Prospects for expansion of international transport corridors Russia- Europe with the use of natural gas as motor fuel

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Blue Corridors (Phase I)

Source: UNECE, 2002
World Population Growth, 2000 - 2050

Source: UNPD, World Population in 2300

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>632</td>
<td>5222</td>
</tr>
<tr>
<td>Northern America</td>
<td>448</td>
<td>46</td>
</tr>
<tr>
<td>Asia</td>
<td>5222</td>
<td>768</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>796</td>
<td>1803</td>
</tr>
<tr>
<td>Oceania</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>Africa</td>
<td>728</td>
<td>316</td>
</tr>
<tr>
<td>Total</td>
<td>8,92</td>
<td>6,01</td>
</tr>
</tbody>
</table>

Source: UNPD, World Population in 2300
World Motorization, 2000 - 2020

Vehicles per 1000 people

Source: Energy Information Administration, 2001
World Energy Consumption for Transportation, 2006-2030

- 2006: 87.5 Quadrillion Btu
- 2010: 90.9 Quadrillion Btu
- 2015: 97.2 Quadrillion Btu
- 2020: 105.1 Quadrillion Btu
- 2025: 112.9 Quadrillion Btu
- 2030: 121.4 Quadrillion Btu

Source: International Energy Outlook, 2009
Major AfroEurAsian Gas Corridors

- existing
- planned or under construction
Blue Corridor OEM NGV Caravans

Real life experience harvested in two NGV Caravans (2008 & 2009) proved: we need three new CNG Filling Stations along the route from Saint-Petersburg to Sochi to secure the gas continuity of the Corridor. Three more CNG Filling Stations must be built along the highway to improve the driving pattern and exclude deviations from the main route.
CNG/NGVs in Russia, 2009

- CNG demand – 321 Mm³
- Filling stations - 235
- NGVs – 103 000 (Gazprom – 4600)

Gazprom’s Program for expansion of CNG filling stations network
Blue Corridors Beyond Automobiles
Evolution of Corridors

- **White Corridors (hydrogen)** - 2030
- **Green Corridors (biomethane)** - 2020
- **Blue Corridors (natural gas)** - 2010
- **Red Corridors (oil based fuels)** - now
The World Blue Corridors

86 km Bering Strait
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as motor fuel

Thank you

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