality, was the reduction of air pollution. Furthermore, the need of increasing the quality of the transport services and the heightening of its efficiency were aimed by the programme.

More information

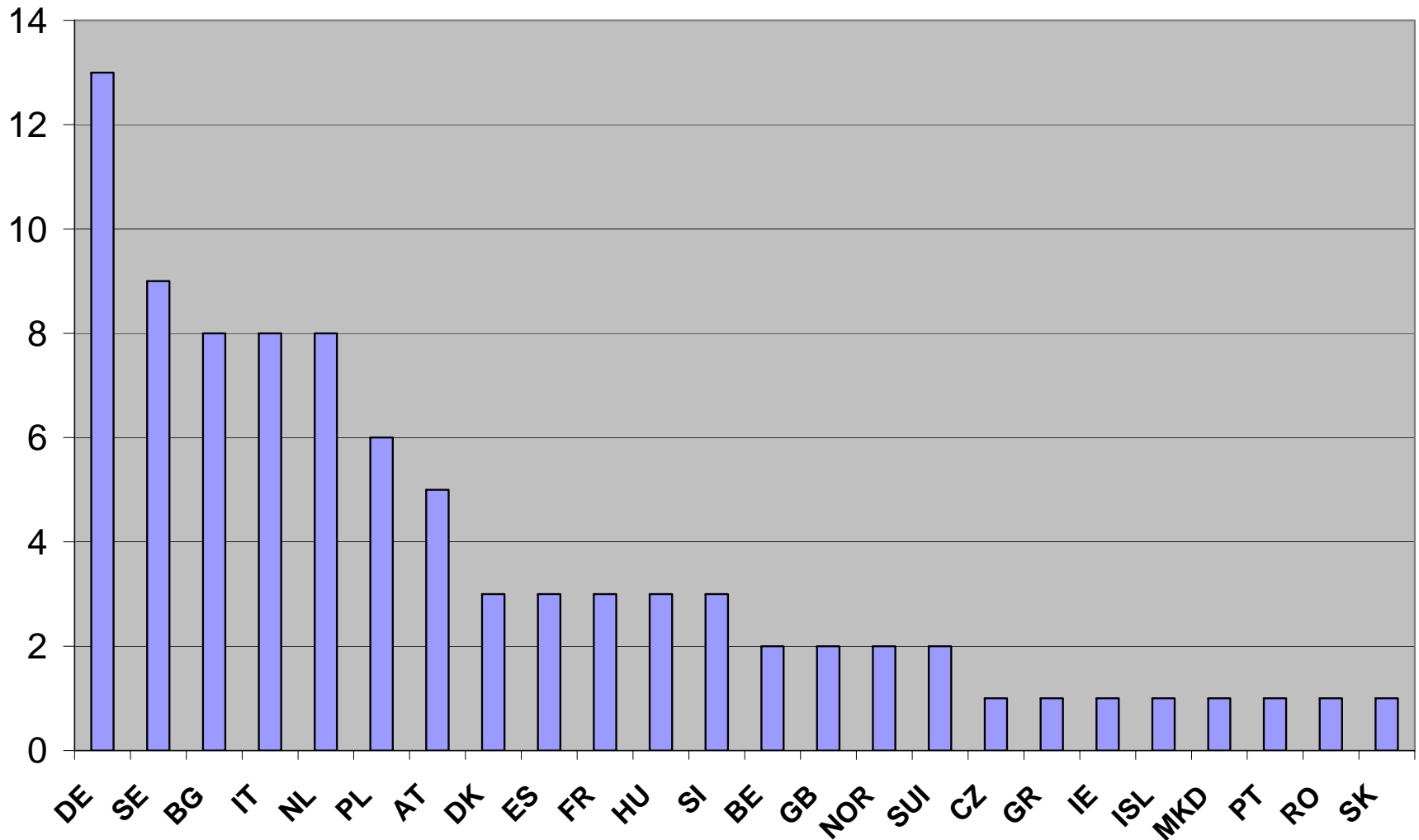
http://www.skgt-bg.com/Structure/auto_transport.htm

Evaluation

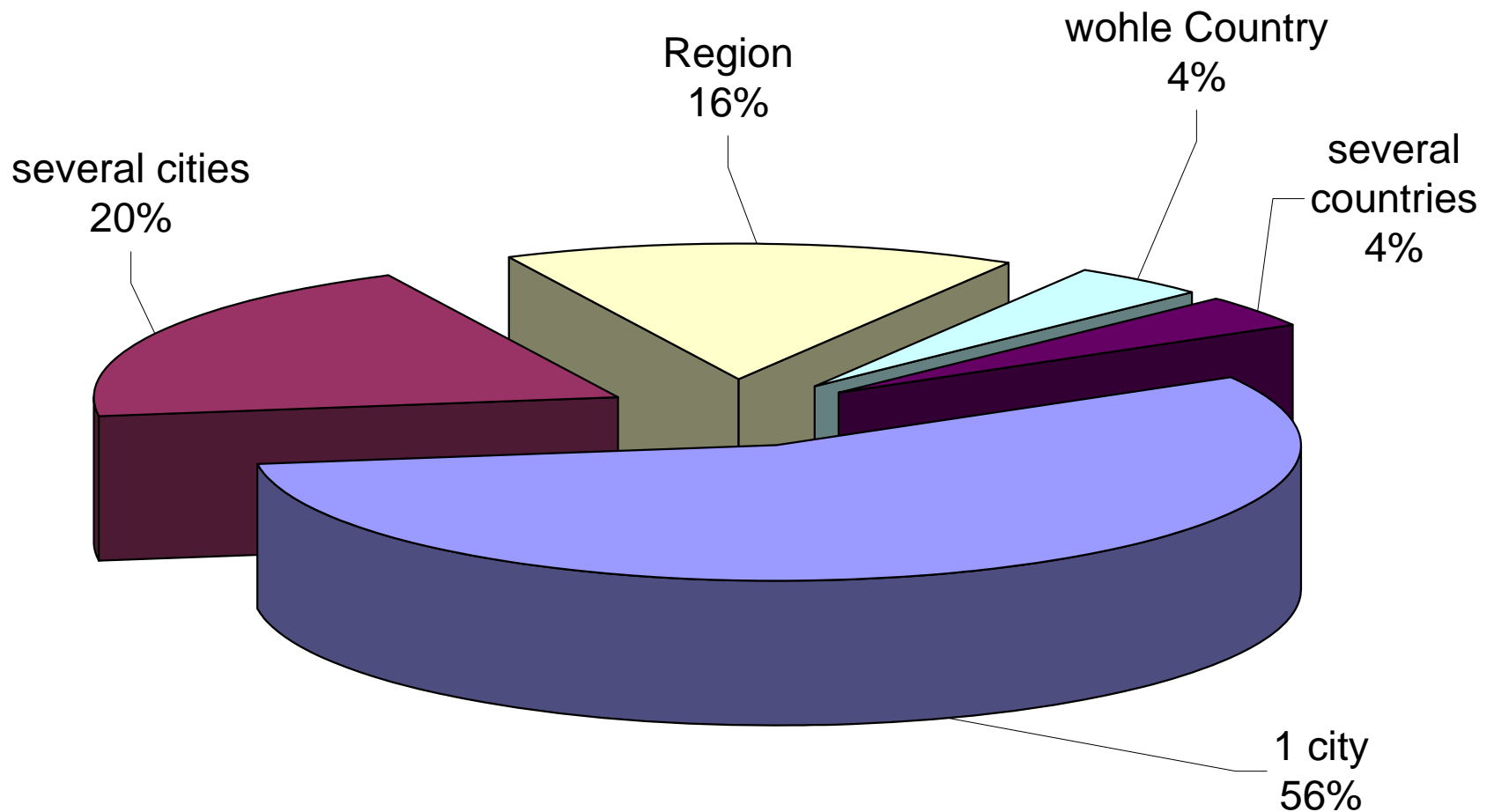
Both kinds of the Kraftstoffes were accepted and should be further used. Now after 68 buses in the first phase, 60 buses should further follow.

