



Ozone – Public Information in Belgium

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Ozone Belgium, Legislation

Ozone

Summer



NO_x, VOC, Heat + UV

Directive 2008/50/CE

- Information threshold: 180 $\mu\text{g}/\text{m}^3$
- Alert threshold: 240 $\mu\text{g}/\text{m}^3$

Forecasted and/or measured exceedance(s)  Information Public

Federal 'Heat and Ozone plan'

Temperature criteria : forecasted by the RMI (Royal Meteorological Institute)
Ozone : measurements + forecasts by IRCEL-CELINE

3 Phases : Vigilance, Warning, Alert

IRCEL- CELINE : Responsible for the activation of the different phases

Ozone Belgium, Informing/warning the public

2 possible situations:

=> exceedances forecasted:

Warning/Alert messages day – 1 or day 0 (before noon)

=> exceedances measured at fixed monitoring sites

> Information threshold:

- * Real-time on website

- * Twitter message via @smog_be

- * Information report/bulletin day 

> Alert threshold:

- * Real-time on website

- * Immediate alert message on day 0 + 

- * Additional info via report day +1

Ozone Belgium, Examples Public Info

Measurements

You are here: [Home](#) / [Air Quality](#) / [Measurements](#) / [Ozone](#) / [Last 14 days](#)

Particulate Matter

Ozone

Information

Per monitoring site

Animation last 24 hours

Last 14 days

Exceedances

History

Forecast

Europe

Nitrogen Dioxide

BelAQI Air Quality Index

Meteorological Observations

Monitoring Stations

Forecasts

Population Exposure

Emissions

Last 14 days

[previous 14 days](#)

[next 14 days](#)

Daily highest mean ozone concentrations (00h00 till 24h00 GMT), 17/07/2018 - 30/07/2018

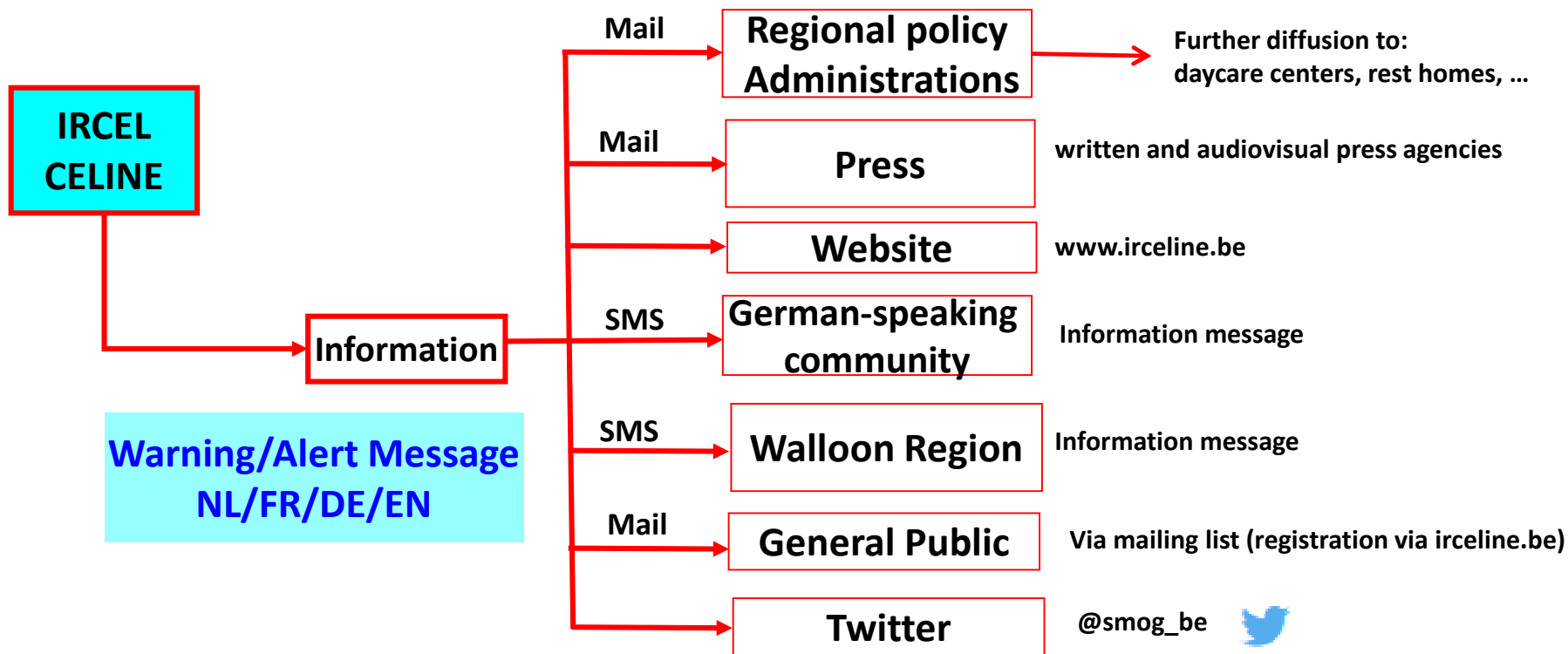
info :

