

# ATMOsphere 'network' Tokyo (Sept)



**18:00 Informal Reception** - Drinks & Appetizers

**18:50 Welcome and Introduction by shecco & MEC**

**19:00 Lawson's Action against Global Warming**

- Hiroyuki Matsutani & Mengmeng Yu, Lawson

**19:20 Hydrocarbons: Should you make the switch?**

- Bill Ho, Director of Sales, AHT Asia

**19:40 EU F-Gas Regulation & Update from global markets**

- Marc Chasserot, Managing Director, shecco Japan

**20:00 - 21:00 Business networking**

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Invitation to ATMOsphere network Tokyo event

# Commercial refrigeration with natural refrigerants & EU F-Gas Regulation

Program:

### Informal Reception

Drinks & Appetizers

### Lawson's Action against Global Warming

Hiroyuki Matsutani and Mengmeng Yu, Lawson

### Hydrocarbons: Should you make the switch?

Bill Ho, Director of Sales, AHT Asia

### EU F-Gas Regulation & Update from global markets

Marc Chasserot, Managing Director, shecco Japan

Date: 19 September 2013, 18:00 – 21:00

Place: Tokyo 21c Club Collaboration Space, Shin-Marunouchi Building 10F, Tokyo

日時：2013年9月19日（木）18:00 – 21:00

会場：東京21cクラブ・コラボスペース  
新丸の内ビルディング 10階

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Organizer



## September edition sponsored by





# European Update

## EU F Gas Regulation & Market Trends



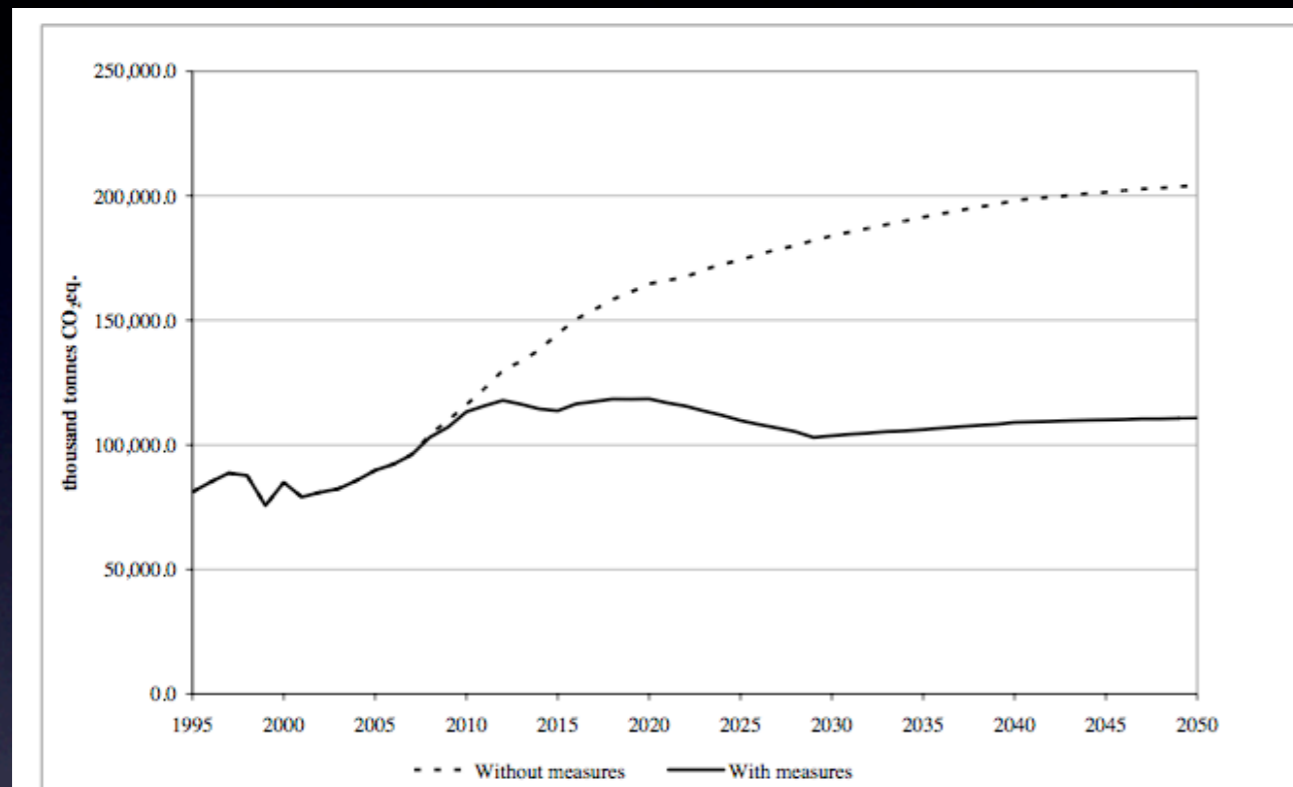
Tokyo, 19 Sept 2013

Marc Chasserot, Managing Director

shecco Japan K.K.

# EU F Gas update

# EU F-Gas Regulation revision - rationale



**Figure 1: Projections of F-gas emissions in the EU without and with the measures in the F-gas Regulation and the MAC Directive**

source: EC report on effectiveness of EU F-Gas Regulation, Sept 2011

Figure 1: Projections of F-gas emissions in the EU without and with the measures in the

- September 2011 - EC report assessing F-Gas Regulation effectiveness concludes:

more action on f-gases is needed to achieve EU's long-term emission reduction targets

“the overall EU objective to cut emissions by 80–95 % by 2050, the stabilisation of F-gas emissions at today's levels is not adequate. Our studies show that low-GWP technologies are technically feasible and can be cost-effective in many application areas”.