Posted: 10-11-2009

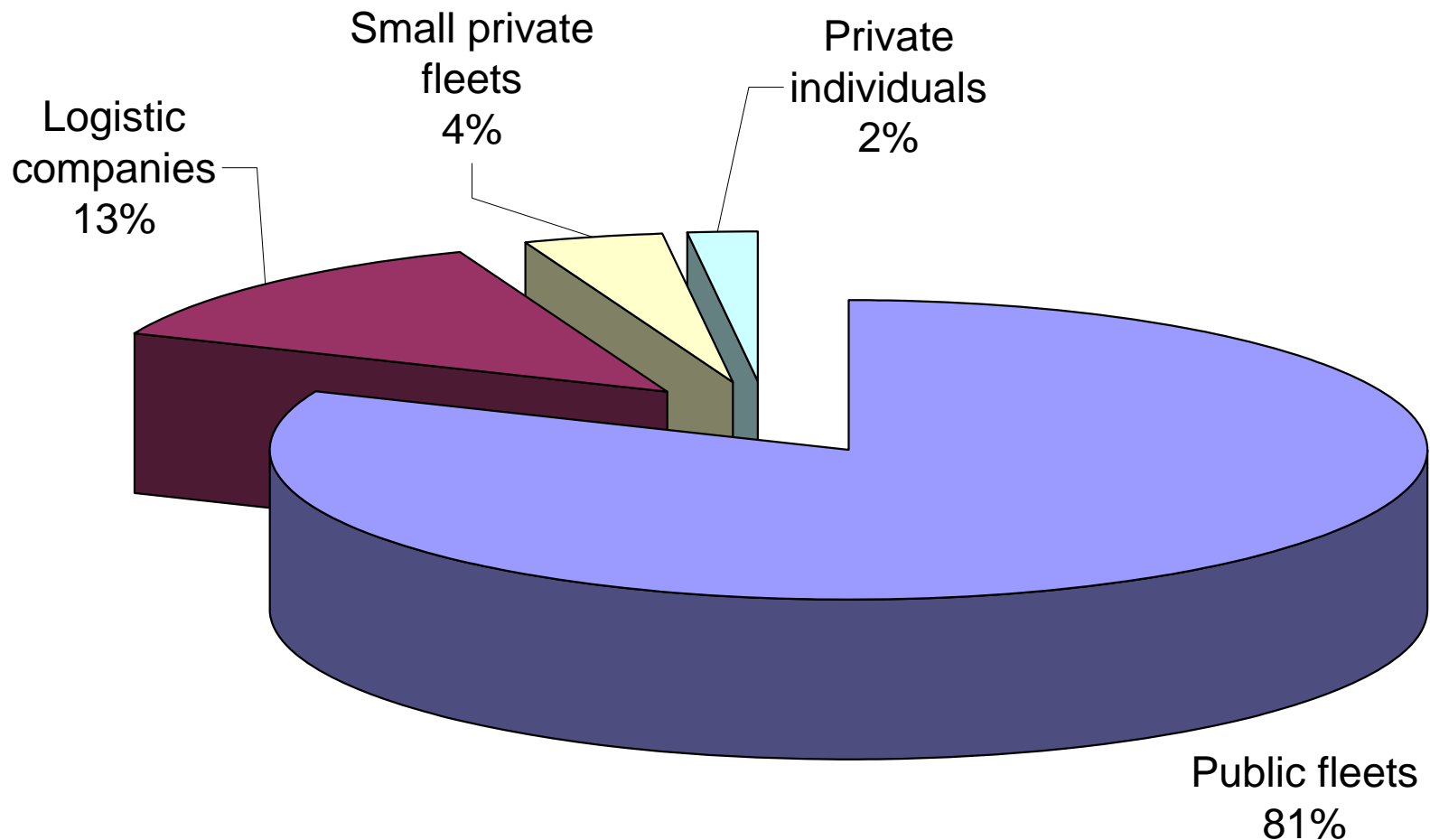
Sample - cases by country



Sample - Area of application



Sample – fleet categories



Proceeding

- Questionnaires were constructed with the aid of historical analysis
- Answers should help to build up future scenarios
- Analysis will be the basis for WP 5 (evaluation of policy effectiveness)
- Analysis of the cases with the aid of questionnaires
- different questionnaires for
 - Fleet
 - Policy
 - Supply Chain



FLEET

Questionnaire for deepening the knowledge about the show cases

The questionnaire is for the collectors of the information, should be distributed via email to the interviewees only as **basis for a telephone or face to face interview!**
You may tick more than one category if they represent no ranking!

1. Set-Up of the measure

1.1. Which area do you cover running your fleet (e.g. whole city of Milano in Italy)

Prevent climate change	Improve local air quality	create employment	Create/improve 'green image'	Other, as:

1.2. Did you consider any incentives for your initiative?

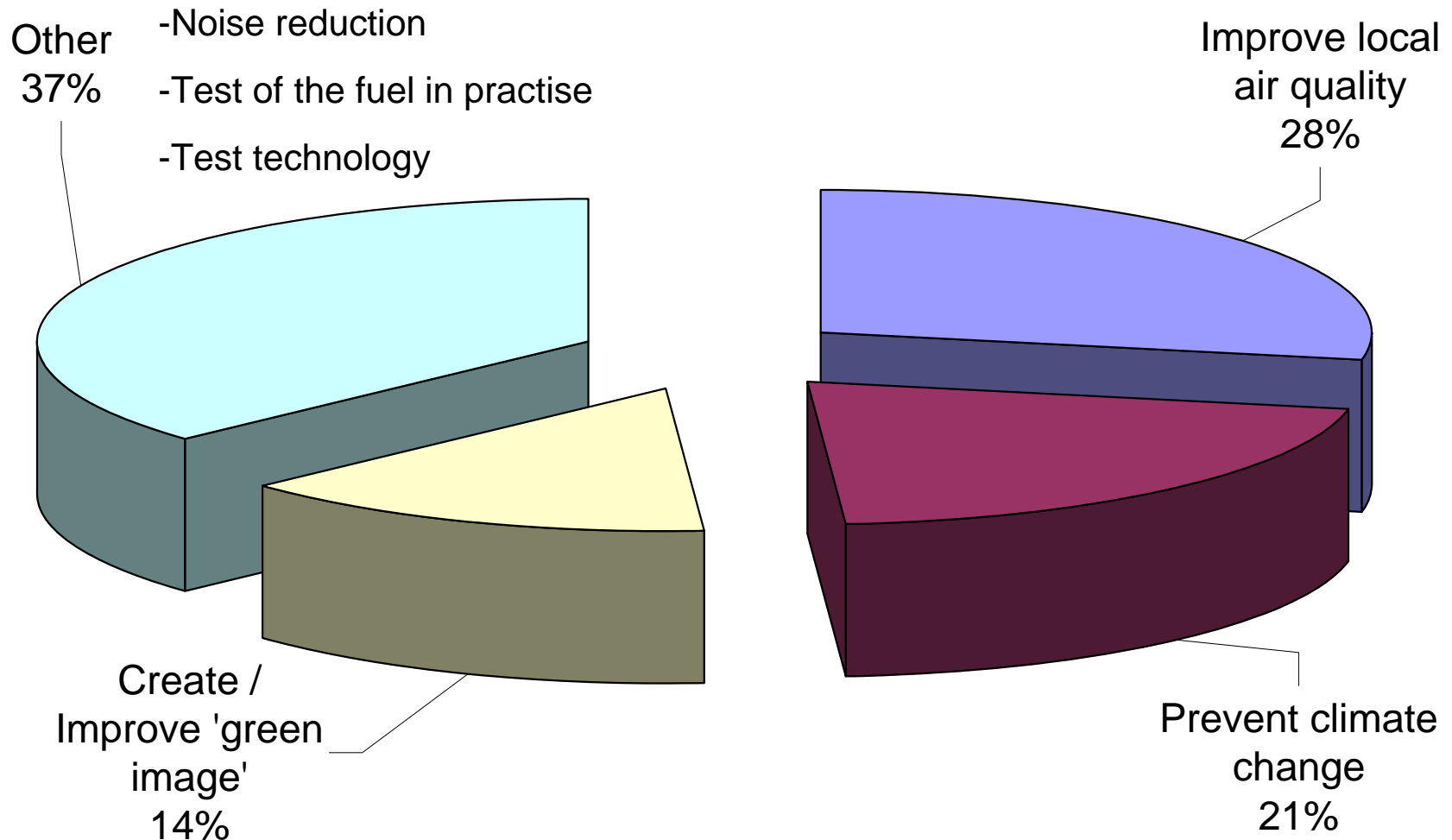
Reduced parking fees	Subsidies procurement vehicles	Subsidies procurement depot/home filling stations	Emission/CO ₂ based road tolls	Access restrictions for other vehicles	ISO/EMAS or CSR schemes	Other as _____

If you based your initiative on an incentive, what did you consider?

