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TO TODAY'S WEBINAR



## EN ISO 14090 – a new standard on climate change adaptation



*We start at  
14:00 CET*

# Your webinar moderator

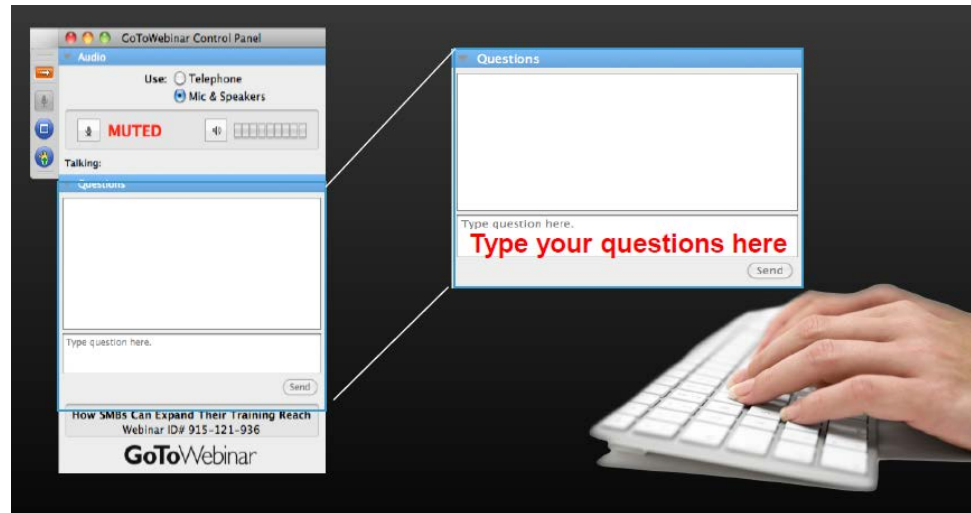


**Els Somers**  
Project Manager  
Strategy & Governance

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EN ISO 14090 – a new standard on climate change adaptation

# Your speakers today



**Andrea NAM**  
Project Manager  
Energy & Living  
Standardization & Digital Solutions



**Celine PHILLIPS**  
**ADEME**  
Climate Change Adaptation Programme  
Manager  
French Agency for the Environment and  
Energy management, ADEME

# EN ISO 14090 – a new standard on climate change adaptation



## The context

### Climate change and Standards

# About the Changing Climate



- Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels (UN IPCC report findings)
- Changes in climate have caused impacts on natural and human systems on all continents and across the oceans.





# Associated Risks



- If we carry on without addressing it sufficiently, we risk increasingly severe and irreversible **impacts**:
  - melting ice sheets,
  - more severe droughts and floods,
  - extreme events,
  - leading to rising seas,
  - food and water shortages,
  - more climate refugees, etc.
  
- The associated risks depend on
  - the magnitude and rate of warming,
  - geographic location,
  - levels of development,
  - vulnerability, and
  - **on the choices and implementation of adaptation and mitigation options**



# What can be done?



Complementary **Strategies** for reducing and managing the risks of climate change

- **Mitigation** - dealing with the causes of climate change by reducing emissions.



even if anthropogenic emissions of greenhouse gases are stabilized relatively soon, **many associated impacts of climate change will continue** to persist for centuries (IPCC).

- **Adaptation** - dealing with the unavoidable physical impacts of climate change



- ✓ **anticipating** the adverse effects of climate change
- ✓ taking appropriate action **to prevent or minimise** the damage they can cause or
- ✓ taking advantage of **opportunities** that may arise





# Climate change adaptation



Today we talk about **adaptation**



Source – Printest – T. Smerling

# Standards and adaptation



## Adaptation and Standards development at ISO and in the EU

- **EU work** – vertical – sector specific standards
  - ✓ Mainstream adaptation considerations in standards in key vulnerable sectors:
    - Energy,
    - Transport
    - Construction
  - ✓ Ensuring more resilient infrastructure - a long life span and high costs
- **ISO international work** – horizontal standards – management system standards
- ❖ **Avoid duplication** of work at International and European levels