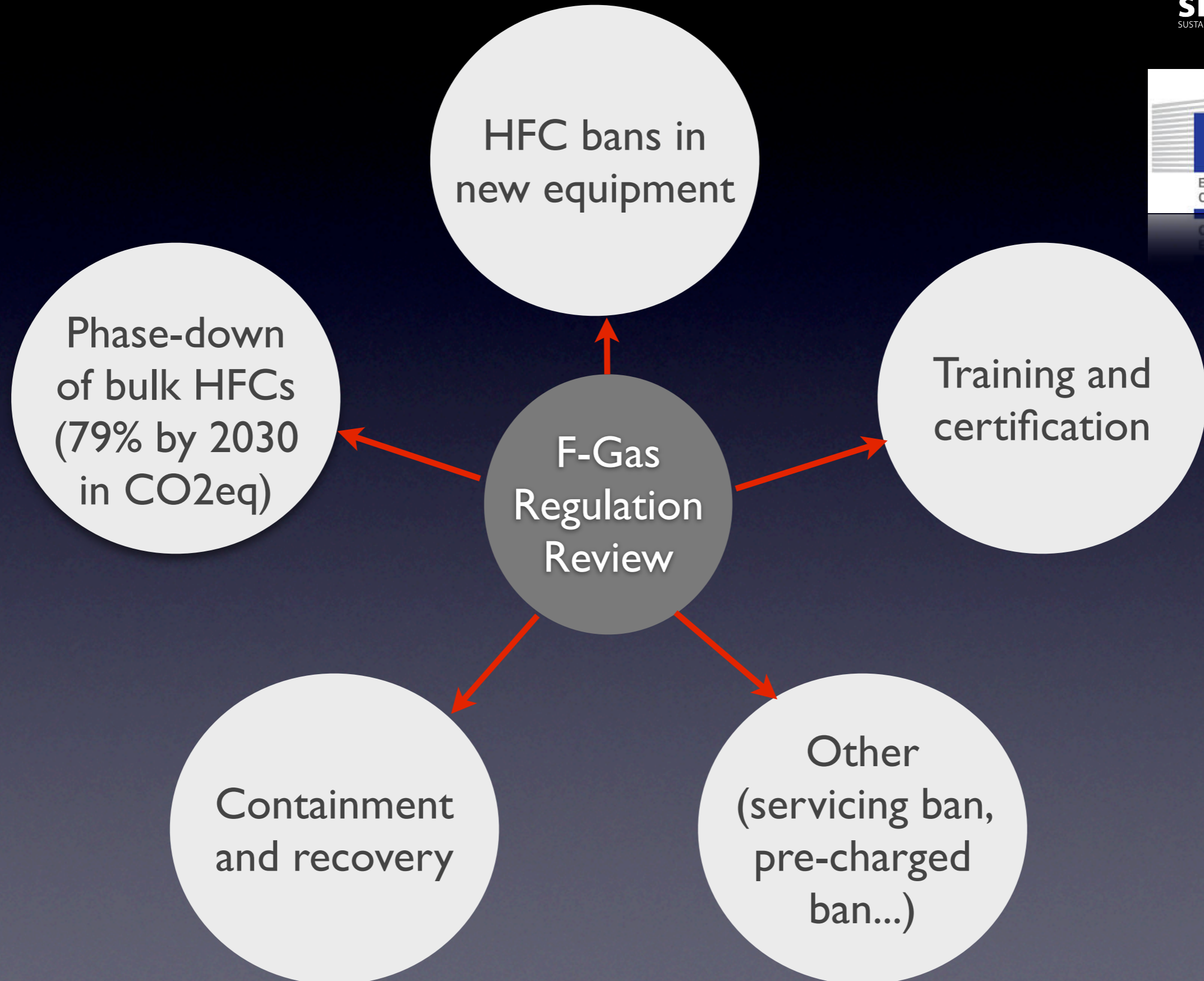
# EU F-Gas Regulation revision - EC proposal



- © European Commission published the proposal in November 2012 (at ATMOSphere Europe 2012)