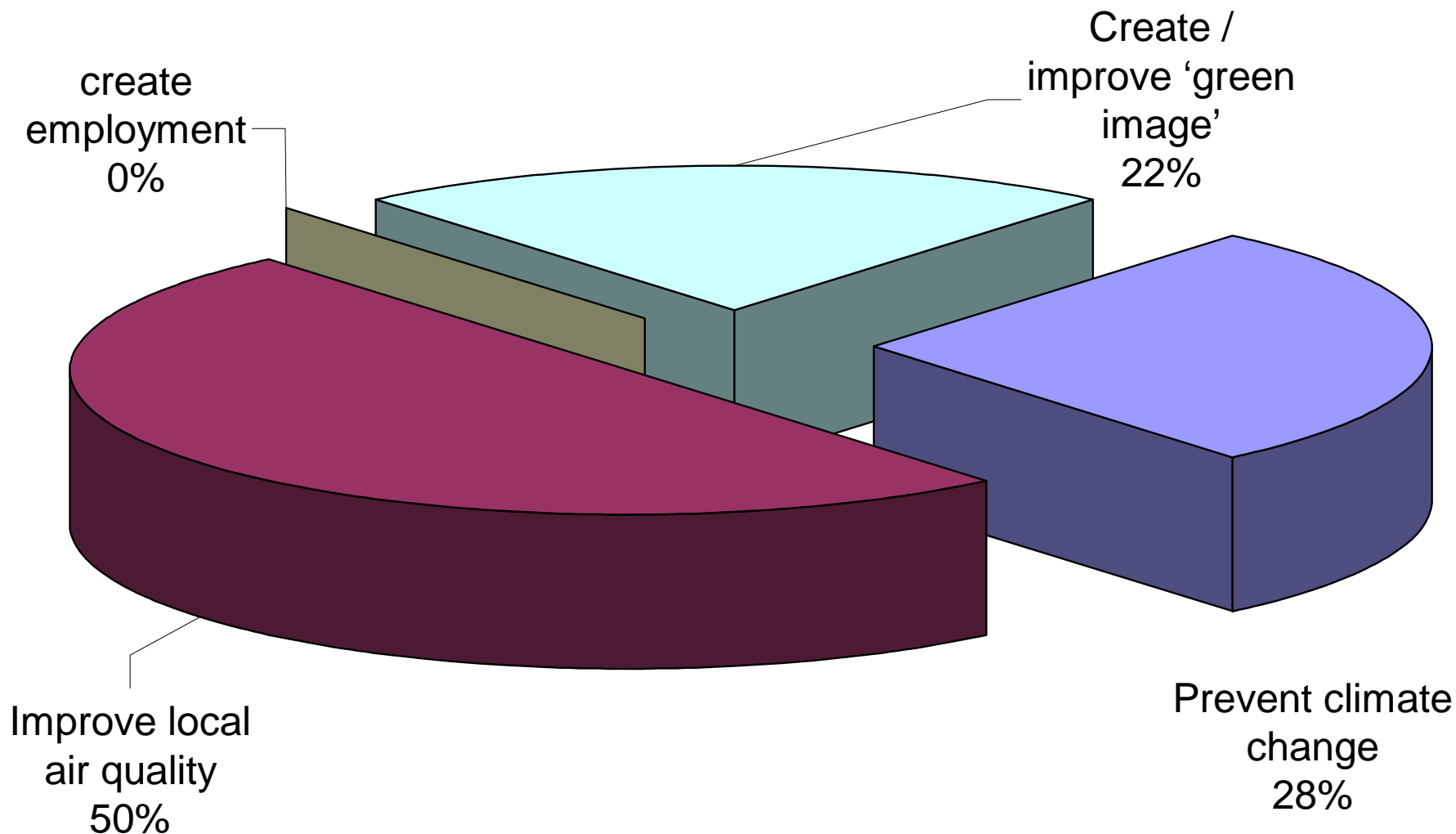
1.3. Which category does your fleet belong to?

Private individual	Small private fleets	Logistics companies	Public fleets	Other

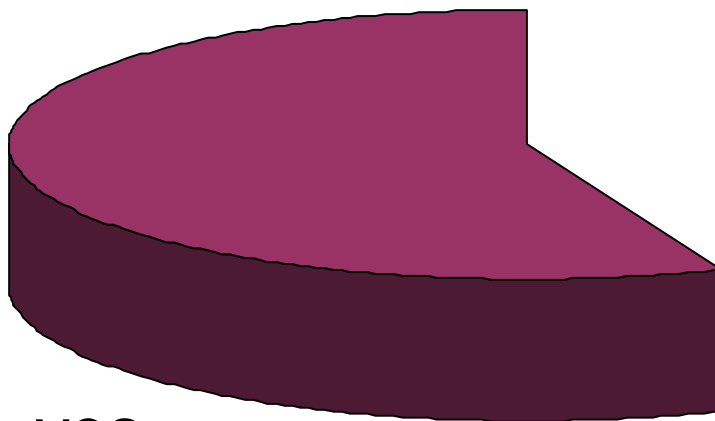
What was the core motivation to initiate the project?



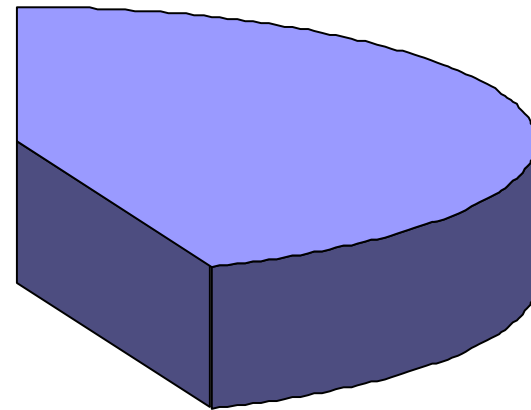
Which motivation brings good/very good acceptance by the public?



Did you exploit any incentives?

