

GIE's answer to the European Commission's Public Consultation on Clean Transport Systems (CTS) initiative

Context

The European Commission has started a public consultation on Clean Transport Systems (CTS) initiative until 20 October 2011. The consultation document includes the following context of this consultation:

"In its Europe 2020 strategy, the European Commission proposes the Flagship Initiative 'Resource efficient Europe'. This states that the European Commission will work to present proposals to modernise and decarbonise the transport sector.

In line with this strategy, the European Commission has recently adopted the White Paper 'Roadmap to a Single European Transport Area –Towards a competitive and resource efficient transport system', which announced that the European Commission will develop "a sustainable alternative fuels strategy including also the appropriate infrastructure".

*In this context, the European Commission has initiated the **Clean Transport Systems (CTS) initiative**, which should help the EU to put an end to oil dependency in transport in the longer term. Under the CTS initiative, the European Commission is preparing to launch, in the first quarter of 2012, a Communication on alternative transport fuels. The Communication will present a comprehensive long-term alternative fuel strategy for the EU covering the whole transport sector and will identify possible future actions in this area. The strategy should provide the industry, public sector and consumers with a clear and coherent vision, and should help to accelerate the use of alternative transport fuels in the EU. Action at the EU level should facilitate EU-wide circulation of vehicles powered by alternative fuels.*

In order to facilitate the implementation of the strategy and to actively stimulate the market development of alternative fuels, the European Commission is considering putting forward, together with the Communication, a legislative proposal on alternative fuel infrastructure requirements."

This document gives the GIE answers that will be filled in the electronic questionnaire.

Online Questionnaire and answers

Part I: Information about respondents

1. In what capacity are you completing this questionnaire? * (compulsory)

- My personal capacity
- Private sector company
- Industry association or NGO
- Local or regional public authority



National public authority

2. Contact details, personal or professional.

Even if you supply these details, you may choose to have your contribution be published anonymously. (optional)

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3. Country or region in which you are based * (compulsory)

Belgium

4. Contributions received to this consultation, together with the identity of the contributor, may be published by the Commission, unless the contributor objects to the publication of the personal data on the grounds that such publication would harm his or her legitimate interests. In this case the contribution may be published in an anonymous form. If the contribution cannot be published at all, its content will not be taken into account. * (compulsory)

- The contribution may be published
- I object to the publication of my personal data (publication in anonymous form)
- I object to the publication of my reply (the contribution will not be published nor will its content be taken into account)

Part II. The CTS initiative

5. Should policy actions be taken at the EU level to steer an EU-wide market introduction of alternative fuels? * (compulsory)

- Yes
- No

Which ones (compulsory)

Only natural gas and biomethane offer an available and affordable fuel alternative to any type of vehicle on road and maritime use. A sound investment climate together with a stable and predictable regulatory framework providing the appropriate incentives for investment constitute the prerequisite for the development of new gas infrastructure which will be required to develop alternative fuels in Europe.

6. In addition to appropriate standards for CO₂ emissions from vehicles, do you consider it important to put in place requirements on energy efficiency addressing all types of propulsion systems alongside the progressive market penetration of alternative fuels? * (compulsory)



- Yes
- No

When should such measures be in place? (compulsory)

Together with the introduction of alternative fuels into the market.

Additional comments (optional)

GIE considers that meeting the EU's very ambitious commitments towards a low-carbon economy by 2050 will require parallel development of energy efficiency measures, the development of renewable energy sources and the deployment of carbon capture and storage (CCS). Most importantly, these developments will have to be accompanied by a significant development of new natural gas infrastructures.

Natural gas is the cleanest, most efficient and versatile of the fossil fuels, making it a unique choice in the path towards a lower carbon energy mix and sustainable future. The abundance of natural gas, its competitive cost of supply, its immediate availability clearly favors it as the best alternative fuel to address emission reductions at the lowest cost.

7. In view of the current availability of fuel options with lower CO₂ emissions, what should now receive priority? * (compulsory)

- Research to improve existing fuel/vehicle technologies
- Deployment of new low-CO₂ fuel/vehicle technologies

Additional comments (optional)

The use of CNG and LNG is a proven technology that should be deployed.

8. Which approach should the EU take on the promotion of alternative fuels? * (compulsory)

- Technology-oriented: giving preference to certain fuels and vehicle technologies (based on estimated cost effectiveness, market potential, long-term contribution to oil substitution and decarbonisation)
- Performance-oriented: linking support to alternative fuels in a technology-neutral way to performance criteria, such as energy efficiency, reduction of CO₂ and pollutant emissions

Additional comments (optional)

Natural gas (CNG and LNG) has demonstrated its great performance as an alternative fuel.