# EU F-Gas: European Commission proposal



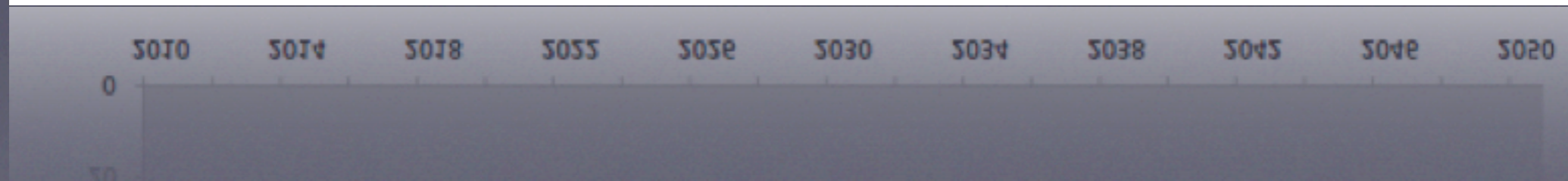
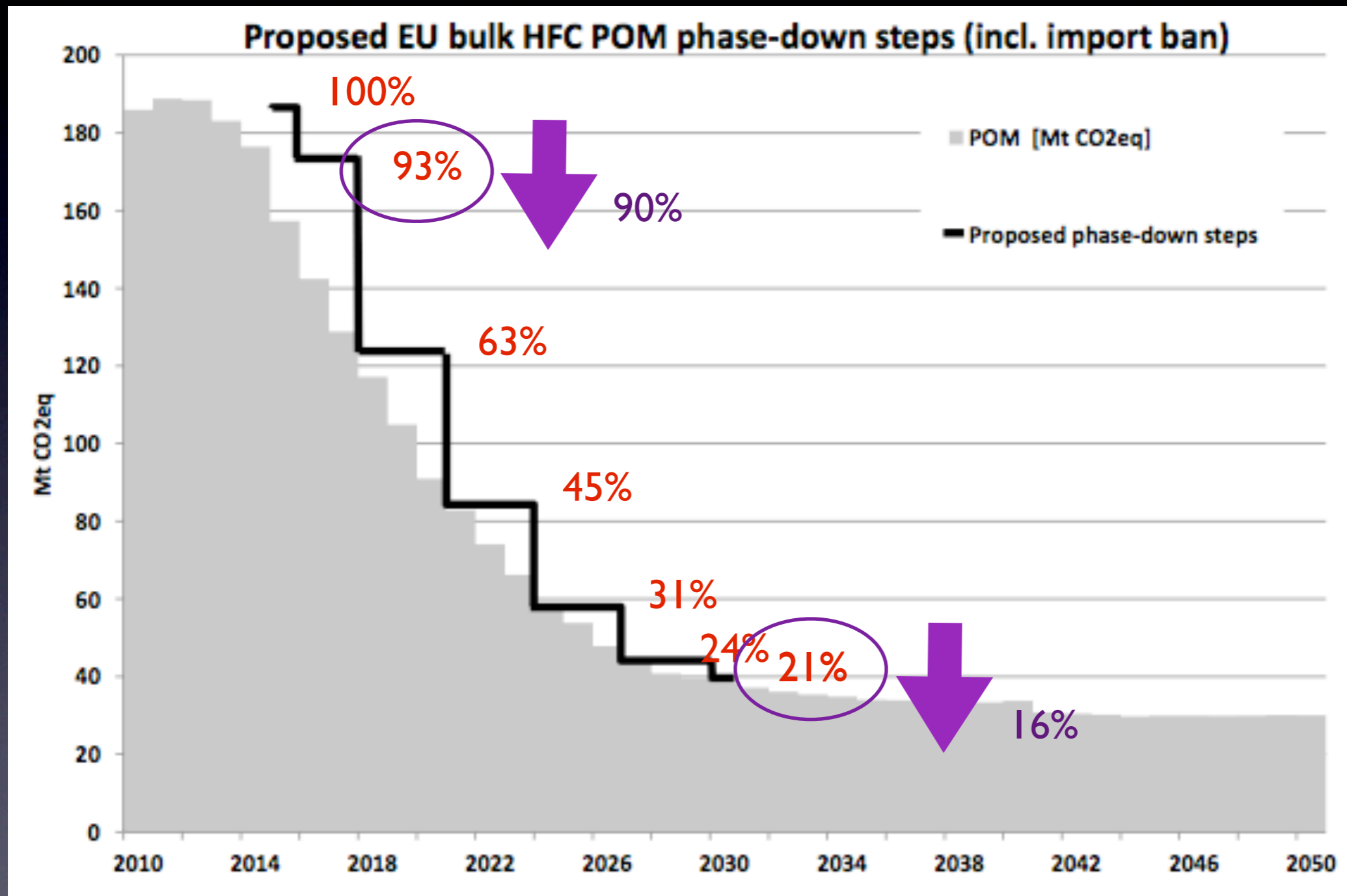
# European Parliament strengthens the F-Gas Regulation proposal - 19 June 2013



- ✓ **HFC bans** in new equipment in additional sectors
- ✓ **More ambitious phase-down** - 84% reduction by 2030 against 2009-2012 baseline
- ✓ **Allocation fee on quotas** with part of the revenues streamlined to facilitate an international agreement on HFCs
- ✓ Maintained requirement to include alternatives to f-gases in **certification of technicians** + necessity to update knowledge every 5 years


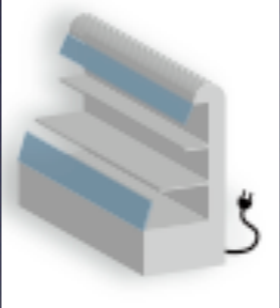
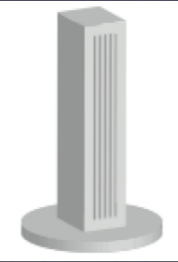


# EU F-Gas: Phase-down schedule



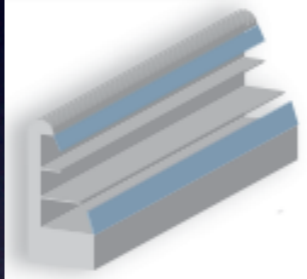



# EU F-Gas: HFC bans in new equipment



<b>Type of equipment</b>	<b>Ban applies as of</b>
1. Domestic refrigeration 	2015 for HFCs
2. Hermetically sealed refrigeration systems for commercial use 	2015 if GWP $\geq$ 2,150 2018 for HFCs
3. Movable air conditioning systems (hermetically-sealed) 	2020 for HFCs

