

# Acceptance of CO<sub>2</sub> Labels for Biofuels by Forwarding Companies and End-users

Report elaborated in the framework of the Carbon Labelling Project

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## 1. Introduction

In the framework of the Carbon Labelling project, which is supported by the Intelligent Energy for Europe Programme, a label for biodiesel (B100) was developed. This CO<sub>2</sub>Star Label was applied for B100 on fuel pumps of the German fuel retailer Q1. The objective was to increase the consumer's awareness about the GHG mitigation potential of biodiesel, and to promote its carbon dioxide benefits.

The present study investigated the acceptance of CO<sub>2</sub> labels for biofuels by forwarding companies and commercial end-users in Germany, such as logistic companies and freight services.

Evaluating the results, the current policy framework for biodiesel in Germany has to be considered. This is important since the former tax exemption of B100 in Germany was replaced by increasing taxes on B100 in 2007 and 2008. This stepwise increase of biodiesel taxes in Germany drastically decreased former cost benefits of biodiesel, and thus has effects on the acceptance of biodiesel by forwarding companies and commercial end-users.

## 2. Methodology

The objective of this study was to investigate the acceptance of CO<sub>2</sub> labels for biofuels by forwarding companies and commercial end-users in Germany, such as logistic companies and freight services.

Thereby telephone interviews with representatives and decision makers of 13 forwarding companies and commercial end-users in Germany were conducted. For the qualitative interviews open ended and semi-open ended questions were used. The questionnaire is attached to this report. In order to guide and structure the results, the following classification of topics is used.

### *A) Benefits of biofuels*

- *Price of energy and potential monetary savings from renewable fuels*
- *Climate protection as a primary goal*
- *Independency from oil and petrochemical products*

### *B) Implementation and utilisation of renewable fuels*

- *Already used renewable fuels*
- *General interest in the utilisation of (future) renewable fuels*
- *Considerations to implement other CO<sub>2</sub> reduction measures*

### *C) Introduction of a CO<sub>2</sub> label*

- *General acceptance of a CO<sub>2</sub> label*
- *Institution for issuing a CO<sub>2</sub> label*

### 3. Results

#### **3.1. Benefits of biofuels**

In view of the coherency between climate protection and business success the survey showed, that most of the interviewed forwarding companies are aiming at climate protection as one of their ideological goals. Besides that, throughout all interviews, climate protection as well as the promotion of overall environmental conservation were considered as important and vital elements of business success in the sector.

In contrary to these results, climate protection and environmental conservation are apparently not considered as important issues at the end-customer level. According to the interviewed companies, customers mainly focus on the timing and the price of transport services. Likewise, new customers do not really ask for “green services” in the freight forwarding business.

According to this, the implementation of alternative fuels for transport is not driven by the goodwill of environmental protection and climate conservation. In fact, the wide utilisation of renewable transport fuels goes along with the strong desire to be independent from the continuously rising prices of oil and petrochemical products for the transport sector.

The high costs for transport can act as a catalyser to pave the way for the implementation of alternative fuels and lubricants. On the other hand, the available cost reduction potential of renewable fuels however, is a crucial aspect within the overall decision making process in favour or against renewable fuels for transport. The sustainable inclusion of climate protection and environmental conservation is considered to be indispensable for the future of the transport sector. However, it is necessary to create a political and economical framework that promotes and supports such efforts.

#### **3.2. Implementation and utilisation of renewable fuels**

The second part of the dedicated expert interview addressed the potential utilisation of renewable fuels for transport in the portfolio of the forwarding companies. According to the statements of consulted representatives and decision makers, every forwarding company converted at least some vehicles of their overall truck fleet for the regular and daily utilisation of biodiesel.

Due to the meanwhile marginal cost reduction potential of biodiesel however, most of the companies stated, that they do not utilise biodiesel anymore. This is a result of the stepwise increase of biodiesel taxes in Germany in 2007 and 2008 which replaced the former tax exemption of B100.

As already mentioned, the available price difference between conventional fuels and renewable fuels is a crucial aspect within the overall decision making process. Taking into account the high costs of refitting the engine and of increased maintenance, it seems clear, that at the moment there is no driving force for the wide promotion of biodiesel.

Another obstacle, besides the marginal cost reduction potential, is the uncertainty of biodiesel supply in Germany. The majority of representatives and decision makers of the

consulted forwarding companies indicated, that there were often delivery problems and production shortages for biodiesel.

Regarding the future outlook it was stated, that the repeated implementation and utilisation of renewable fuels will need substantial guarantees in price and availability. Therefore, the most potential type of (future) renewable fuel will be identified under these principles.

Likewise, all considerations to implement further CO<sub>2</sub> reduction potentials (high-performance lubricants, dedicated fuel additives, aerodynamic vehicle design, etc.) are directly dependent on the long-term availability of cost benefits. Therefore it is necessary to create a supportive political and economical framework.

### **3.3. Introduction of a CO<sub>2</sub> label**

During the interview procedure it became apparent that the general acceptance of a potential “CO<sub>2</sub> label” seems to be very low. The representatives and decision makers of the consulted forwarding companies do not believe in the informative and declarative value of a CO<sub>2</sub> label.