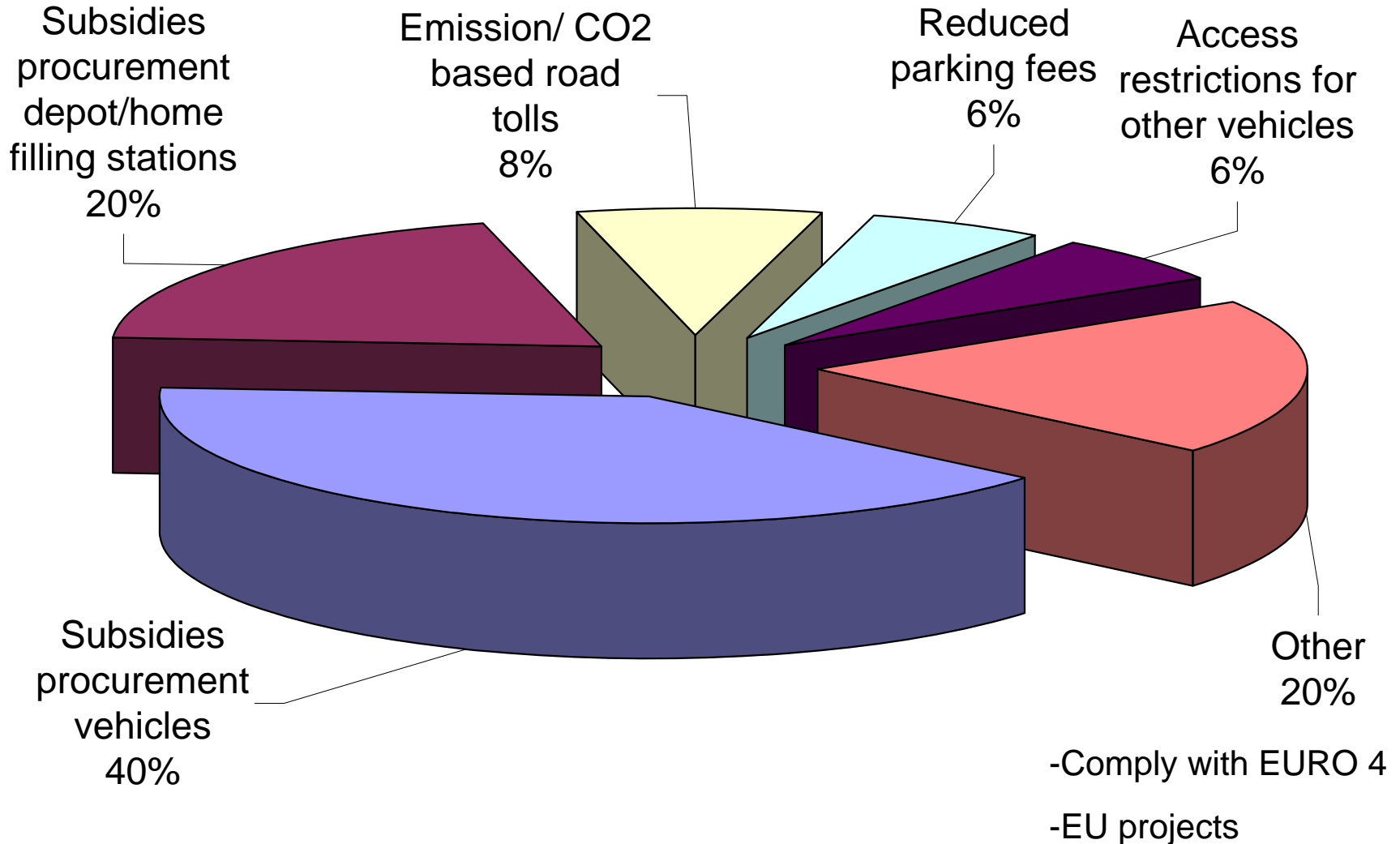


yes
56%

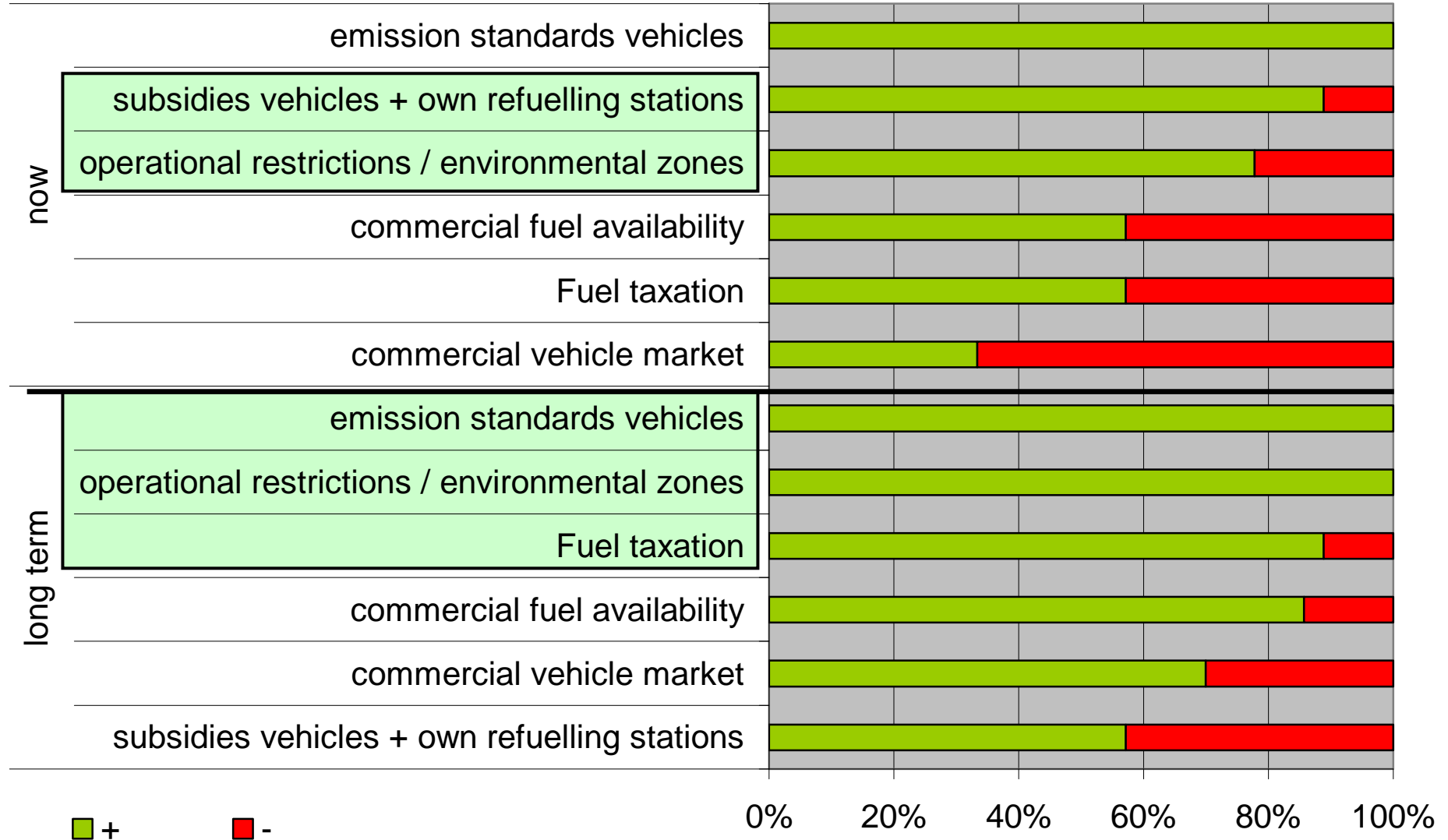


no
44%

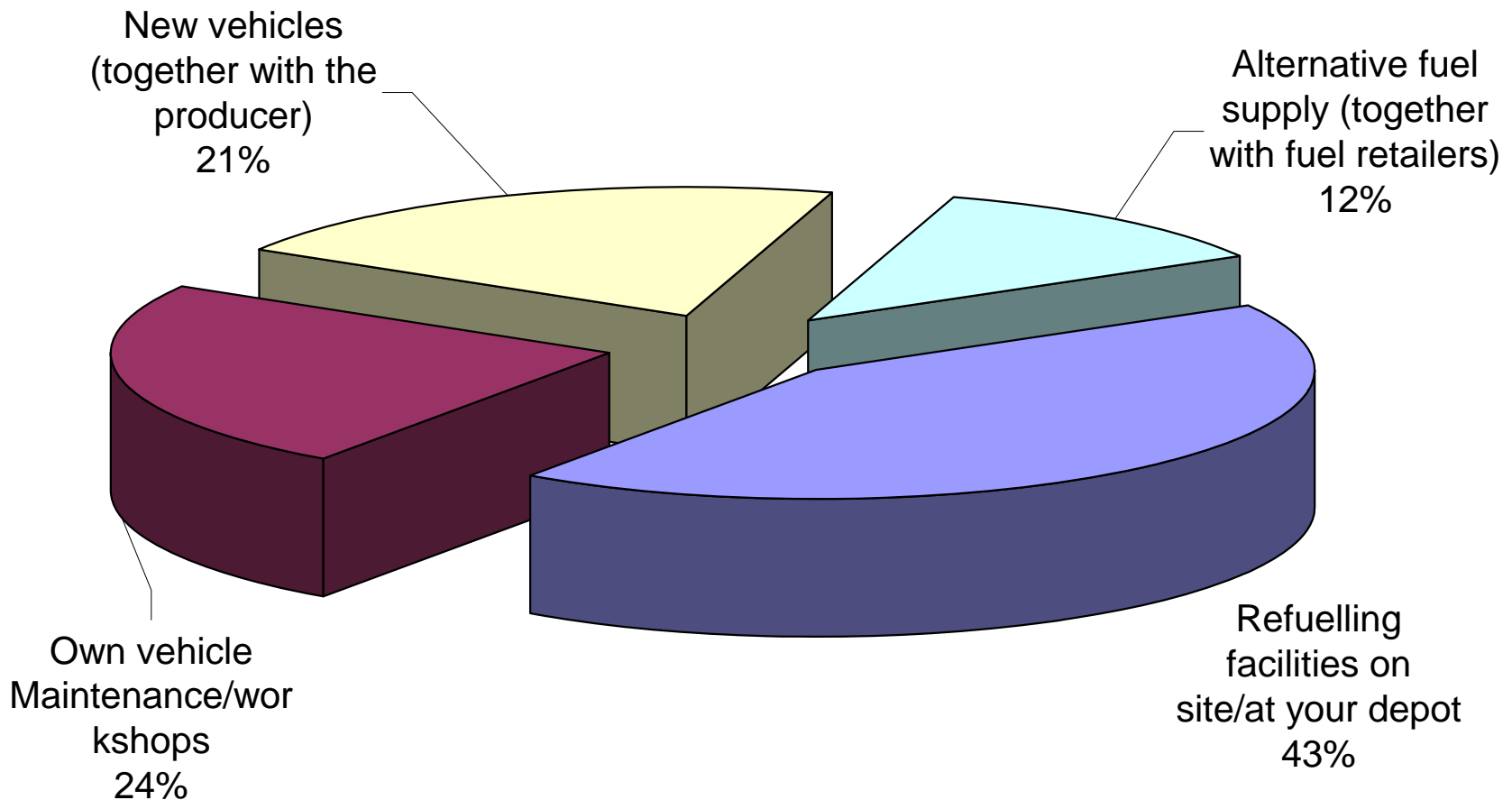
Motivating incentives for the initiative