# EU F-Gas: HFC bans in new equipment



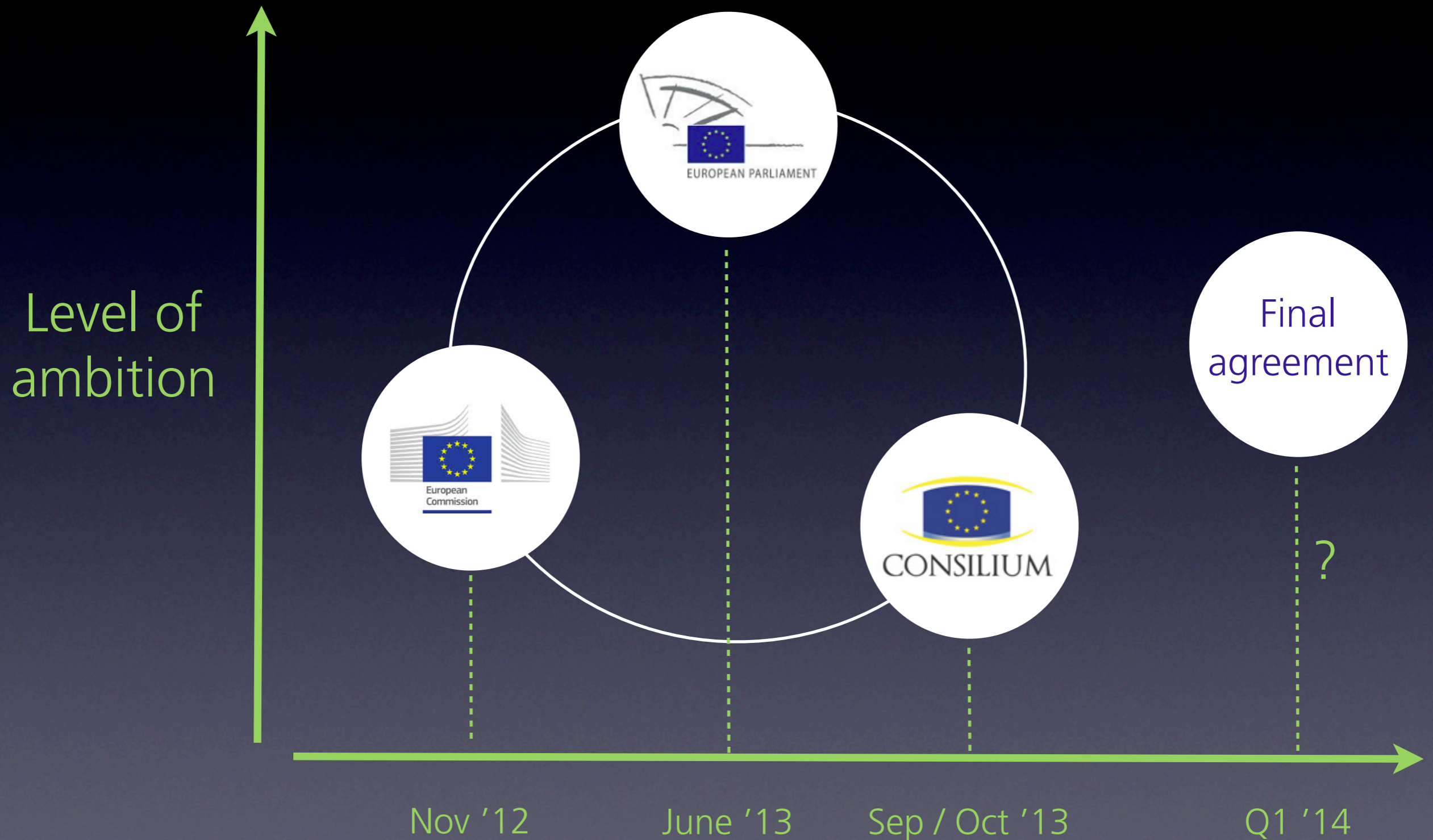
<b>Type of equipment</b>	<b>Ban applies as of</b>
4. Stationary refrigeration (except for use below - 50 degrees) 	2016 if GWP $\geq$ 2,150 2020 for HFCs
5. Stationary air-conditioning 	2020 for HFCs
6. Mobile refrigeration 	2025 for HFCs
7. Air-conditioning in cargo ships 	2020 for HFCs

# EU F-Gas: Member States (Council of the EU)



- ✓ Member States are taking a more conservative approach closer to the original EC proposal:
  - ✓ **HFC phase down** - supported in general as the key instrument
  - ✓ **HFC bans in new equipment** - additional bans to EC proposal lack support
  - ✓ **Training on alternatives to f-gases** - removing requirement of mandatory training & certification, only requiring access to information

# EU F-Gas: Triilogue negotiations



# EU F-Gas: Triologue negotiations



Agreement needed on several measures:

- ✓ Allocation of quotas:
  - ✓ free of charge (EC proposal)
  - ✓ upon a fixed fee (EP amendment)
  - ✓ auctioning
- ✓ HFC bans in new equipment - which sectors ?
- ✓ Training & certification on alternatives
- ✓ Pre-charged ban vs. tracking system

# Recent developments



- ✓ June 2013 - Environmental Taxation Committee recommends the **French** government to propose HFC tax
- ✓ July 2013 - **New Zealand** introduces HFC levy
- ✓ July 2013 - **Spanish** government proposes HFC tax, with the view of implementation as of January 2014