Concerning this, the most prominent problem is the lack of regulations and measurements that could ensure a national or even a European “quality standard” for such a label. This is also reflected by the currently hindering situation in the field of renewable transport fuels. It is necessary to create a political and economical framework that promotes and supports the introduction of biofuels and therewith a related CO<sub>2</sub> label.

Therefore, the currently small request for a potential CO<sub>2</sub> label needs to be supported and expanded by the implementation of adequate regulations and verification procedures. It is a necessity to procure a broad acceptance of a future CO<sub>2</sub> label.

It is vital to assign the overall introduction and verification of a CO<sub>2</sub> label to a qualified and prestigious institution. This could be done through a national ministry in close cooperation with the European level. Alternatively it is also supposable to realise the management of a European CO<sub>2</sub> label directly via a European institution that enjoys sufficient public confidence.

## **4. Summary and Outlook**

The study shows that there is evidentially a diverse coherency between climate protection and the daily business in the forwarding sector. While climate protection and environmental conservation are considered as important and vital elements of business success by the decision makers of forwarding companies, the customers of transport services mainly focus on timing and price.

The utilisation of renewable transport fuels is strongly and almost exclusively driven by the desire to cut the prices of the transport sector. The available cost reduction potential of renewable fuels however, is currently not sufficient to push the decision in favour of renewable fuels. Therefore it is necessary to create a political and economical framework that promotes and supports this alteration.

The meanwhile marginal cost reduction potential of biodiesel in Germany due to the increasing taxes on B100 caused that the forwarding companies do not utilise biodiesel

anymore. The high costs for refitting regular diesel engines and the increased maintenance intervals are do not offset the potential savings any more. On top of that, the uncertainty of biodiesel supply causes a loss in consumer confidence.

The acceptance of a potential CO<sub>2</sub> label is very low. Representatives and decision makers of forwarding companies do not believe in the informative and declarative value of such a label.

It is necessary to convince forwarding companies and end-users by the creation of a political and economical framework that promotes and supports the broad utilisation of Biofuels. Only the implementation of taxation schemes, related to CO<sub>2</sub> emissions could bring a significant change in the current situation. In connection to such measurement it could be promising to introduce a CO<sub>2</sub> label via qualified and prestigious institutions at national or even European level.

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## Annex: Fragebogen CO<sub>2</sub> Label

1. Wie wichtig ist das Thema „Klimaschutz“ für ihren derzeitigen Geschäftserfolg?

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

2. Wie wichtig schätzen Sie das Thema „Klimaschutz“ für ihren zukünftigen Geschäftserfolg ein?

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

3. Welche alternativen Kraftstoffe werden Ihrer Meinung nach in Zukunft eine entscheidende Rolle im europäischen Markt (Transportsektor) spielen?

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5a. Welche Beweggründe erachten Sie als wesentlich beim (möglichen) Einsatz von alternativen Kraftstoffen in Ihrem Unternehmen?

### Preis / Preisersparnis

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

### Klimaschutz

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

### Unabhängigkeit von Mineralölprodukten / Alternative Treibstoffversorgung

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

### Sonstiges:

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5b. Welche Motive spielen Ihrer Meinung nach eine Rolle bei der Auftragserteilung durch bestehende/potentielle Kunden?

### Preis / Preisersparnis

sehr wichtig  wichtig  neutral  wenig Bedeutung  keine Bedeutung

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**Klimaschutz**

sehr wichtig    wichtig    neutral    wenig Bedeutung    keine Bedeutung

**Sonstiges:**

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6. Glauben Sie, dass ein CO<sub>2</sub> Label die Akzeptanz von Biokraftstoffen erhöhen könnte?  
(Anmerkung: Bei Ihnen selbst und bei der Auftragserteilung Ihrer Kunden)

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Wie wichtig könnte ein solches Label für bereits akquirierte/potentielle Kunden sein?

sehr wichtig    wichtig    neutral    wenig Bedeutung    keine Bedeutung

7a. Setzt Ihr Unternehmen bereits alternative Kraftstoffe ein?

Wenn ja, welche? / seit wann? / weshalb (Beweggründe)?

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Wenn nein, warum nicht?

Informationsmangel    Zweifel    Ablehnende Haltung

Erläuterungen:

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7b. Gibt es bei (bereits) konkrete Pläne zur Nutzung alternativer Kraftstoffe?

7c. Wie groß ist ihr Interesse (Firmenphilosophie / Leitlinien) alternative Kraftstoffe bzw. ein CO<sub>2</sub> Label zukünftig einzusetzen?

sehr groß    groß    neutral    wenig Bedeutung    keine Bedeutung

8. Ziehen Sie weitere Treibstoff / CO<sub>2</sub> Einsparungsmaßnahmen in Betracht?

Wenn ja, welche? (z.B. Einsatz von energiesparenden Leichtlaufölen)



9. Welche Institutionen wären Ihrer Meinung nach geeignet, ein solches Label auszugeben und entsprechende Produkte zu zertifizieren?

Bundesumweltministerium

Fachverbände

NGO's (Nichtregierungsorganisationen)

EU

Sonstige: \_\_\_\_\_

Freiwillige Angaben:

Firma/Institution: \_\_\_\_\_

Name: \_\_\_\_\_

Funktion: \_\_\_\_\_