# European and International Standards



- Aiming at having **identical** worldwide and European Standards

## Why are European Standards so unique ?

### 1 European Standard



34 **identical** national standards  
All conflicting standards removed



Access to a market of 600 million consumers



- [EN ISO 14090:2019](#) 'Adaptation to climate change — Principles, requirements and guidelines' – **adopted ISO standard**



EN ISO 14090 – a new standard on climate change adaptation



## The standard

EN ISO 14090:2019 'Adaptation to climate change — Principles, requirements and guidelines'

# EN ISO 14090:2019 – a management system standard



## Management System Standards

- help organizations improve their performance by
  - ✓ specifying repeatable steps to achieve their goals and objectives,
  - ✓ creating an organizational culture that engages in a continuous cycle of self-evaluation, correction and improvement
- can be implemented by any organization, large or small,
- are the result of consensus among international experts.



# EN ISO 14090 – a « Framework » Standard



- Guidance on tools, adaptive capacity
- Enables tailored solutions, not ‘one size fits all’
- Recording and documenting is fundamental
  - “The organization shall...
    - document the results of its assessment...”;
    - document the data and information sources used ...”;
    - document how the adaptation actions address the most critical climate impacts and opportunities” etc.
- Allows ‘subservient’ Adaptation Standards to be drafted in more detail (e.g. 14091, 14092...)





# EN ISO 14090: What will it help organisations do?



- Identify, prepare for, and manage, the impacts of climate change
  - opportunities
  - harmful impacts
- Demonstrate good practice to investors and customers etc.



# EN ISO 14090 at a glance



**Published July 2019**

## Content

- ▲ 15 Terms and definitions
  - ▲ Climate change adaptation
  - ▲ Transformation
  - ▲ Adaptive capacity
  - ▲ Adaptive management
  - ▲ ...
- ▲ 10 Principles
  - ▲ Flexibility
  - ▲ Robustness
  - ▲ Transparency
  - ▲ Synergy between adaptation and mitigation
  - ▲ ...
- ▲ 36 Requirements
- ▲ Guidelines

## Scope

- ▲ Applicable to any organization, regardless of size, type and nature
  - e.g. local, regional, international, business units, conglomerates, industrial sectors, natural resource management units.
- ▲ Can support the development of sector-, aspect- or element-specific climate change adaptation standards

## Main Clauses

- ▲ Pre-planning
- ▲ Assessing climate change impacts including opportunities
- ▲ Adaptation planning
- ▲ Implementation
- ▲ Monitoring and evaluation
- ▲ Reporting and communication

# EN ISO 14090 – Pre-planning



- Assess the organisation's capability to undertake the climate change adaptation process described in the subsequent clauses e.g.
  - ✓ leadership and broader governance;
  - ✓ human resources;
  - ✓ roles and responsibilities;
  - ✓ financial resources;
  - ✓ required levels of expertise and knowledge;
  - ✓ information and data sources.
- Prepare the climate change adaptation process
  - ✓ document and describe capability gaps;
  - ✓ establish a work programme;
  - ✓ commit the human and financial resources;
  - ✓ identify relevant interested parties and develop a plan to engage with them.



# EN ISO 14090 – Assessing climate change impacts including opportunities (1/3)



- Assessment of how the organisation's activities, products and services might be impacted by climate change.
  - slow onset impacts (chronic) and sudden impacts due to extreme events (acute)
  - impacts directly and indirectly on the organization
  - past and future trends in average and extreme conditions and changing variability and seasonality of relevant climate parameters
- Identification of the most important climate change impacts, including opportunities



# EN ISO 14090 – Assessing climate change impacts including opportunities (2/3)



- Documentation of
  - ✓ the impact assessment process, the data and information sources used;
  - ✓ the findings of the impact assessment
  - ✓ uncertainties.

Transparency

- The impact assessment must be reassessed and updated to reflect changes in business strategy, external environment and influences, and knowledge about climate change.

Flexibility

# EN ISO 14090 – Assessing climate change impacts including opportunities (3/3)



## Assessment of the organisation's adaptive capacity

- ✓ financial resources;
- ✓ human resources;
- ✓ technical resources;
- ✓ other organizational capabilities.





