



# **Sustainable management of land and soil resources in Europe – supported through LIFE**

**Soil Platform Meeting LIFE  
Athens, 24. September 2013**

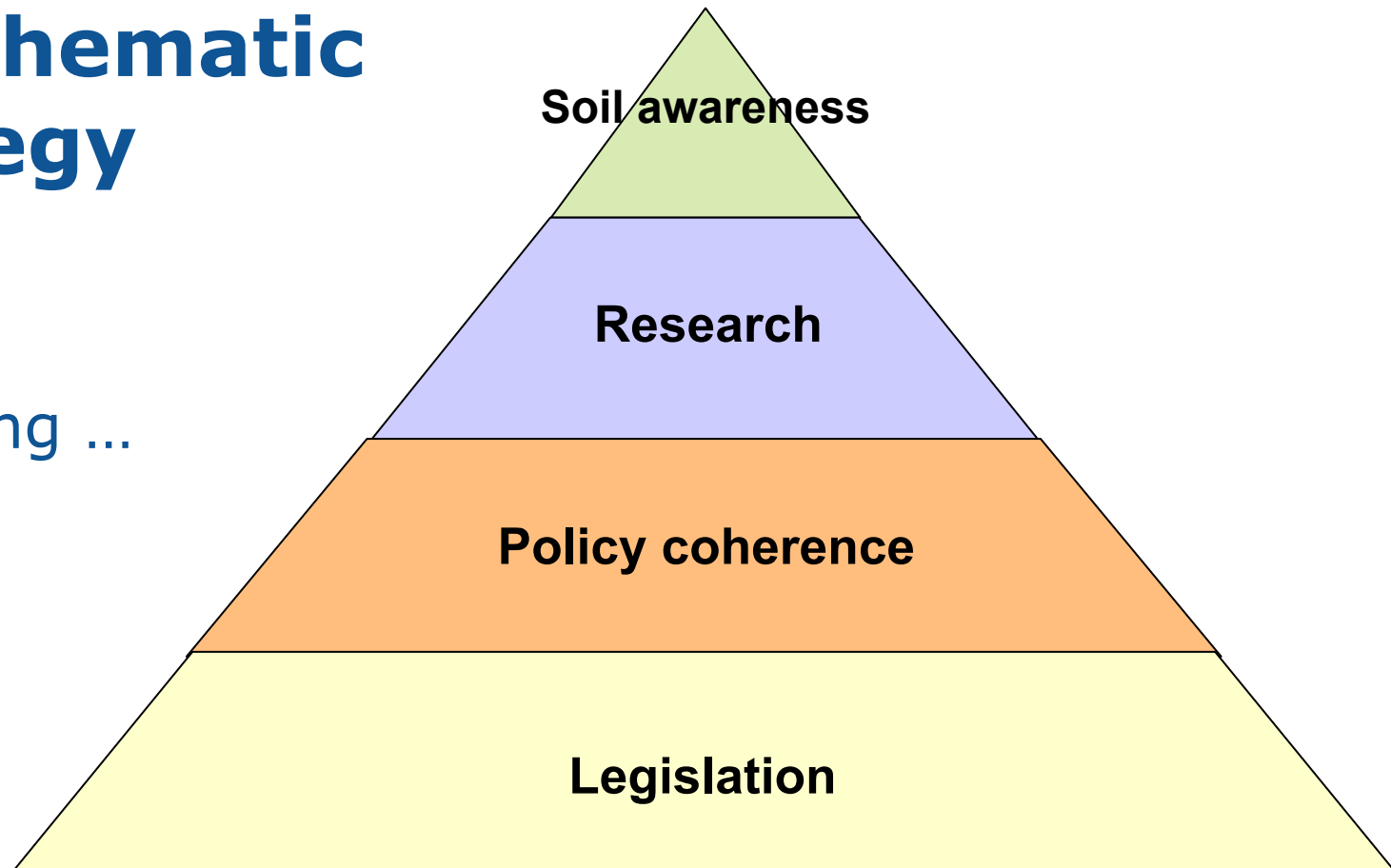
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## Setting the context

