

# Expert judgement collection and documentation

*Training seminar on uncertainty evaluation*

*October 28th-29th, 2015  
Norwegian Environment Agency*

**Vita RATNIECE**

Latvian Environment, Geology and Meteorology Centre  
Air and Climate Division

2009 – 2014 EEA GRANTS PROGRAMME  
**NATIONAL CLIMATE POLICY**

PRE-DEFINED PROJECT  
**“DEVELOPMENT OF THE NATIONAL SYSTEM FOR GREENHOUSE GAS INVENTORY  
AND REPORTING ON POLICIES, MEASURES AND PROJECTIONS”**  
Nr.4.3-23/EEZ/INP-002

# Uncertainty (%) given by Central Statistical Bureau (CSB) for activity data

Referring to your letter No. 18-1e/739 on 29.01.2015 about Central Statistical Bureau (CSP) activity data uncertainty, CSB explains the following:

- Statistical sampling error (Uncertainty) for energy data is evaluated as 2%;
- Industrial and Construction Statistics Section has been carried out quantitative evaluation of data used in GHG inventory according to EU PRODCOM classification and product types. CSP confirms that uncertainty for these data is evaluated as 2%.

Coefficient of variation (CV) for the areas of agricultural crops in 2013

	Coefficient of variation
Cereals	0.99
Dried pulses	3.84
Root crops	2.05
Oilseeds	0.55
Other industrial crops	18.88
Plants harvested green	2.26
Total vegetables	5.73
Vegetables	5.71
Total permanent crops	8.83

Coefficient of variation (CV) for use of fertilizers in 2013

	Coefficient of variation
Organic fertilizers	3.56
Mineral fertilizers	1.09
N	1.07
K <sub>2</sub> O <sub>2</sub>	1.36
P <sub>2</sub> O <sub>2</sub>	1.56

Coefficient of variation (CV) for the number of livestock\* in 2013

	Coefficient of variation
Number of pigs	0.57

\* For other categories of livestock CSB use the administrative data source - Animal Register

# Uncertainty (%) given by gas company «Latvijas Gāze» for activity and emission data



Pielikums  
A/s «Latvijas Gāze»  
24.09.2015. vēst.  
Nr 03-51/3396



Dati par SEG gāzu emisiju vidē lielumiem

2014.gads

Siltumnīcefekta gāzes noplūdes avots	Siltumnīcefekta gāze, Gg (m <sup>3</sup> )						Neprecizitāte, (plus, minus)%	
	CH <sub>4</sub>	CO <sub>2</sub>	N <sub>2</sub> O	NMGOS	NOx	CO		SO <sub>2</sub>
1. Uzglabāšana storage	0.1997 285326	0.000508 256		0.071165 6869				10%
2. Pārvade transmission	0.8400 1200152	0.002136 1079		0.299339 28892				10%
3. Sadales tīkli distribution	0.4876 696597	0.00124 626		0.173744 16770				10%
4. Citas izplūdes								
4.1. Rūpniecības uzņēmumos un spēkstacijās	xxx	xxx		xxx				—
4.2. Mājsaimniecības un tirdzniecības sektoros	3.8852 5550235	0.009878 4989		1.384327 133613				35%
Other (commercial, institutional)	KOPĀ: 5.4125 7732310	0.013762 6950		1.928575 186144				

A/s «Latvijas Gāze»  
Eksploatacijas un tehniskā departamenta  
Eksploatacijas un tehniskās daļes  
vadotais inženieris enerģētiskā

IVARS RĒPELIS

*I. Rēpelis*

23.09.2015.

# ETS enterprises (Cement company CEMEX) for activity and emission data



## IV. Emisiju noteikšana

Emisijas apjoma noteikšanas metodoloģija

Uncertainty

Nr.p.k.	darbības veids	lietotā metodoloģija	nenoteiktība	līmeņu maiņa
1.	2.	3.	4.	5.
1.	<b>3. Minerālu izstrādājumu ražošana:</b> 1) iekārtas cementa klinkera ražošanai rotācijas krāsnīs, kuru jauda pārsniedz 500 tonnas produkcijas dienā	Aprēķina	< ± 2.5 %	Nē
2.	<b>1. Enerģētika:</b> 1) sadedzināšanas iekārtas, kuru nominālā ievadītā siltuma jauda pārsniedz 20 MW	Aprēķina	< ± 2.5 %	Nē
3.	<b>1. Enerģētika:</b> 1) sadedzināšanas iekārtas, kuru nominālā ievadītā siltuma jauda pārsniedz 20 MW	Aprēķina	< ± 2.5 %	Nē
4.	<b>1. Enerģētika:</b> 1) sadedzināšanas iekārtas, kuru nominālā ievadītā siltuma jauda pārsniedz 20 MW	Aprēķina	< ± 2.5 %	Nē

- Information regarding uncertainties are reported in NIR under relevant subchapters as well as used in Uncertainty analysis file;
- Official letters received from companies confirming their activity data uncertainty are stored on common, password protected FTP folder;
- Question for discussion – how to document judgment of uncertainty made by experts?

**Thank you for your attention!**

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