Opportunities and threats current+long term



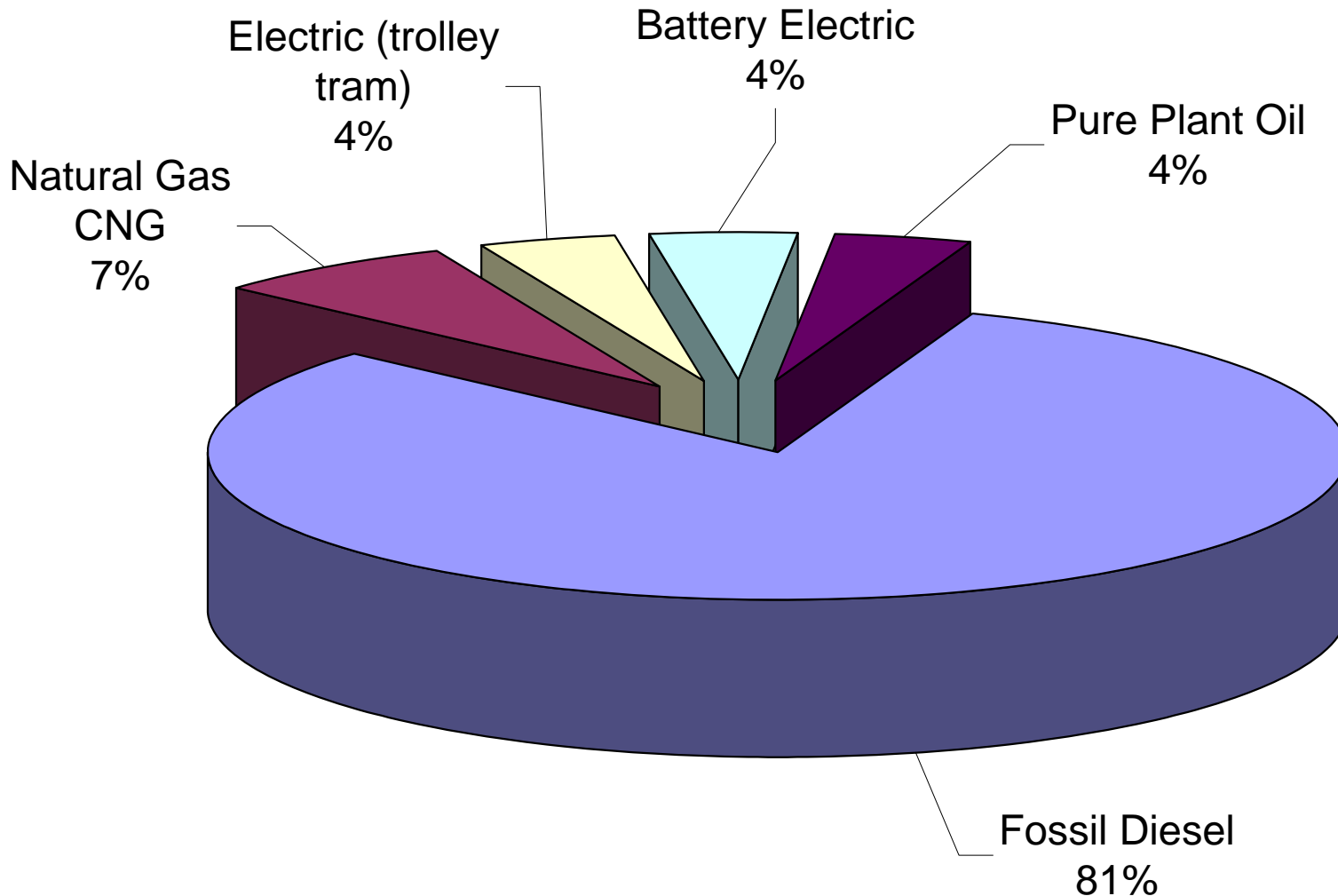
Which measures were implemented?



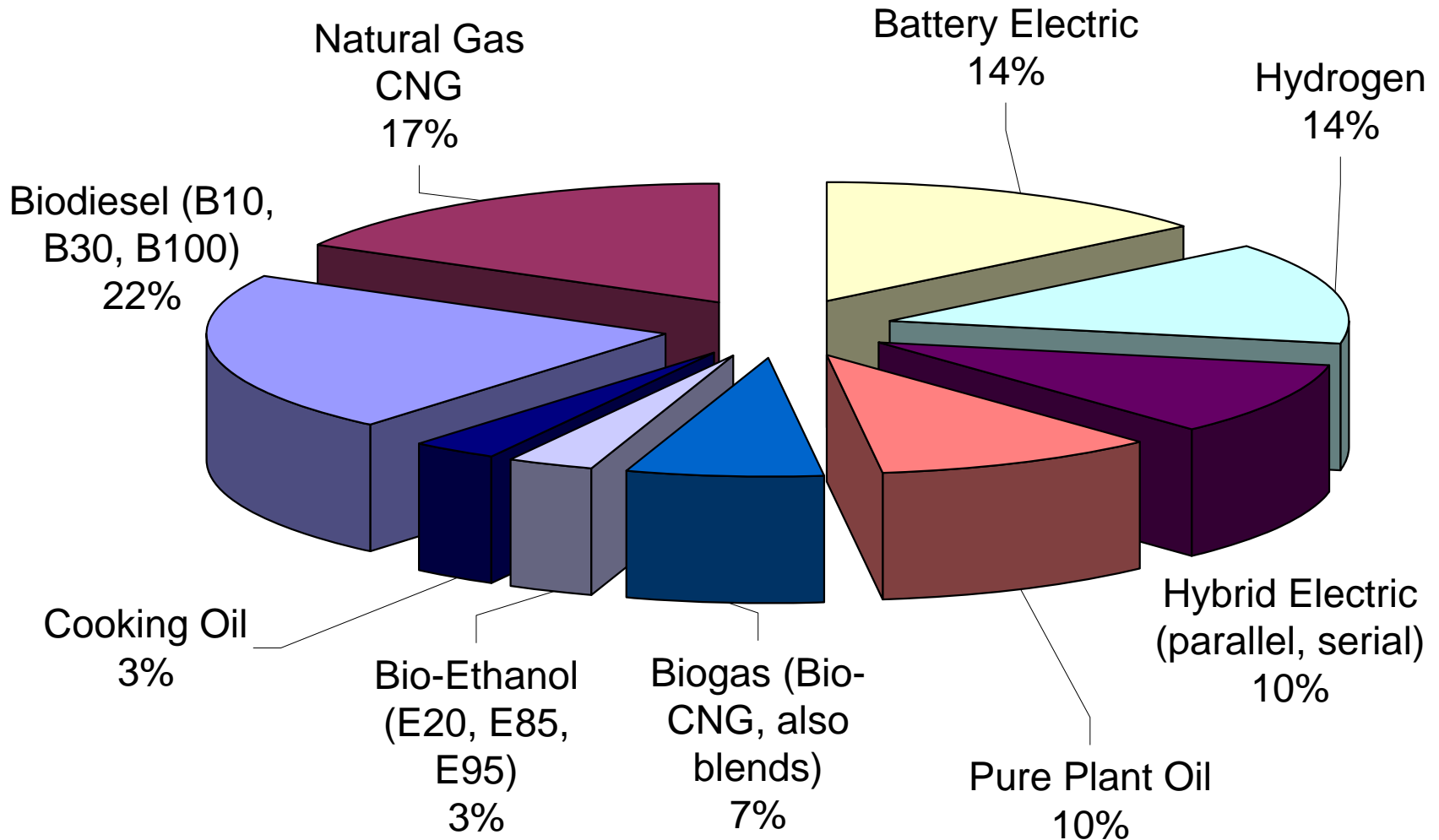
Analysis

Question	Hypothesis	Analysis
Core motivation to initiate the project	Most important issue: air quality	Confirmed, also noise reduction and test of technology/fuel Creates high acceptance with public
Motivating incentives for the initiative	Most projects are exploiting incentives	Only 56 % were exploiting incentives, mostly subsidies for vehicle procurement
Opportunities and threats	Price fluctuations Emission standards acting negatively	<ul style="list-style-type: none"> + emission standards (long term) + environmental zones - Commercial market/vehicle supply (now) - Subsidies (long term)

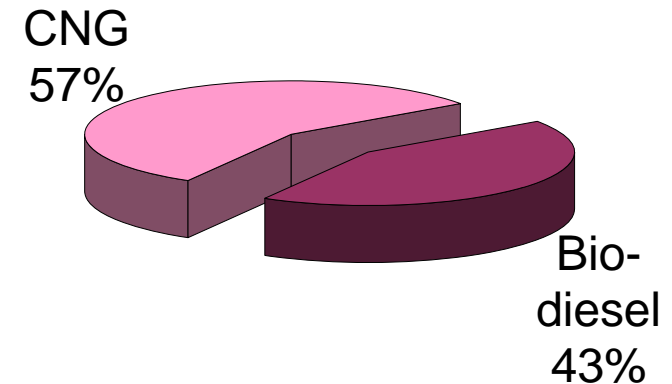
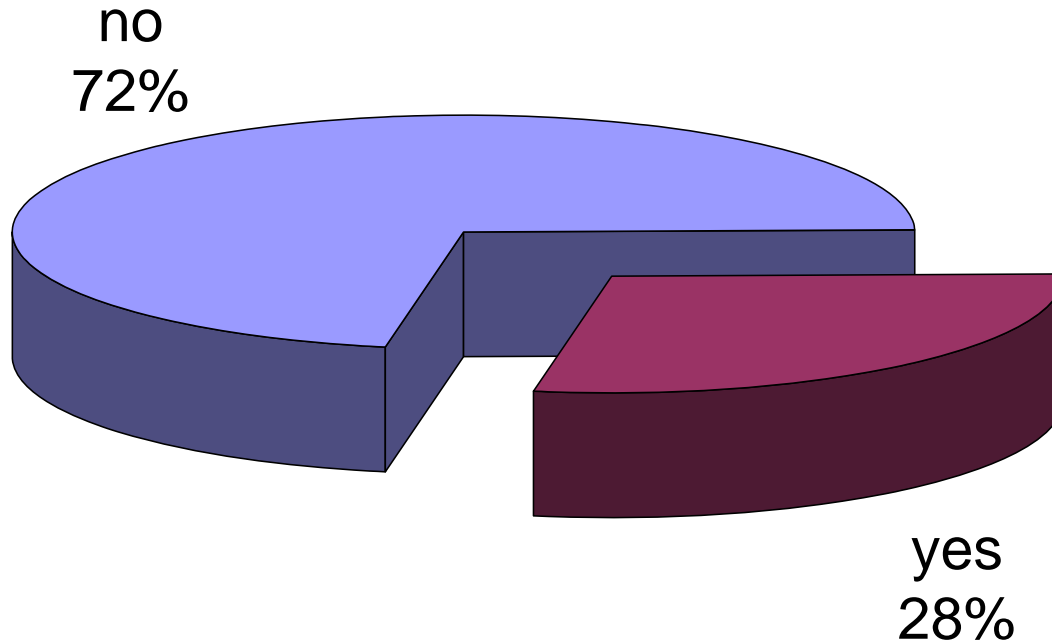
Which kind of fuel was used before implementing the project?



