

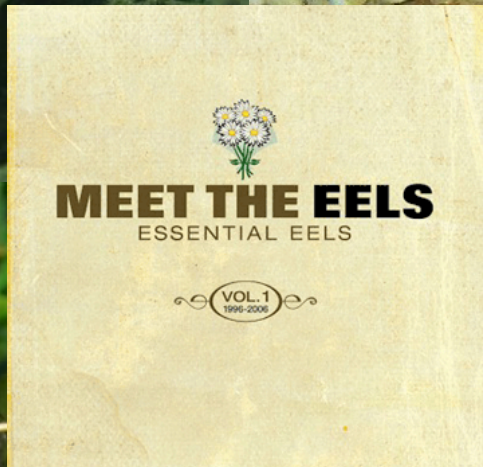
Tuesday 2016-05-31 – London, Fishmongers Hall

Without international steering,  
nobody will protect the eel –  
an analysis of the steering models  
governing the eel across Europe



Willem . Dekker @ SLU . SE









WONDERFUL,  
GLORIOUS



EELS

Sargasso



Africa

— *Anguilla rostrata* —  
— *Anguilla anguilla* —



# C. Puke, Svensk Fiskeri Tidskrift 1955 – Uppsamling och transport av ålyngel i nedre Norrland



Sundsvalls museum



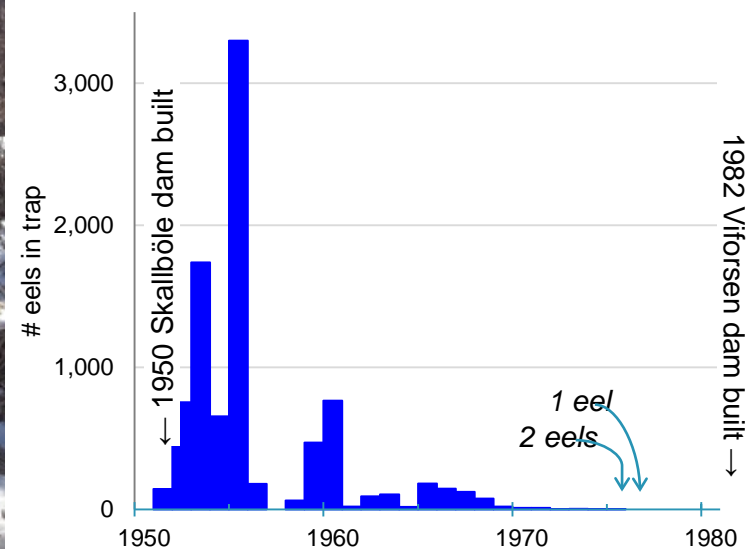
Sundsvalls museum



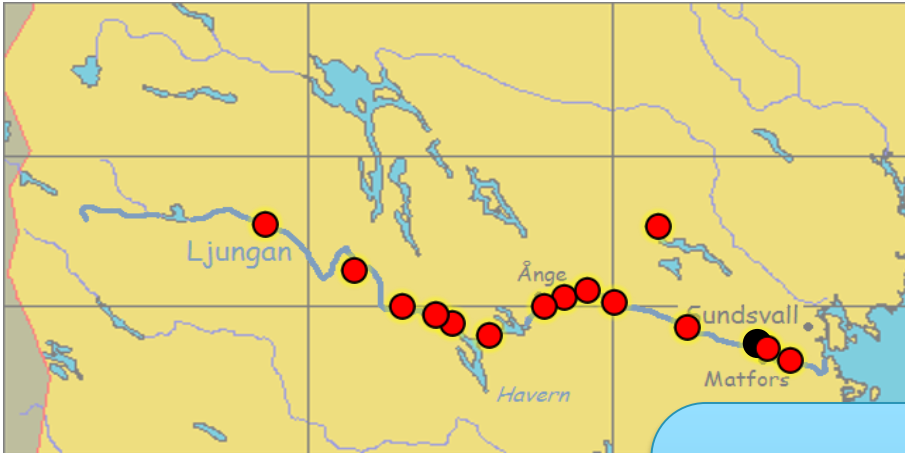