# EN ISO 14090 – Adaptation planning



## ➤ Adaptation plan

- ✓ Establish climate change adaptation priorities;
- ✓ Incorporate and embed climate change adaptation into policies, strategies and plans;
- ✓ Identify a range of potential climate change adaptation actions that address its priorities;
- ✓ Use decision-making methods suited to climate change,
- ✓ Adopt an adaptive management approach that enables the capture of new knowledge and learning to inform future decisions;
- ✓ Develop adaptive capacity;
- ✓ Engage key decision makers and interested parties.

Synergy between  
adaptation and mitigation

Robustness

Flexibility

# EN ISO 14090 – Implementation



- ❖ Leadership and commitment
- ❖ Top management shall demonstrate leadership of, commitment to and accountability for implementation
- **Implementation plan**





### ➤ Monitoring and evaluation plan

- Assessment of progress against the implementation plan
- Actions:
  - ✓ Document the results of monitoring and evaluation
  - ✓ Determine whether the plans are still valid;
  - ✓ Update policies, strategies and plans using the outcomes of the evaluation;
  - ✓ Determine the periodicity of monitoring and evaluation



- Communication to external interested parties
  - Climate change adaptation report



# Draft international standards dealing with climate change adaptation



Other international adaptation standards in the pipeline:

- ISO 14091
  - Adaptation to climate change - Vulnerability, impacts and risk assessment
- ISO/TS 14092
  - Adaptation to climate change — Requirements and guidance on adaptation planning for local governments and communities
- ISO 14097
  - Framework including principles and requirements for assessing and reporting investments and financing activities regarding climate change



# EN ISO 14090 – Key learning points



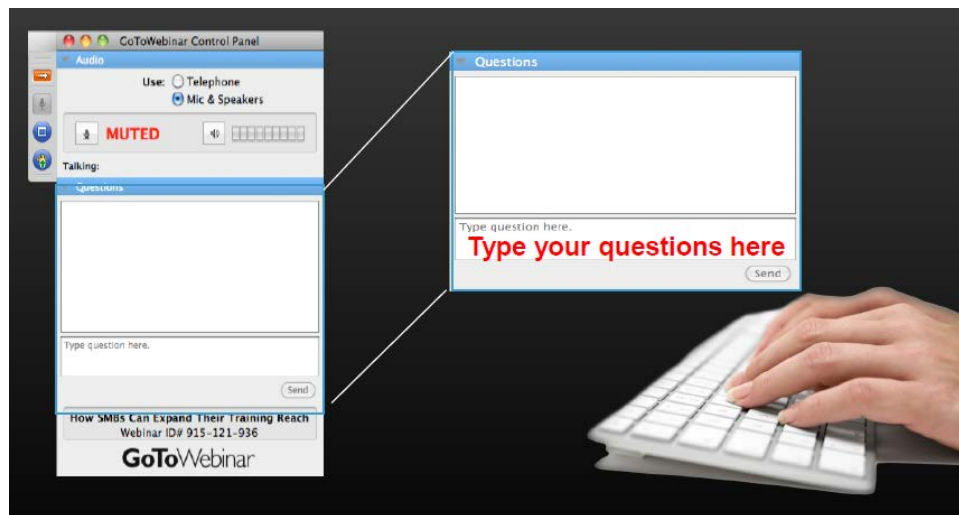
- **The choices and implementation of adaptation options** help organisations to mitigate climate risks
- **Who can use EN ISO 14090?**
  - ANY organization
- **What will it help organisations to do?**
  - Identify, prepare for, and manage, the impacts of climate change : opportunities & harmful impacts
  - Demonstrate good practice to investors and customers
- **What are the main steps?**
  - Pre-planning ; Assessing climate change impacts including opportunities ; Adaptation planning ; Implementation ; Monitoring and evaluation ; Reporting and communication
- **What are the main deliverables?**
  - Adaptation plan; including an implementation plan, a monitoring and evaluation plan, arrangements for reporting and communication
  - Climate change adaptation embedded into the organisation's policies, strategies and plans



# Question time



Use the Q&A panel to submit your questions



**THANK YOU  
FOR YOUR PARTICIPATION**



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climate change adaptation**

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**2019-11-25: [Revised CEN-CENELEC Guide 8 "Standard essential patents" \(SEPs\)](#)**

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