9. In the technology-oriented approach would you give preference to: * (compulsory)

- Alternative fuels standards



- Vehicle technology standards
- Infrastructure standards

Additional comments (optional)

10. In the performance-oriented approach would you give preference to: * (compulsory)

- Energy efficiency standards
- Cap on CO2
- Differentiated charging based on CO2 emissions

Additional comments (optional)

11. Which fuels should be included in a long-term European alternative fuel strategy? * (compulsory)

- | | |
|---|---|
| <input checked="" type="checkbox"/> Electricity | <input checked="" type="checkbox"/> Methane |
| <input checked="" type="checkbox"/> Hydrogen | <input checked="" type="checkbox"/> LPG (Liquefied Petroleum Gas) |
| <input checked="" type="checkbox"/> Biofuels | <input type="checkbox"/> Other |
| <input checked="" type="checkbox"/> Synthetic fuels | |

Additional comments (optional)

Although all fuels should be considered in the European alternative fuel strategy, Natural Gas (CNG/LNG) is the only alternative that fits to any type of vehicle (cars, trucks, ships, trains) for long and short distances. Biomethane can be injected in natural gas infrastructure. Furthermore, biomethane has the highest energy efficiency of all biofuels per surface of land.

12. Different transport modes may require different alternative fuels. Indicate which alternative fuels will be relevant for which transport modes on the time horizon 2020

BEV: Battery Electric Vehicle; HFC: Hydrogen/Fuel-Cell EV; Grid: Grid powered electric vehicle (e.g. tram, metro, train, trolley bus); CNG: Compressed Natural Gas; CBG: Compressed Bio-methane Gas; LNG: Liquefied Natural Gas; LPG: Liquefied Petroleum Gas

	Electric BEV	Electric HFC	Electric Grid	Biofuels (liquid)	Synthetic fuels	Methane CNG	Methane CBG	Methane LNG	LPG
Road-passengers: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-passengers: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Road-passengers: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-freight: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rail (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: inland (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: short-sea shipping (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: maritime (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

13. Different transport modes may require different alternative fuels. Indicate which alternative fuels will be relevant for which transport modes on the time horizon 2030

BEV: Battery Electric Vehicle; HFC: Hydrogen/Fuel-Cell EV; Grid: Grid powered electric vehicle (e.g. tram, metro, train, trolley bus); CNG: Compressed Natural Gas; CBG: Compressed Bio-methane Gas; LNG: Liquefied Natural Gas; LPG: Liquefied Petroleum Gas

	Electric BEV	Electric HFC	Electric Grid	Biofuels (liquid)	Synthetic fuels	Methane CNG	Methane CBG	Methane LNG	LPG
Road-passengers: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-passengers: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-passengers: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-freight: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rail (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: inland (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: short-sea shipping (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: maritime (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



14. Different transport modes may require different alternative fuels. Indicate which alternative fuels will be relevant for which transport modes on the time horizon 2050

BEV: Battery Electric Vehicle; HFC: Hydrogen/Fuel-Cell EV; Grid: Grid powered electric vehicle (e.g. tram, metro, train, trolley bus); CNG: Compressed Natural Gas; CBG: Compressed Bio-methane Gas; LNG: Liquefied Natural Gas; LPG: Liquefied Petroleum Gas

	Electric BEV	Electric HFC	Electric Grid	Biofuels (liquid)	Synthetic fuels	Methane CNG	Methane CBG	Methane LNG	LPG
Road-passengers: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-passengers: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-passengers: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Road-freight: short (urban) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: medium (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Road-freight: long (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rail (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: inland (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: short-sea shipping (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water: maritime (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

15. Should actions be taken to privilege the use of particular fuels in particular transport sectors?
* (compulsory)

- Yes
- No

Which actions should be taken? (compulsory)

CNG is the best adapted alternative fuel for passengers' vehicles whilst LNG is the best alternative for long distance transportation.

16. Do we need to accompany those actions with a coherent life-cycle approach for all fuels?
* (compulsory)

- Yes
- No



17. Do you think that biofuels meeting the EU sustainability criteria could provide the major share of the transport energy supply in the long term?* (compulsory)

- Yes
- No

Additional comments (optional)

In the transition to a low-carbon economy, natural gas will play a key role in electricity production and as an alternative fuel for transports. Natural gas is the fossil fuel with the lowest CO₂ emissions, and associated with biogas will contribute to achieve the CO₂ reductions targets. Biogas should be developed where possible and not competing with agriculture.