N.America:  
Montreal Protocol  
amendment  
proposal

Quebèc: considers  
limiting HFCs in  
commercial refr. and  
arenas

Norway: HFC  
tax + refund  
scheme

Sweden: proposed  
HFC tax

Spain: HFC  
tax proposal

France:  
considering HFC  
tax

Japan: HFC phase-  
down + other  
measures

Denmark: HFC  
tax + HFC bans

Switzerland:  
HFC bans as of  
Dec 2013

SNAP  
approval for  
HCs

EU: proposed HFC  
phase-down and bans;  
training on alternaitves

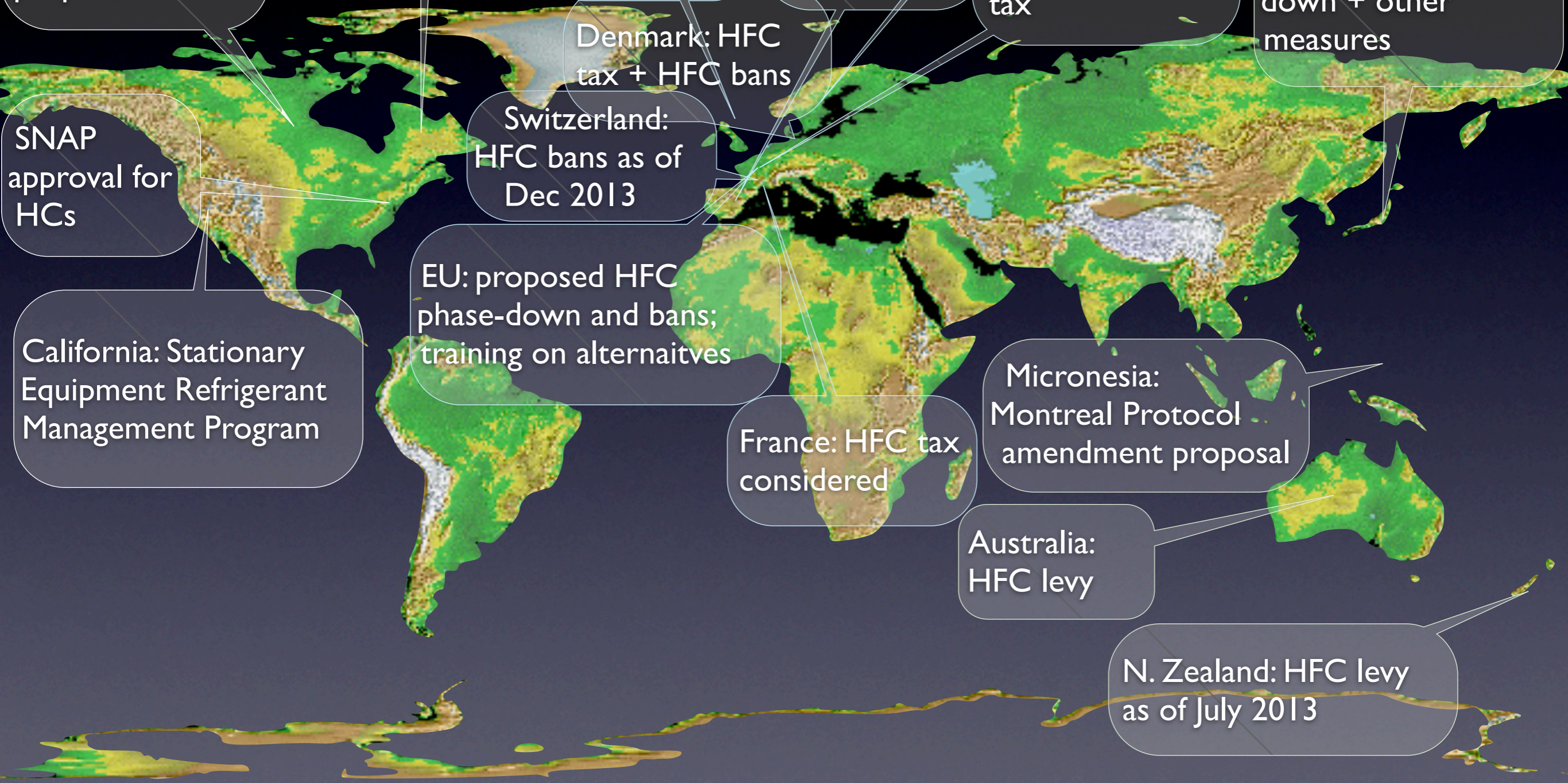
California: Stationary  
Equipment Refrigerant  
Management Program