Sundsvalls museum



Eel trap at Skallböle, Ljungan, C-Sweden

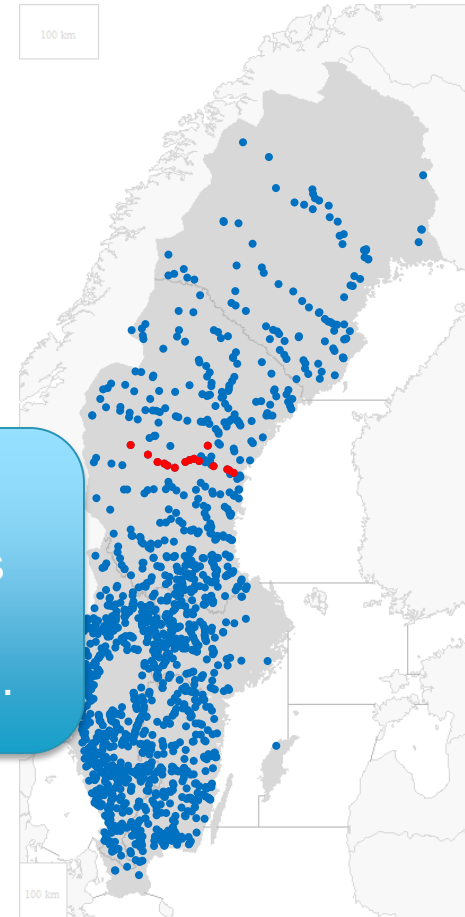


## Hydropower in Ljungan



Thousands of  
hydropower stations  
And pumping, and ...

## Hydropower in Sweden





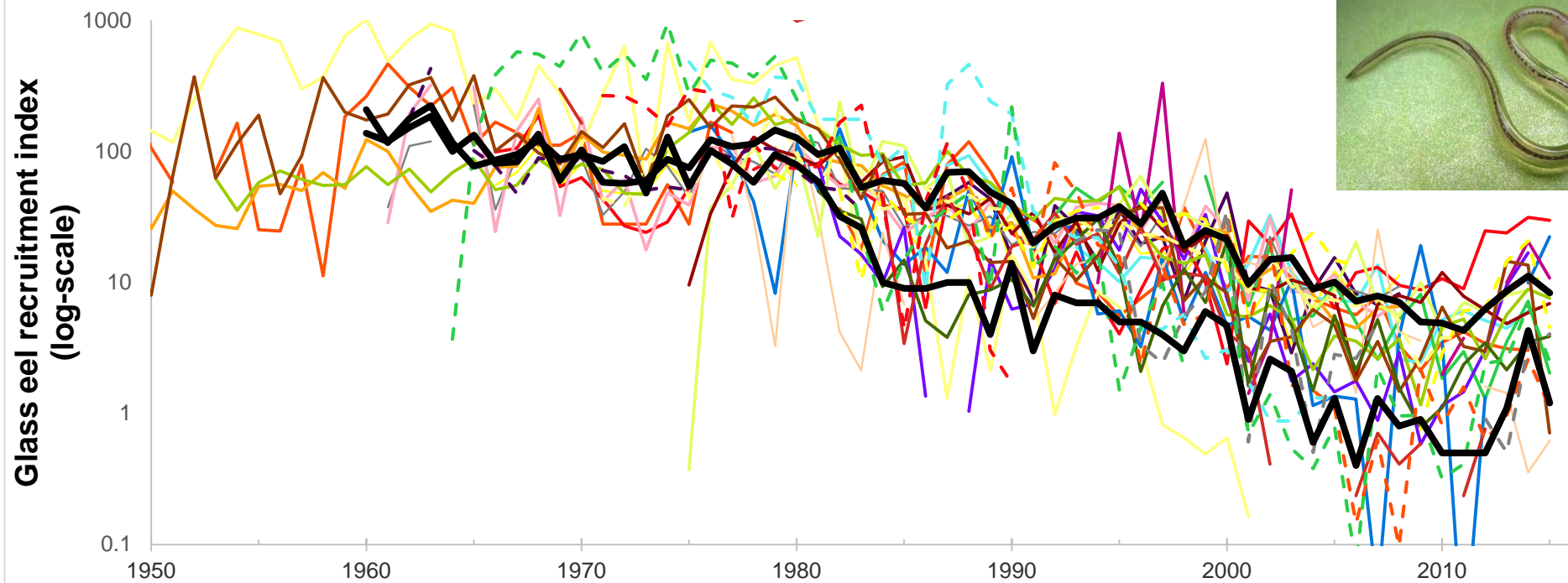
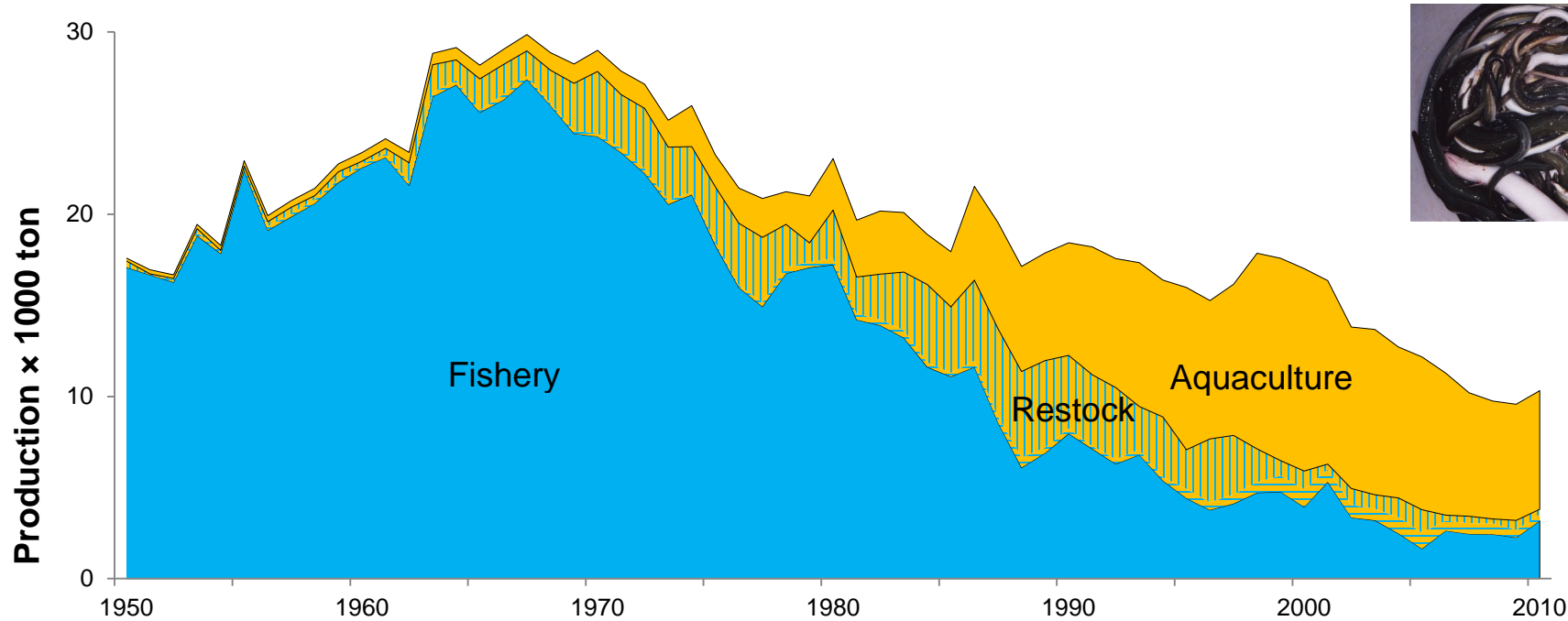