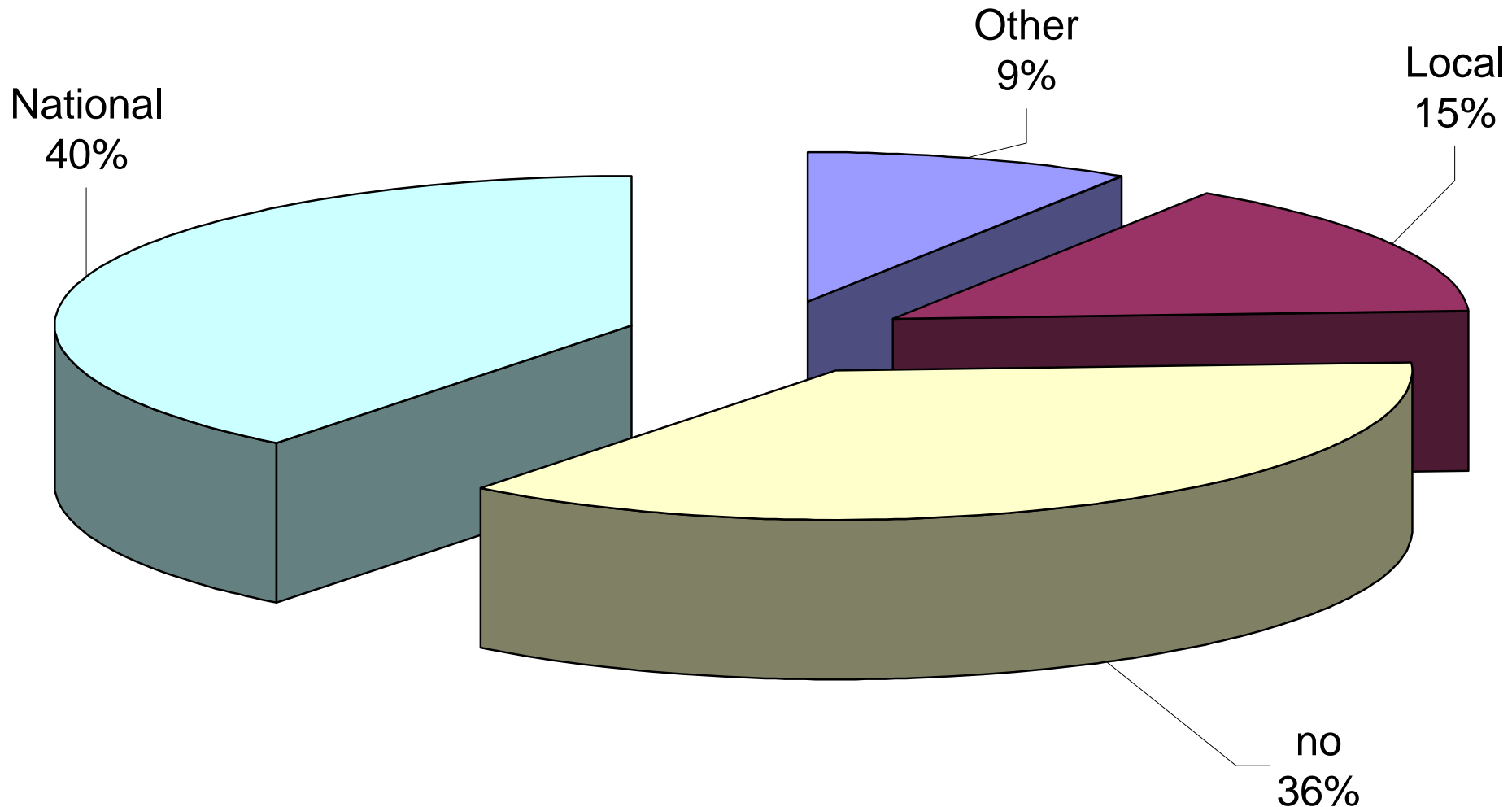
Which kind of fuel was used after implementing the project



Were there significant price fluctuations?



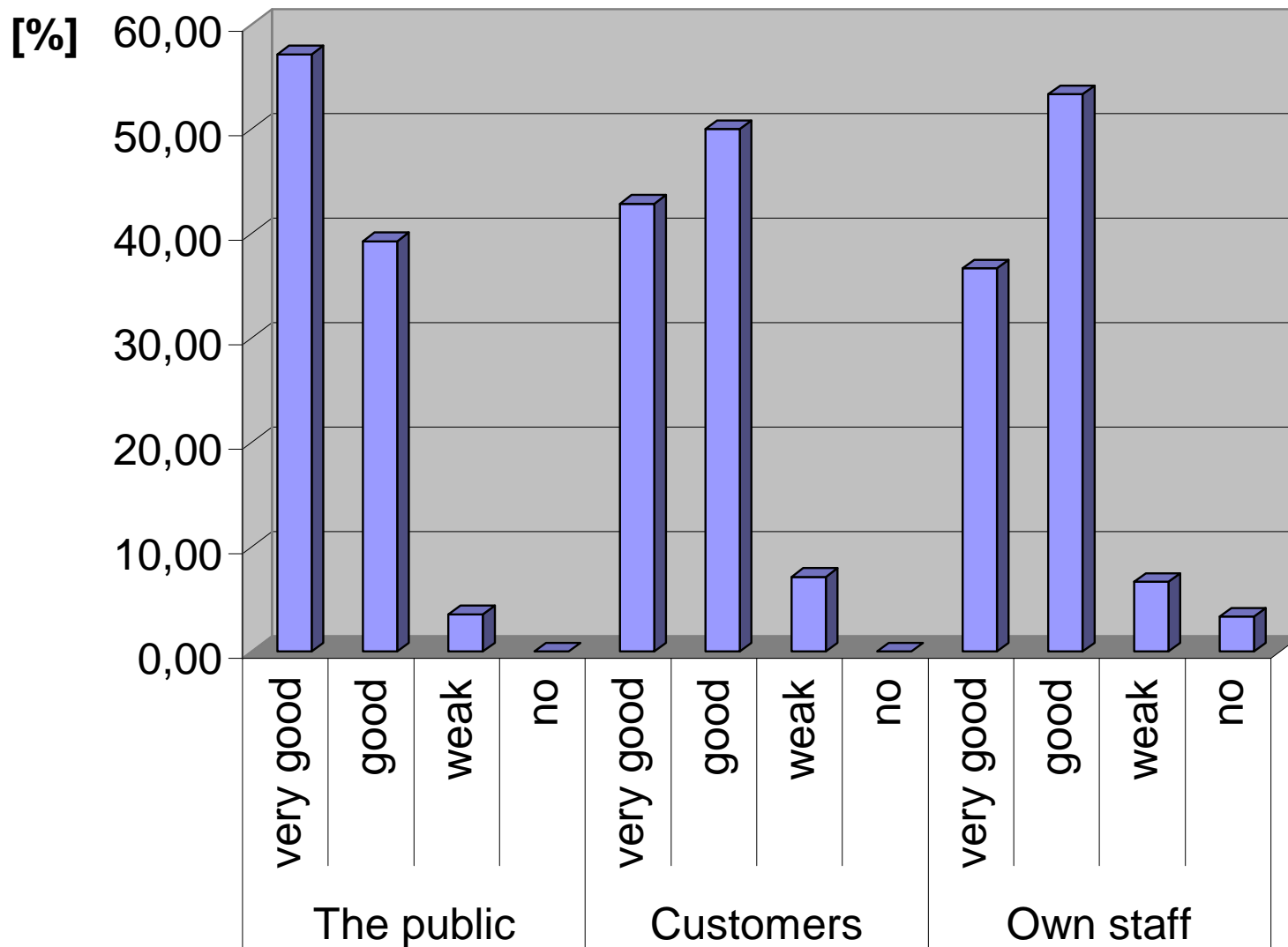
Have you experienced any changes with external boundary conditions?