France: HFC tax  
considered

Micronesia:  
Montreal Protocol  
amendment proposal

Australia:  
HFC levy

N. Zealand: HFC levy  
as of July 2013





# Market Trends

# GUIDE Europe 2013



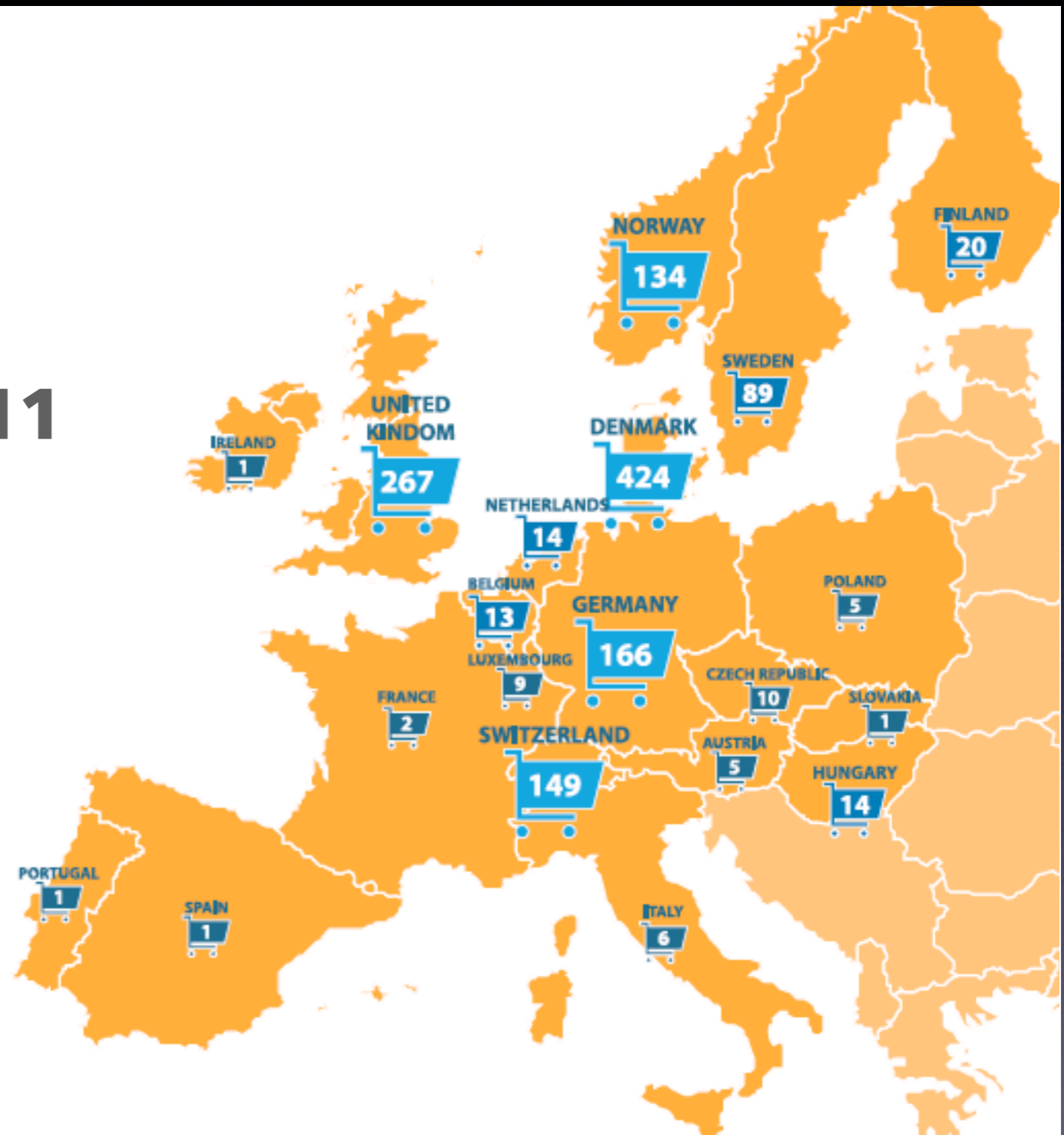
- **expected launch: Nov 2013**
- **2<sup>nd</sup> edition due to high popularity**
- **HVAC&R industry survey with 350+ responses**
- **current & future use of NR**
- **market trends & drivers**
- **natural refrigerant supermarket map, light-commercial map, industrial refrigeration map**