-click on the figures in the table cells to get an evolution graph of daily concentrations

[O₃] "ozone day" : day with at least one exceedance in Belgium of the EU threshold for information of the public (180 µg/m³)

| code | city | 17/07 | 18/07 | 19/07 | 20/07 | 21/07 | 22/07 | 23/07 | [O ₃] 24/07 | [O ₃] 25/07 | [O ₃] 26/07 | [O ₃] 27/07 | 28/07 | 29/07 | 30/07 |
|--------|--------------------------|-------|-------|-------|-------|-------|-------|-------|----------------------------|----------------------------|----------------------------|----------------------------|-------|-------|-------|
| 41B004 | Brussel (Sint-Katelijne) | 81 | 90 | 131 | 96 | 120 | 131 | 137 | 155 | 169 | 73 | NA | NA | NA | 49 |
| 41B006 | Brussel (EU Parlement) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 41B011 | Sint-Agatha-Berchem | 90 | 95 | 134 | 99 | 126 | 136 | 148 | 161 | 179 | 199 | 156 | 89 | 87 | 60 |
| 41MEU1 | Neder-Over-Heembeek | 90 | 97 | 137 | 109 | 123 | 139 | 149 | 165 | 173 | 187 | 155 | 77 | 80 | 56 |
| 41N043 | Voorhaven (Haren) | 80 | 86 | 131 | 98 | 125 | 136 | 146 | 160 | 177 | 164 | 128 | 78 | 73 | 46 |
| 41R001 | Sint-Jans-Molenbeek | 82 | 87 | 127 | 93 | 113 | 133 | 133 | 149 | 161 | 181 | 142 | 85 | 85 | 57 |
| 41R012 | Ukkel | 86 | 93 | 131 | 96 | 118 | 126 | 118 | 154 | 168 | 178 | 150 | 81 | 83 | 57 |
| 41WOL1 | Sint-Lambrechts-Woluwe | 84 | 81 | 122 | 93 | 112 | 124 | 121 | 139 | 156 | 148 | 105 | 78 | 75 | 48 |
| 42MW02 | Diepenbeek (Heidestraat) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 42N016 | Dessel | 104 | 115 | 142 | 137 | 147 | 178 | 135 | 177 | 187 | 184 | 180 | 91 | 86 | 80 |
| 42N027 | Bree | 110 | 126 | 150 | 138 | 152 | 173 | 135 | 196 | 200 | 174 | 132 | 101 | 90 | 85 |
| 42N035 | Aarschot | 99 | 118 | 150 | 129 | 148 | 167 | 177 | 181 | 201 | 191 | 199 | 113 | 90 | 78 |
| 42N040 | Sint-Pieters-Leeuw | 94 | 100 | 145 | 121 | 136 | 143 | 127 | 178 | 194 | 205 | 158 | 84 | 90 | 62 |
| 42N045 | Hasselt | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 42N046 | Gellik | 104 | 114 | 158 | 147 | 155 | 162 | 172 | 181 | 205 | 175 | 172 | 117 | 85 | 84 |
| 42N054 | Walshoutem | 93 | 113 | 138 | 130 | 146 | 154 | 150 | 157 | 199 | 179 | 166 | 89 | 78 | 66 |
| 42R801 | Borgerhout | 79 | 79 | 118 | 99 | 89 | 130 | 128 | 156 | 144 | 186 | 132 | 83 | 77 | 58 |
| 42R811 | Schoten | 84 | 102 | 135 | 124 | 120 | 152 | 139 | 188 | 161 | 212 | 182 | 94 | 89 | 76 |
| 42R831 | Berendrecht | 85 | 92 | 119 | 113 | 113 | 137 | 122 | 152 | 156 | 230 | 164 | 91 | 86 | 71 |
| 44M705 | Roeselare (Haven) | 94 | 77 | 101 | 85 | 123 | 129 | 120 | 128 | 145 | 201 | 170 | 76 | 75 | 60 |
| 44N012 | Moerkerke | 101 | 85 | 102 | 98 | 106 | 114 | 109 | 89 | 136 | 207 | 151 | 79 | 78 | 64 |
| 44N029 | Houtem (Veurne) | 88 | 77 | 96 | 90 | 130 | 118 | 105 | 88 | 143 | 205 | 181 | 76 | 64 | 55 |
| 44N051 | Idegem | 94 | 100 | 141 | 97 | 136 | 149 | 126 | 181 | 187 | 196 | 153 | 97 | 87 | 74 |
| 44N052 | Zwevegem | 86 | 89 | 115 | 73 | 124 | 139 | 127 | 139 | 177 | 193 | 144 | 77 | 74 | 61 |