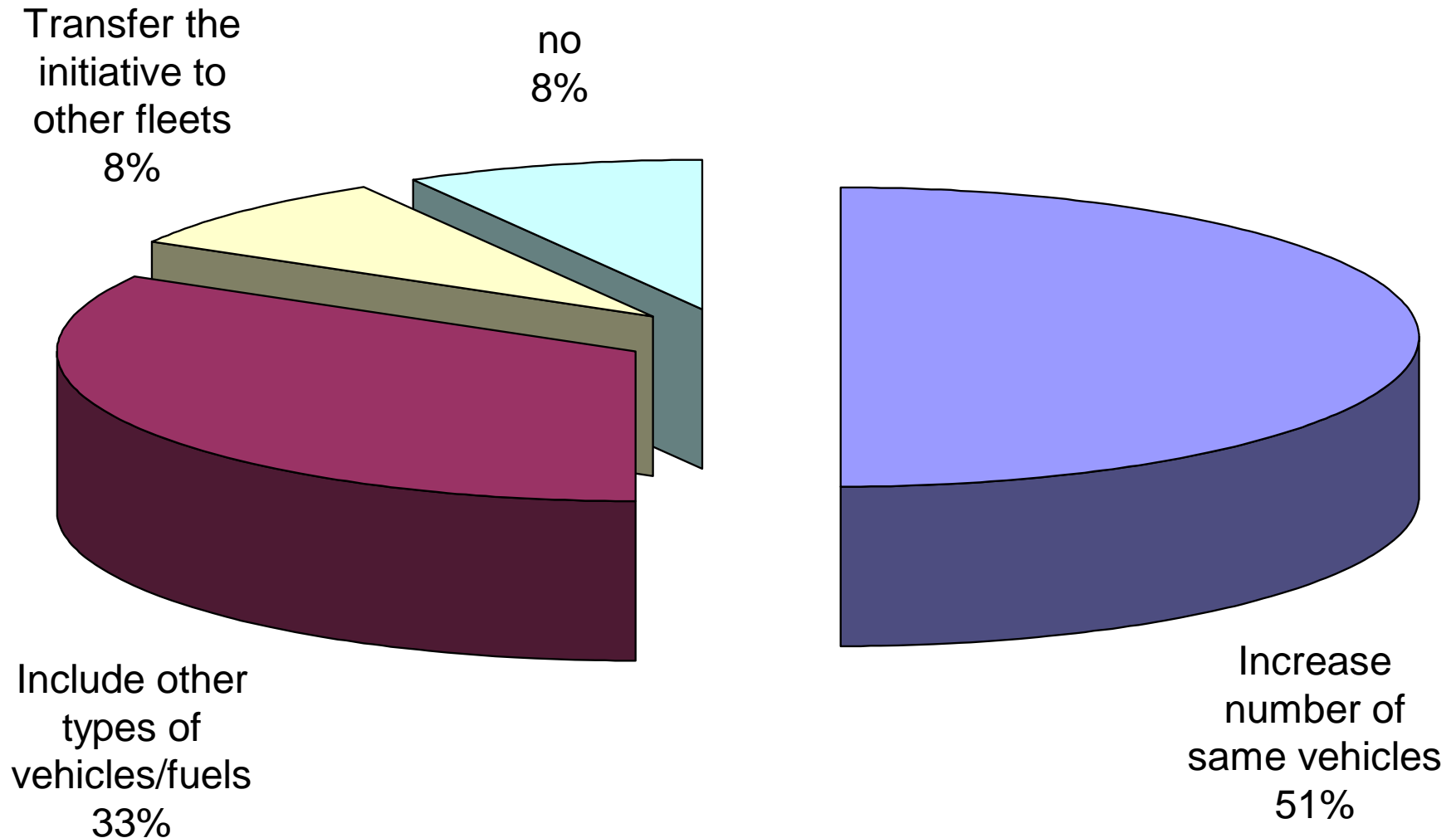
Analysis

Question	Hypothesis	Analysis
Price fluctuations (fuel)	yes for biodiesel	confirmed: of which 57% CNG, 43 % Biodiesel
Changes in boundary conditions	Yes, EURO-standards etc.	36% no changes, 40% national conditions (implementing EC directives?)

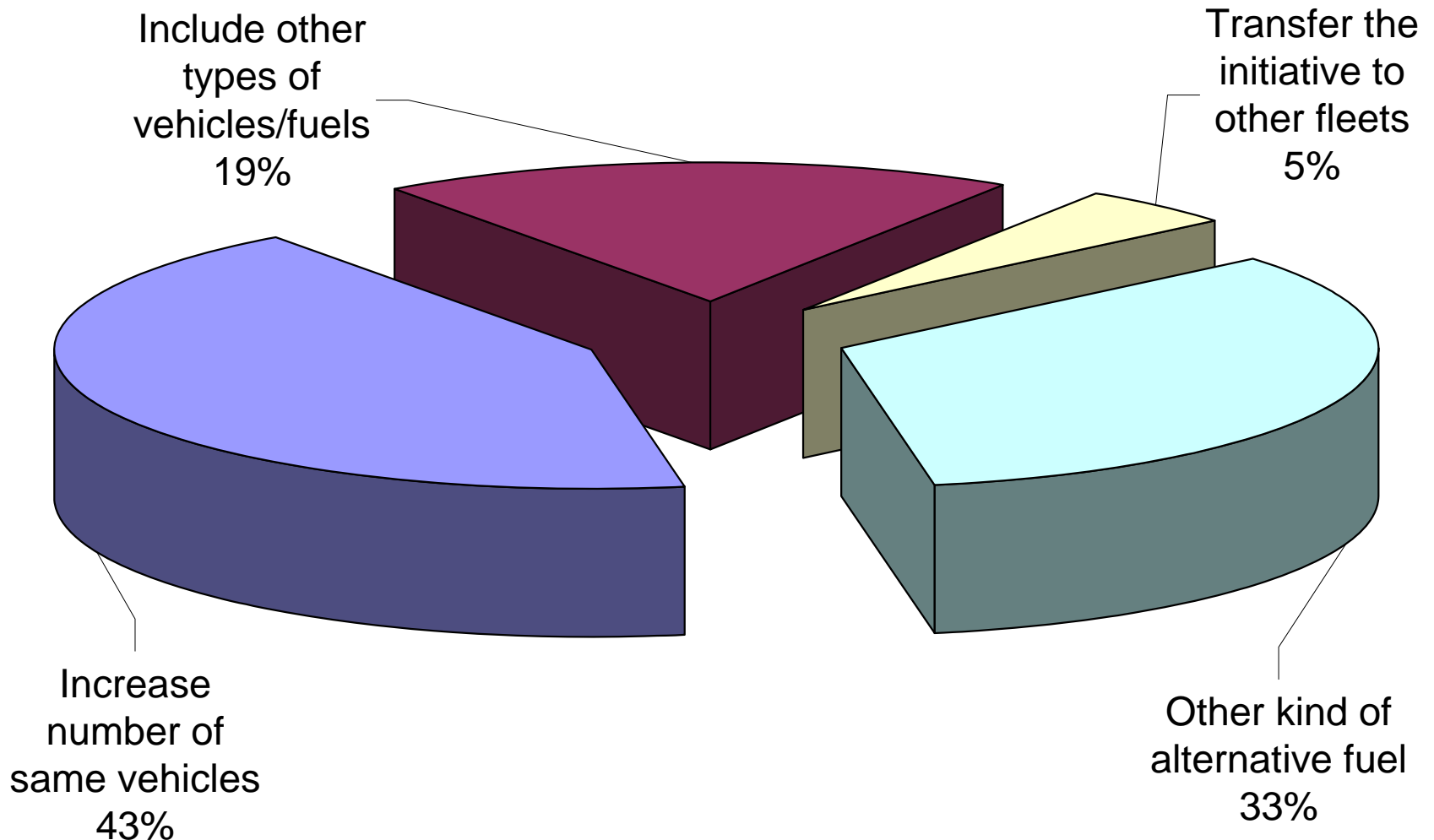
How was the acceptance?