# CO<sub>2</sub> TC stores: europe 2011



**verified: 1,331  
transcritical CO<sub>2</sub>  
stores by mid-2011  
for Europe**

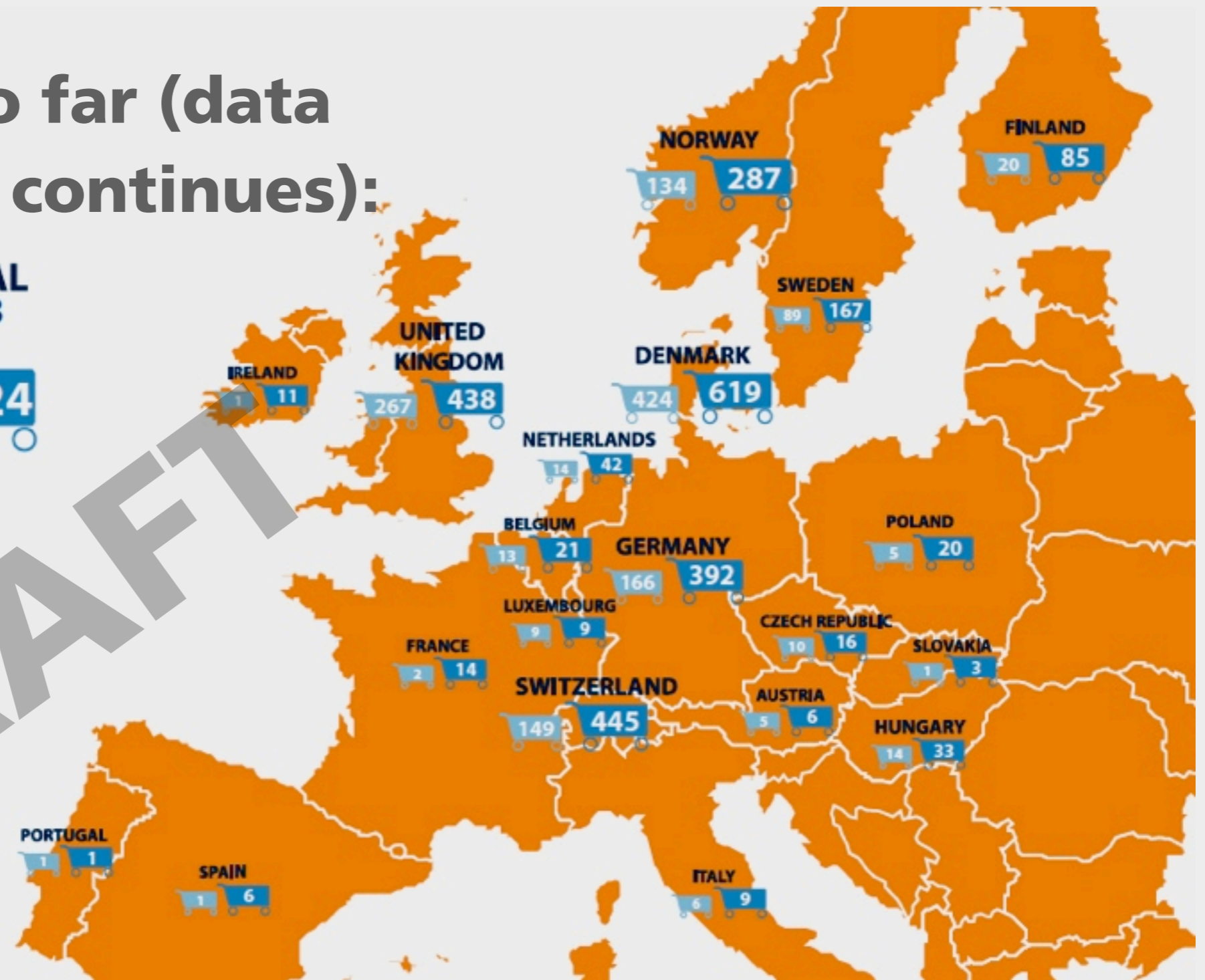


# CO<sub>2</sub> TC stores: europe 2013

verified so far (data collection continues):

TOTAL  
2013

2624



# CO<sub>2</sub> TC stores: europe 2011-13 (est.)



	2011	2013 (tbc)	Increase in 2 years
Denmark	424	619	+46%
Switzerland	149	445	<b>+199%</b>
United Kingdom	267	438	+64%
Germany	166	392	<b>+136%</b>
Norway	134	287	+114%
<b>EU</b>	<b>1331</b>	<b>2624</b>	<b>+97%</b>

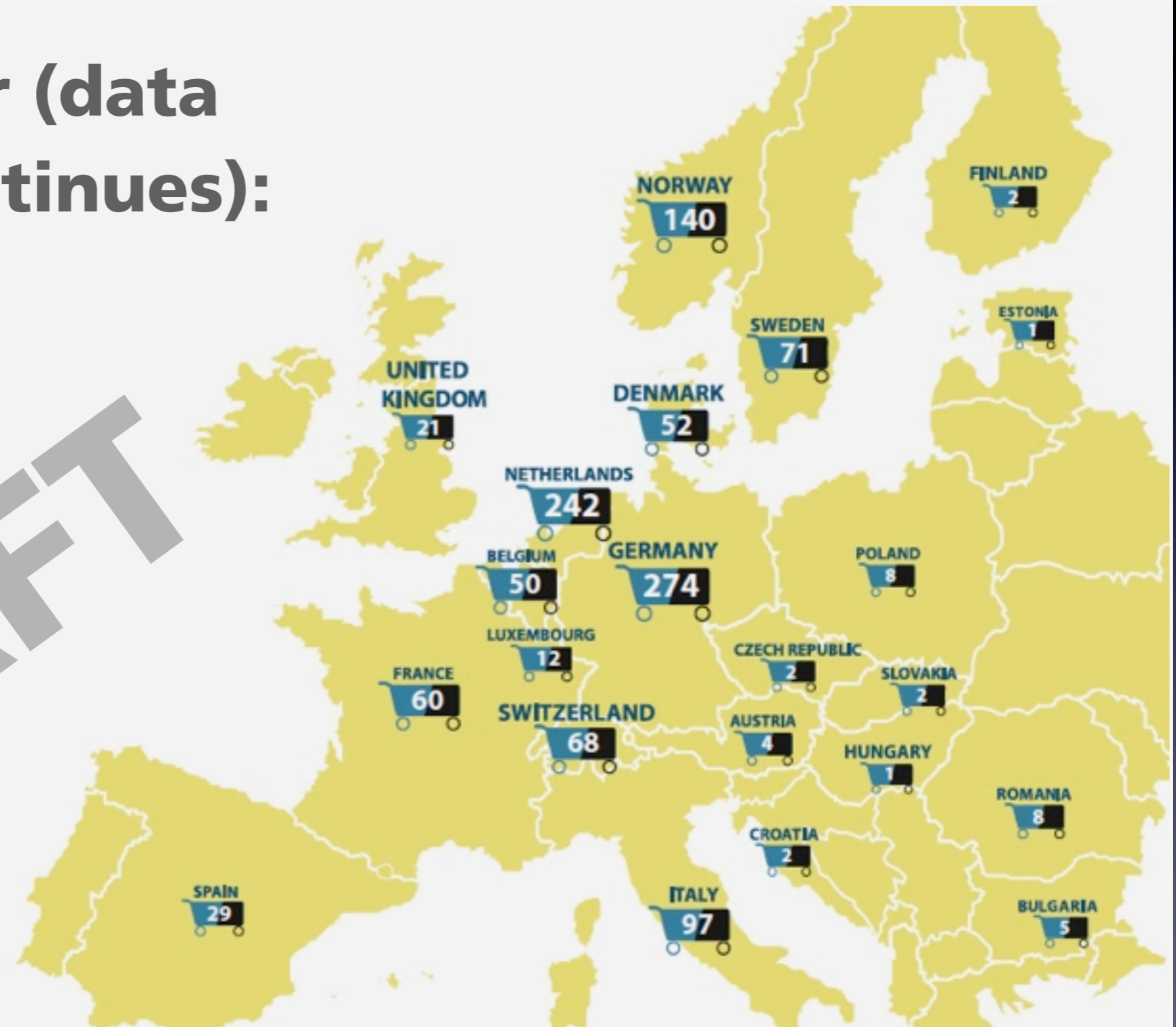
# CO<sub>2</sub>-HFC cascade stores: europe 2013