10 000 fishers

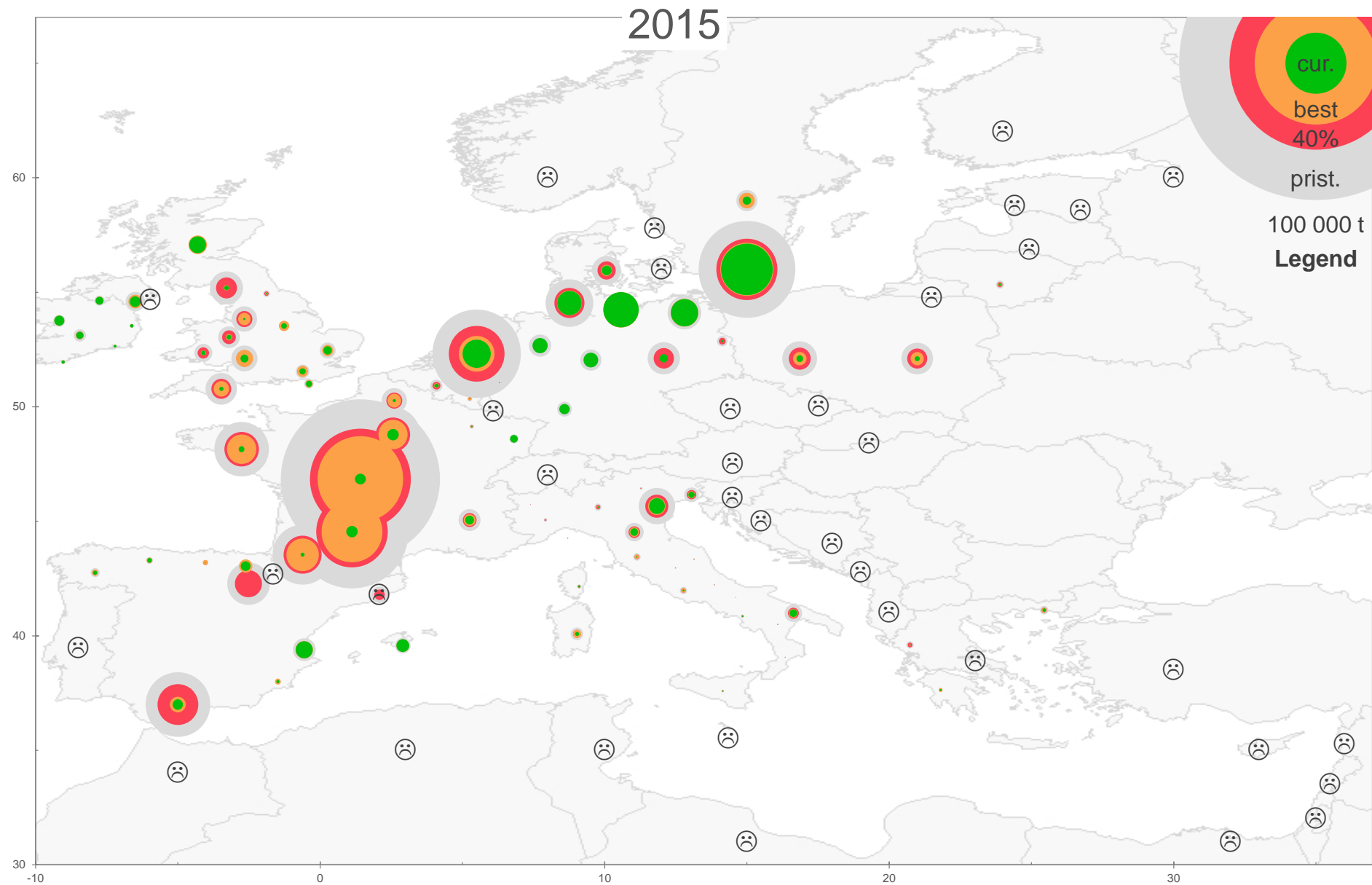


Half of catch numbers is illegally exported





# Stock indicators 2015







## Where Have All the Eels Gone and Does Anyone Care?

Sjöstrand & Sparholt 1996



ICES CIEM Newsletter September 2003

## Eels in crisis

Dekker 2003

*Coalition Clean Baltic*

**Demand EU to stop eel fishing**

News

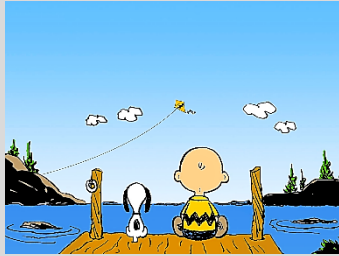





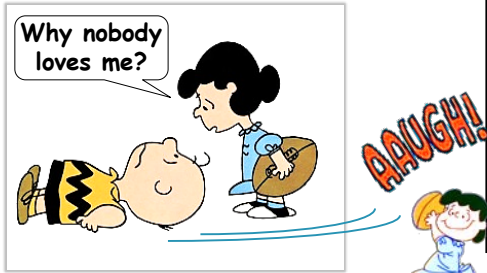

Seeberg et al. 2015

What do we want?

Do we understand?

Who takes action?