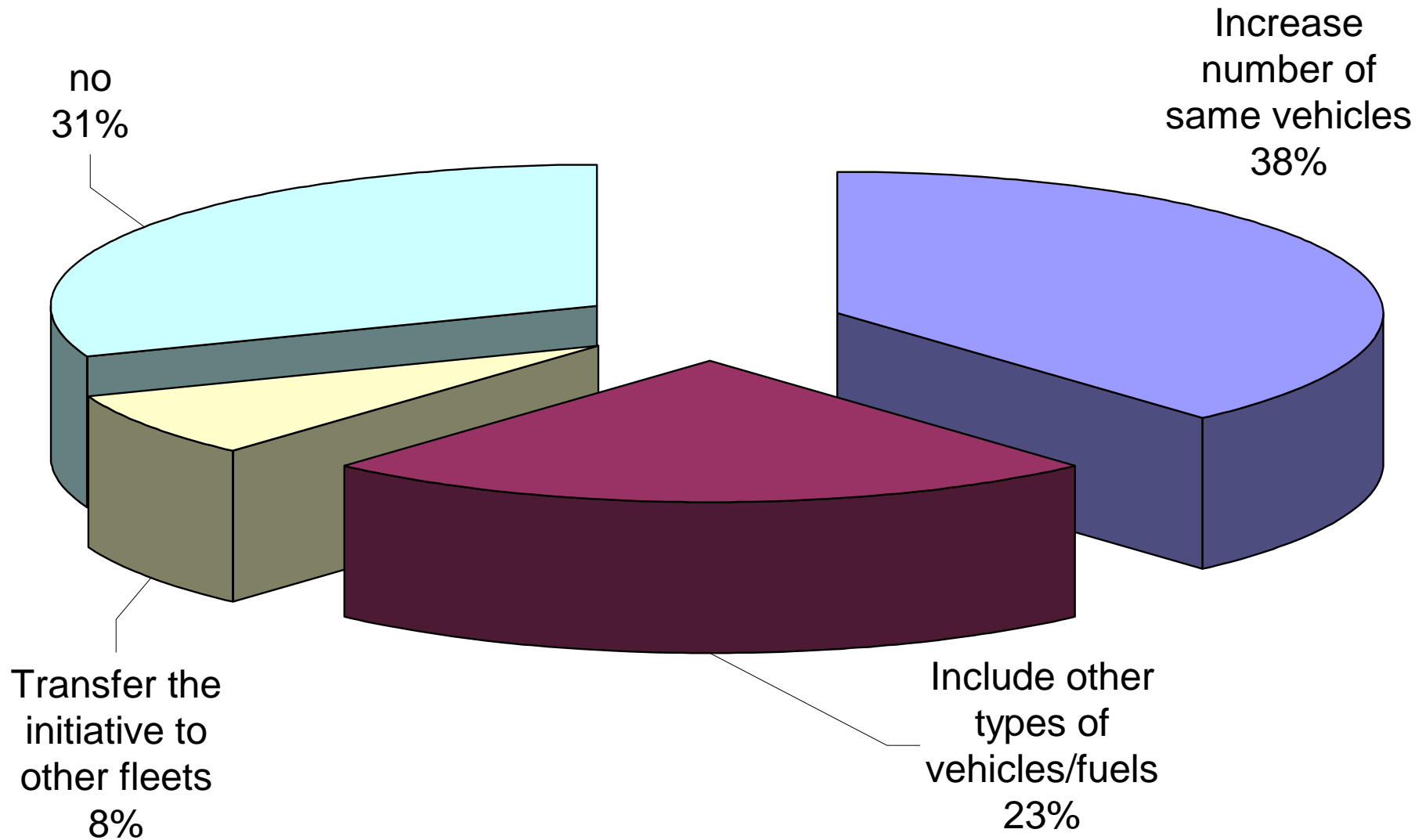
Do you plan enlarge the initiative?



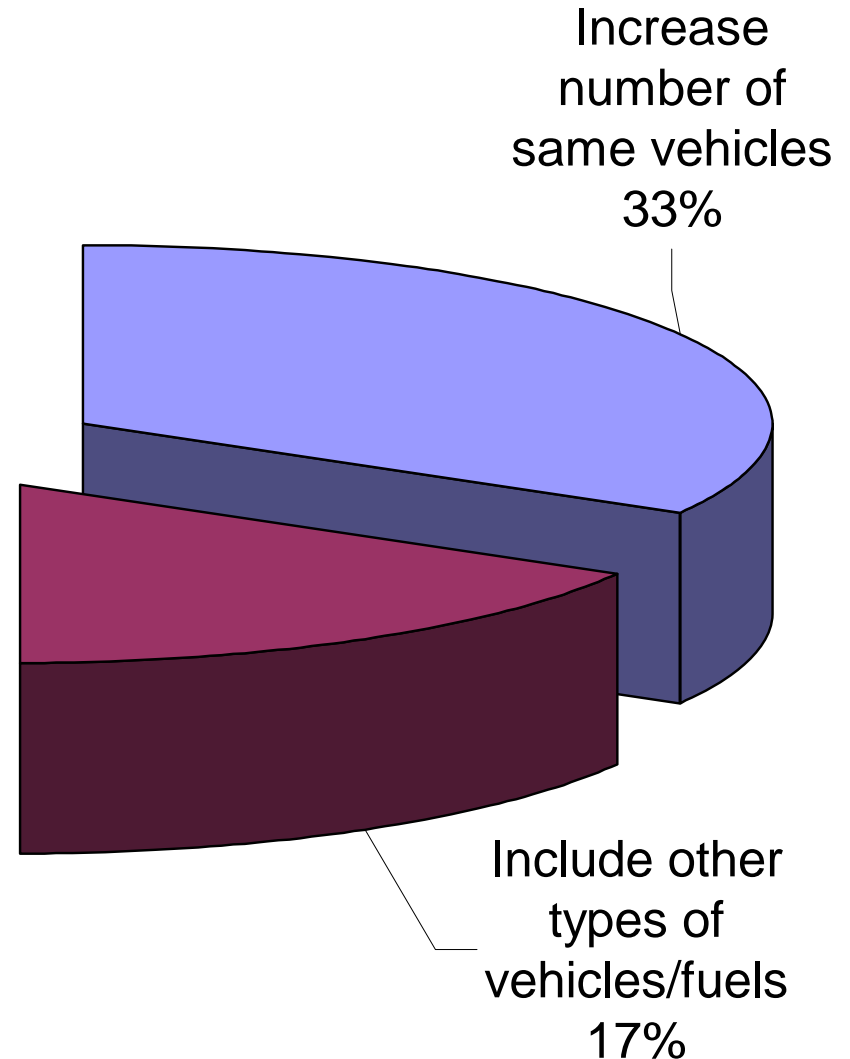
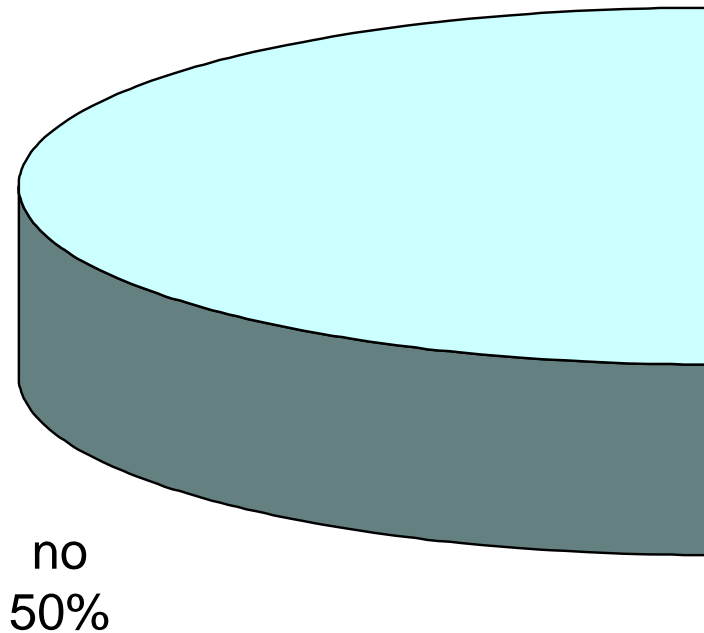
Plans to enlarge - Biodiesel



Plans to enlarge - CNG



Plans to enlarge - Battery electric



Analysis

Question	Hypothesis	Analysis
Acceptance	Image improvement is appreciated by all groups	Very good acceptance: public, good for customers, weak for own staff
Plans to enlarge	Dissemination of experience for cities	51% will increase number of same vehicles, 33% will include other vehicles or kind of fuel
...for Biodiesel & CNG	Stalling because of prices soaring and lacking compatibility for higher blends	Most (biodiesel: 43%, CNG: 38%) will increase number of same vehicles, technology is mature!
...for BEV	Hyped but not mature	50% will not enlarge the initiative

Summary

- Implemented measures: New vehicles and new filling/charging stations
- Majority of initiatives will be prolonged – good results with Biodiesel and CNG
- No correlation between exploited incentives and enlarging plans
- No strong perception of risks, emission standards as facilitator
- Acceptance highest with public, lowest with own staff