verified so far (data collection continues):



DRAFT

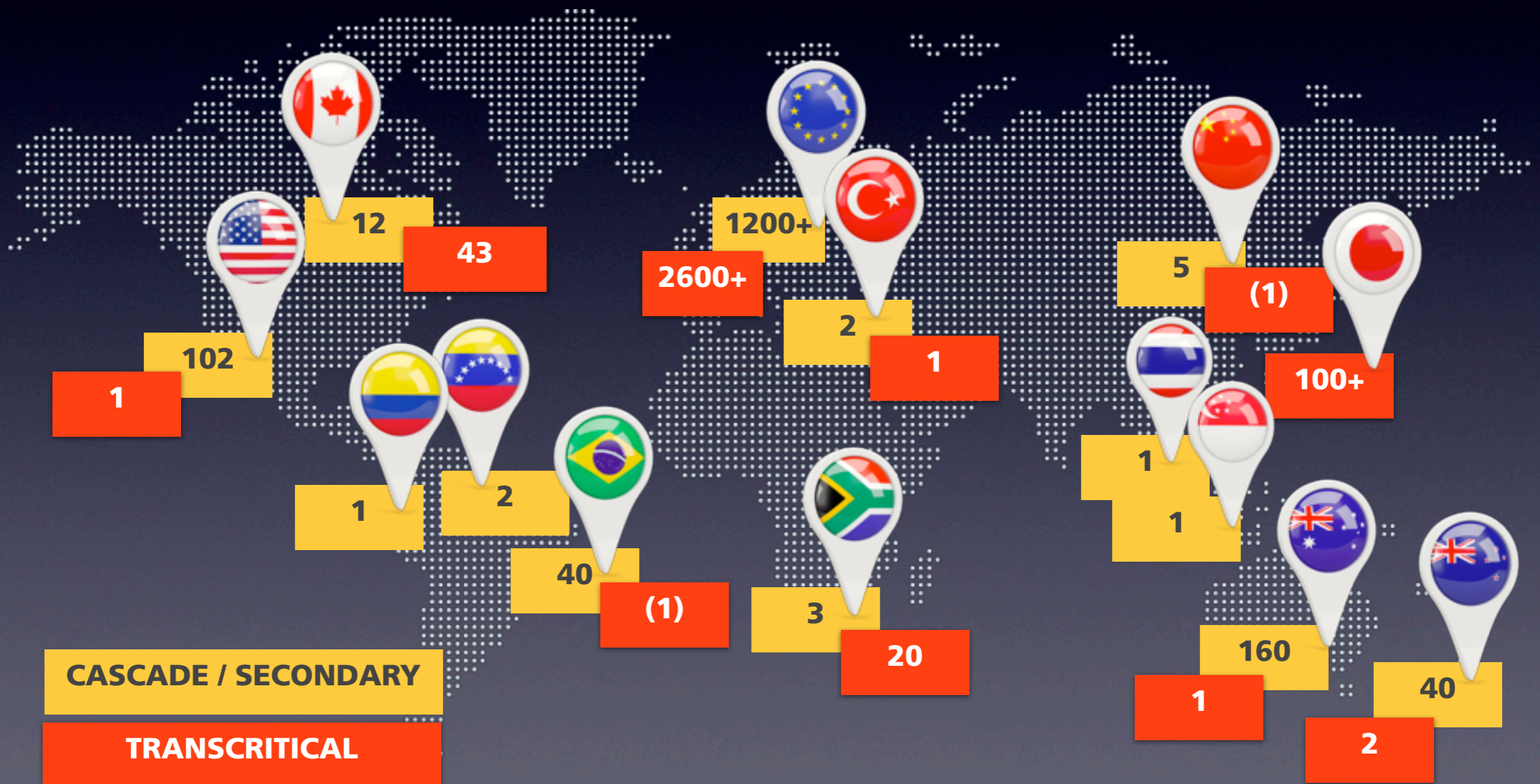


# CO<sub>2</sub>-HFC cascade stores: europe 2013



		2013 (tbc)
		
	<b>Germany</b>	<b>274</b>
	<b>Netherlands</b>	<b>242</b>
	<b>Norway</b>	<b>140</b>
	<b>Italy</b>	<b>97</b>
	<b>Sweden</b>	<b>71</b>
	<b>EU</b>	<b>1200+</b>

# estimated CO<sub>2</sub> systems in the world - status: September 2013







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どうも有り難うございました！