# Typology of Steering Models

<u>Goals</u>	<b>Knowledge</b>		<i>Power</i>
	Unclear, risky	Understood, certain	
<u>Agree</u>	<p>Utopia</p> 	<p>Collective Action</p> 	<i>Shared</i>
	<p>Blind Goliath</p> 	<p>Full Control</p> 	
<u>Disagree</u>	<p>Awkward Drifting</p> 	<p>Clash of Interests</p> 	<i>Shared</i>
	<p>Disoriented Power</p> 	<p>Value Conflict</p> 	



# What do we want?



COUNCIL REGULATION (EC) No 1100/2007  
of 18 September 2007  
establishing measures for the recovery of the stock of European eel

## *Article 1*

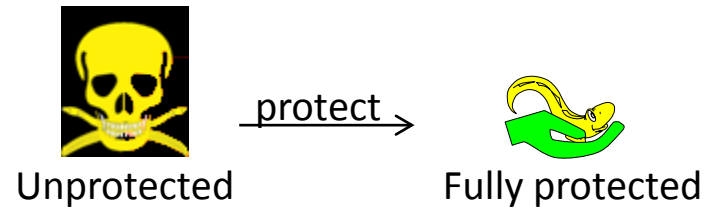
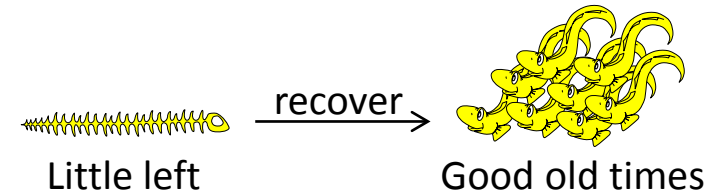
### Subject-matter

1. This Regulation establishes a framework  
for the protection and *sustainable use* of the stock of European eel

Protection  
Recovery  
*Sustainable use*

# Do we understand?

We cannot recover  
the eel stock,  
but we can protect  
every bit of it, now!



Baron de Rivière  
1840



Research takes ages...



Bolesław Dąbrowski  
1952



Climate impact not  
really understood



# Who takes action?

## Distributing control

Horizontal  
communication not  
effective

**Local management, no protection**



# Who takes action?

## Distributing control

**EU**



Principle of  
bounded rationality

### **Common actions**

- Closed season
- Min. legal size
- Quotum

**Uniform protective action**



Horizontal  
communication not  
effective



# Who takes action?

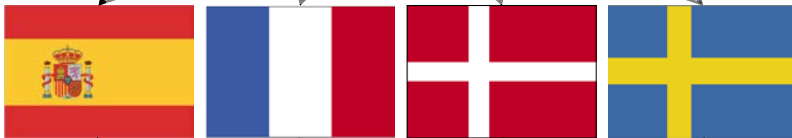
## Distributing control

**EU**



**Common goal**

**National implementation**



**Local action in the field**



Mismatch between  
actions & advice,  
no feedback!



Goals  
2007

Evaluate  
2013

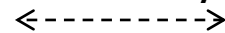


Downward  
communic  
ation  
stepwise

Upward  
communi  
cation  
stepwise

Plan  
2008

Assessment  
2012



Implement  
2009 ...

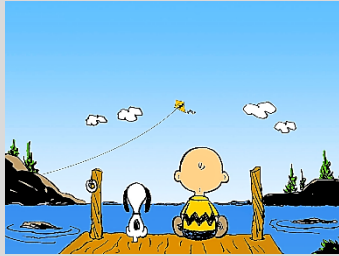










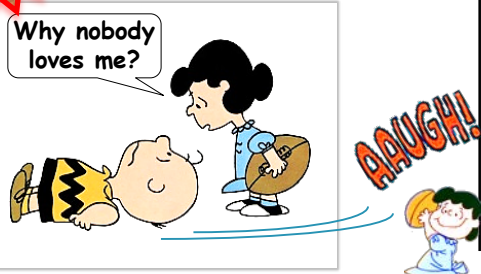
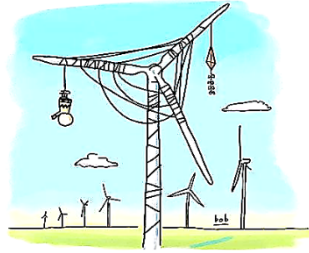
Monitor  
2009 ...



**Traditional, uncoordinated management**

**Centralised, authoritative management**

**Distributed protection, Eel Regulation**

	Unclear, risky	Understood, certain	
<u>Agree</u>	<p>Utopia</p> 	<p>Collective Action</p> 	Shared
	<p>Blind Goliath</p>   	<p>Full Control</p>  	Central
<u>Disagree</u>	<p>Awkward Drifting</p>   	<p>Clash of Interests</p> 	Shared
	<p>Disoriented Power</p> 	<p>Value Conflict</p> 	Central



When leaving this room, please  
take all your belongings with you,  
and remove your coffee cups.  
I will switch off the light.

Distributing control and  
orchestration are the key  
to deal with extreme complexity.

Thank you, and good luck!