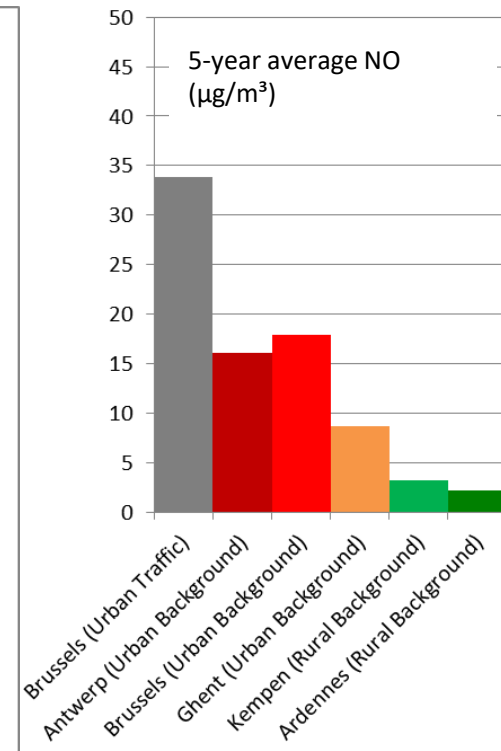
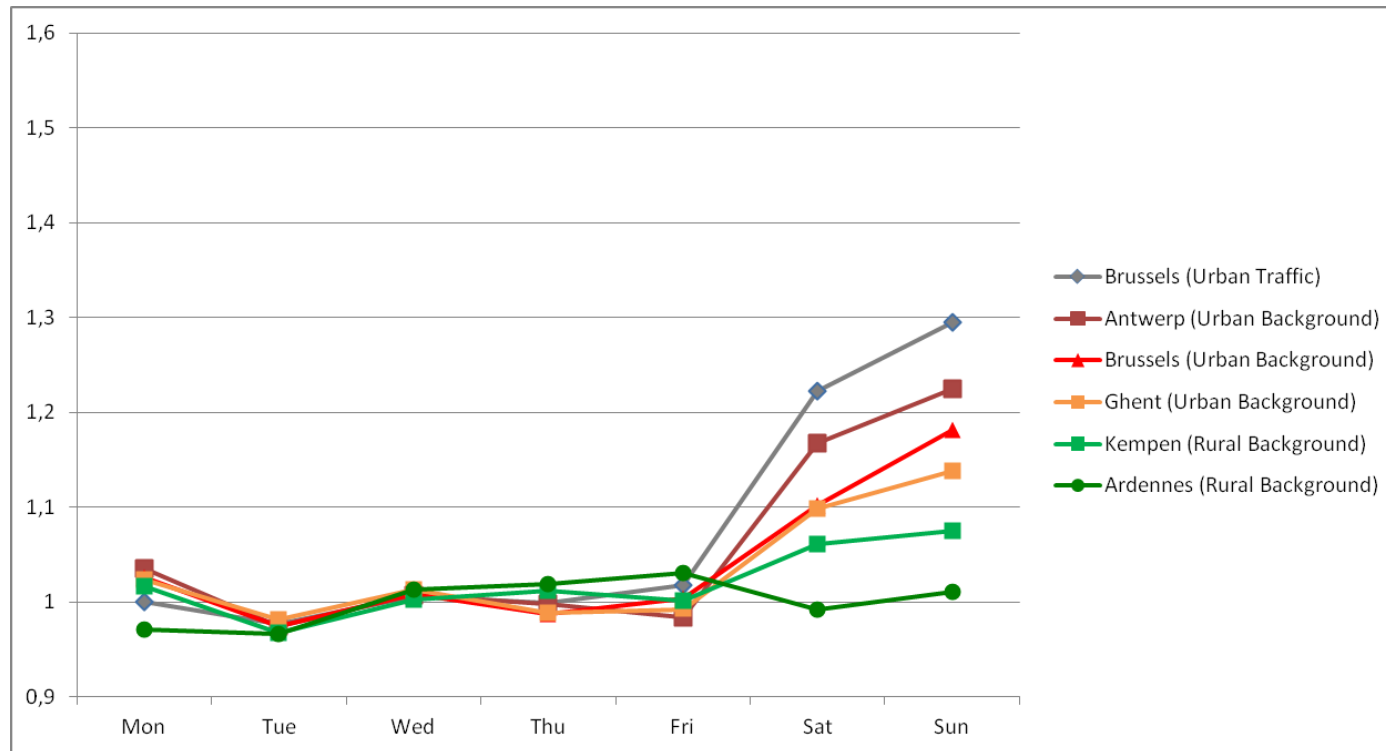
Ozone Belgium, Information Chain