18. Do you think that biofuels meeting the EU sustainability criteria could deliver the required greenhouse gas reduction in the horizon 2050? * (compulsory)

- Yes
- No

19. Biofuels are considered to be an important part of alternative long term options for substituting oil as energy source in transport. Which approach(es) should get priority for further market build-up of biofuels reaching beyond 2020? (optional)

- Enabling progressively higher blending of bioethanol and biodiesel with conventional fossil fuels
- Faster market deployment of flexible fuel vehicles that can accept a much wider range of fuel specifications
- Faster market development of biofuels in transport sectors which are less dependent on fuel specifications than road transport passenger vehicles
- Faster market development of fungible biofuels, which can be blended at any ratio with conventional fossil fuels

Additional comments (optional)

Biomethane can be injected to natural gas systems allowing the biogas to be mixed with the passing natural gas. Furthermore, biomethane has the highest energy efficiency of all biofuels per surface of land.

20. Should the public sector intervene in accelerating the deployment of advanced biofuels technologies for the transport sector? * (compulsory)

- Yes
- No



21. Should the public sector intervene in the development of the refuelling/recharging infrastructures? * (compulsory)

- Yes
- No

Additional comments (optional)

Gas infrastructures are needed to ensure the availability of CNG and LNG as alternative fuels. Gas infrastructure investment entails long-lead times and thus requires long-term visibility. A sound investment climate together with a stable and predictable regulatory framework are fundamental for the development of infrastructure.

22. Do you think that achieving a consistent and significant deployment of alternative fuels is possible through a better use of currently available instruments (large scale demonstration projects; funding and financing; information provision)? * (compulsory)

- Yes
- No

Additional comments (optional)

23. Do you think that, in addition to currently available instruments, EU action to achieve a consistent and significant deployment of alternative fuels should be limited to ensuring the relevant infrastructure standards? * (compulsory)

- Yes
- No

Additional comments (optional)

The existing legislative framework does in most countries not acknowledge the superior environmental qualities of these fuels, or where acknowledgement exists, does not guarantee fiscal advantages for a longer pre-defined term so that potential buyers of e.g. CNG vehicles do not have planning certainty.

24. Do you think that voluntary action of industry alone could achieve the development of the refuelling/recharging infrastructures required for travelling across the whole EU on alternative fuels? * (compulsory)

- Yes
- No



Additional comments (optional)

The development of this market needs significant investments on infrastructure and on converting the trucks or vessels. Players will be understandably reluctant to take risks to invest too much before a certain critical mass is reached and before the legislative and fiscal framework is clearer.

25. Should there be EU legislation requiring a certain minimum refuelling/recharging infrastructure for certain alternative fuels/energy carriers?

	Road	Rail	Water	Air
Electricity (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hydrogen (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Biofuels (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Synthetic fuels (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methane (optional)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
LPG (Liquefied Petroleum Gas) (optional)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional comments (optional)

Methane (CNG and LNG) is the only proven technology applicable to any kind of vehicles for short, medium and long distances.

26. Should there be a build-up of a parallel dedicated bio-methane refuelling infrastructure or should bio-methane be injected into a single methane grid, supplying stationary and mobile consumers? * (compulsory)

- Dedicated bio-methane refuelling infrastructure
- Biomethane injected into general gas grid

Additional comments (optional)

Biomethane as an additional and renewable energy source promotes indigenous production and supports meeting commitments towards sustainability, diversifies energy sources and contributes to security of supply. In order to further facilitate its usage, biogas is injected to natural gas systems, which requires that it is produced, upgraded and purified to the required quality according to the specifications applied for the relevant transmission system. Specific care has to be taken by the biogas producer (or upgrading responsible) in order to safely transport, use and interoperate networks containing also this gas.



27. Should the market introduction of alternative fuels be supported by privileged access of alternative fuel vehicles/transport carriers to transport infrastructure? * (compulsory)

- Yes
- No

Specify the preferred measures* (compulsory)

- Lower charging tariffs for infrastructure use
- Privileged access to access restriction zones
- Other

Additional contributions through position papers are encouraged. They should be sent to MOVE-FUELS@ec.europa.eu or uploaded here below. (optional)

See GIE position paper of 7 March 2011 on “Roadmap for a low carbon economy by 2050” (click [here](#)) as well as the GIE brochure on the Energy Roadmap 2050 (click [here](#))