During ozone smog episodes: no short term (traffic) emission reduction measures, only recommendations to reduce exposure

Ozone, per weekday, 2013 - 2017

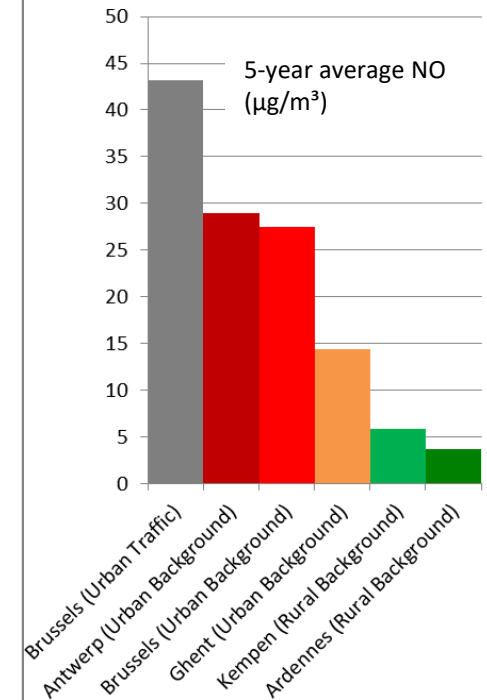
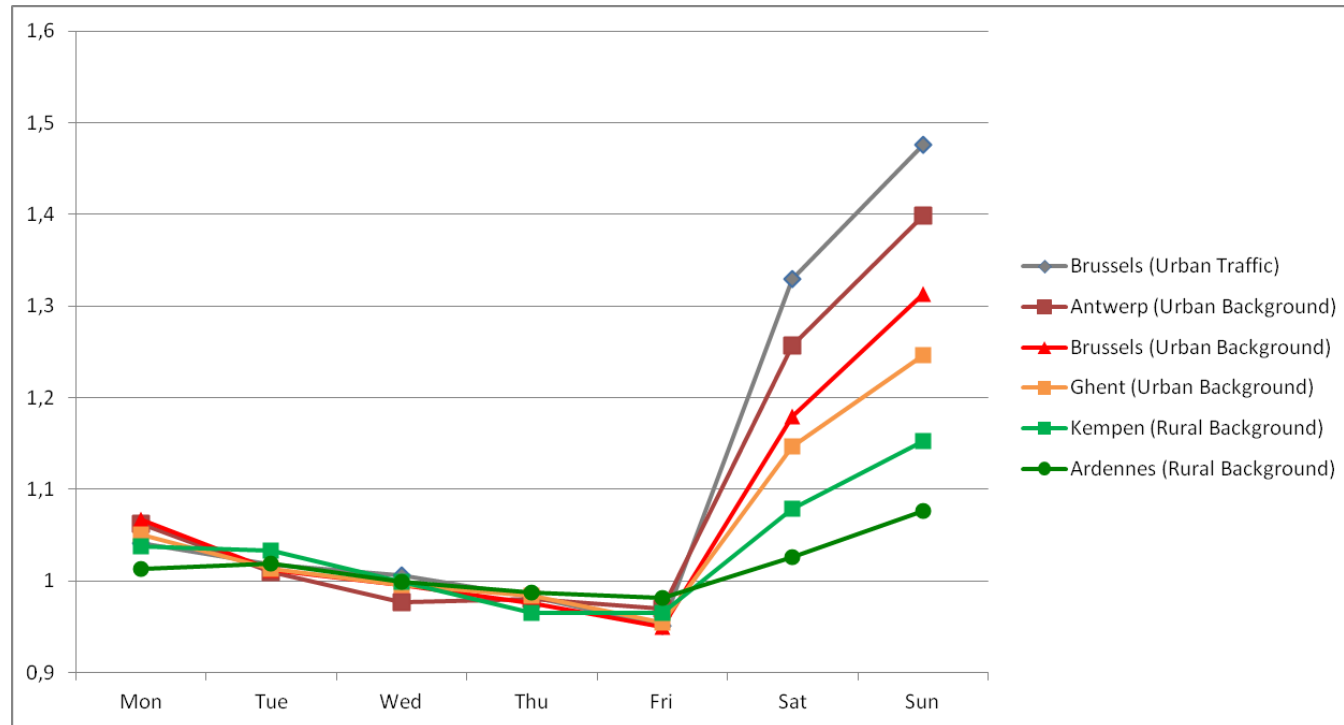
(normalised mean weekday ozone concentrations, April - September)



**Weekend Effect: till 30% increase ozone in urban (traffic) areas
Even at rural location increase ozone (+ 5%)**

Ozone, per weekday, 1998 - 2002

(normalised mean weekday ozone concentrations, April - September)



Weekend effect decreases:

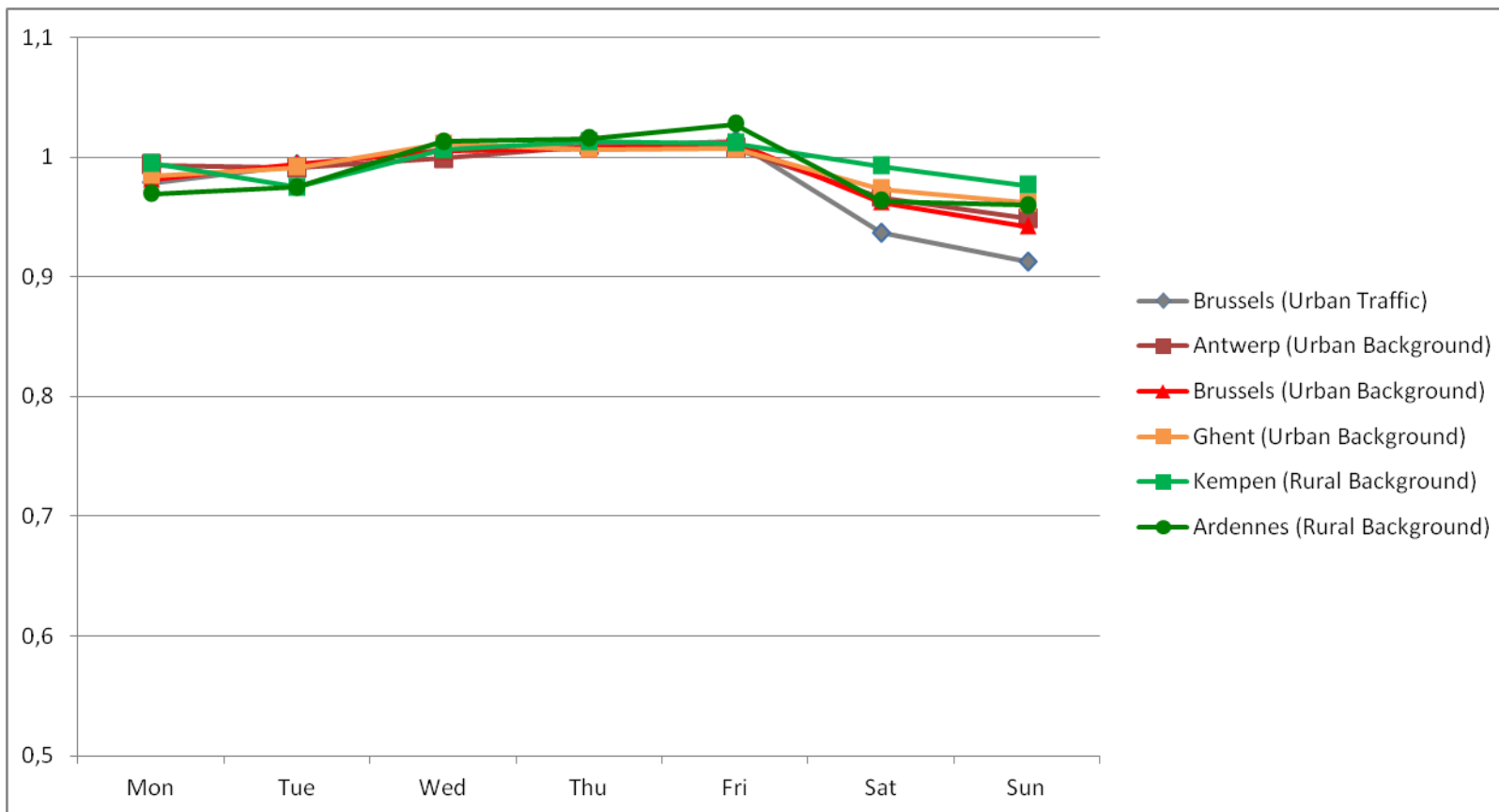
15 years ago: till 50% increase ozone in urban (traffic) areas

At rural locations, ozone increase (5 – 15%)

(but summer average ozone, during weekdays, increased ...)

Ox (O₃+NO₂), per weekday, 2013 - 2017

(normalised mean weekday Ox concentrations, April - September)



Conclusions (1)

- **Information of the public according to guideline 2008/50**
- **Warning messages to reduce exposure**
- **No short term (traffic) emission reduction measures: NOT efficient – weekend effect**

Conclusions (2)

- **The negative impact of ozone pollution on human health (and vegetation) is too important to reduce its control to spectacular but inefficient short term measures that create the false impression that the problem is being dealt with.**
- **Only sustainable, drastic and EU (global) wide reductions of NO_x and VOC will solve the ozone problem.**

Thank you for your attention!

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<http://www.irceline.be>

<http://www.vmm.be>

<http://www.leefmilieu.brussels/>

<http://www.awac.be/>



twitter.com/smog_be