- Soil is a **non-renewable** natural resource
- It performs **crucial** ecological, social and economic functions
- Soils are being **increasingly degraded** or **irreversibly lost** across the EU
- Estimated costs of soil degradation reach up to **€38 billions per year**
- There is a need for a **comprehensive** approach

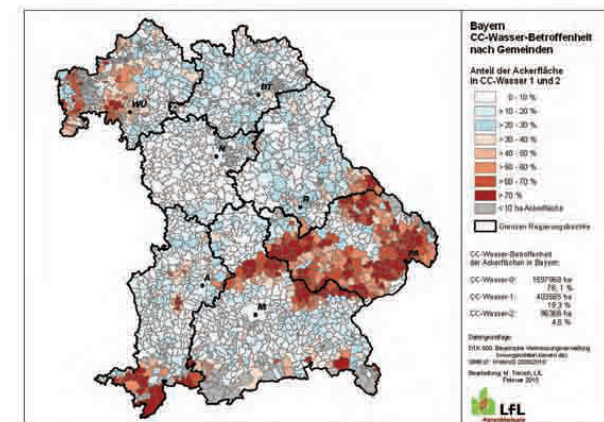
# Soil Thematic Strategy

promoting ...



# Soil Framework Directive

- *Land take*: Limiting, mitigating and compensating soil sealing (securing soil functions)
- *Precautionary soil protection (prevention and risk reduction)*:
  - **Identification of areas under threat** to address soil degradation (e.g. erosion, soil organic matter loss, salinisation) and
  - **Programmes of measure**: Setting up risk reduction targets, implementing measures (cost-effective and feasible)





➤ *Remedial soil protection:*

- **Identification** of contaminated sites (setting up an national inventory, and conducting risk assessments for all sites within 25)
- **Soil status report:** Providing national authorities with site assessments in case of land sales (**only** if located in areas with potentially soil polluting activities, defined by an indicative list)

*and ...*

- **Remediation** of contaminated sites - incl. natural recovery or containment where appropriate; funding mechanisms and national remediation strategy; no deadlines for clean-up !

➤ *Germany aiming at completing remediation of most sites by 2050 (National Strategy for Biological Diversity, 2007)*

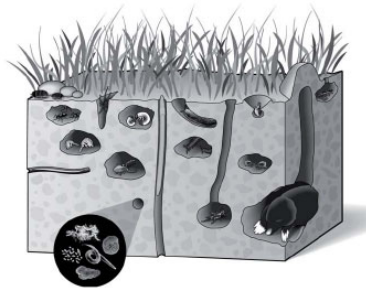
➤ *National Remediation Strategy: Targets, prioritisation, timetable for implementation, allocation of funds*

➤ *Awareness raising; reporting duties; exchange of information (best practices, risk analysis)*

# Impacts of sealing



- **Water storage:** up to 3,750 m<sup>3</sup> per ha or nearly 400 mm of precipitation



- **Soil biodiversity:** at least a quarter of global biodiversity is in soil
- **Landscape fragmentation**

- **Carbon stocks:** 70-75 billion tonnes



- **Urban "heat-island" effect**





*The loss of soil resources through urbanisation and the conversion of our landscape is one of the major environmental challenges Europe is facing. There is an urgent need to use this valuable resource more wisely, in order to secure its many vital services for future generations. We simply cannot pave over our chances for a sustainable future.*

Janez Potočnik  
Environment Commissioner





## Resource Efficiency Roadmap (2011)

- *By 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally; ...*
- *... and the rate of land take is on track with an aim to achieve **no net land take by 2050**;*
- Soil erosion is reduced and soil organic matter contents are increased and soil;
- Soil contamination inventories;
- *The Commission will (...) publish **guidelines** on best practice to limit, mitigate or compensate soil sealing (in 2012);*
- **Communication** on land use (2014).







## **Soil Thematic Strategy Report (2012):**

'Five year-report' on threats to soil within the Union and at global level; future challenges.

Stocktaking of Commission activities on soil protection since approval of directive in the European Parliament / Council rejection.



# The magnitude of soil sealing in the EU



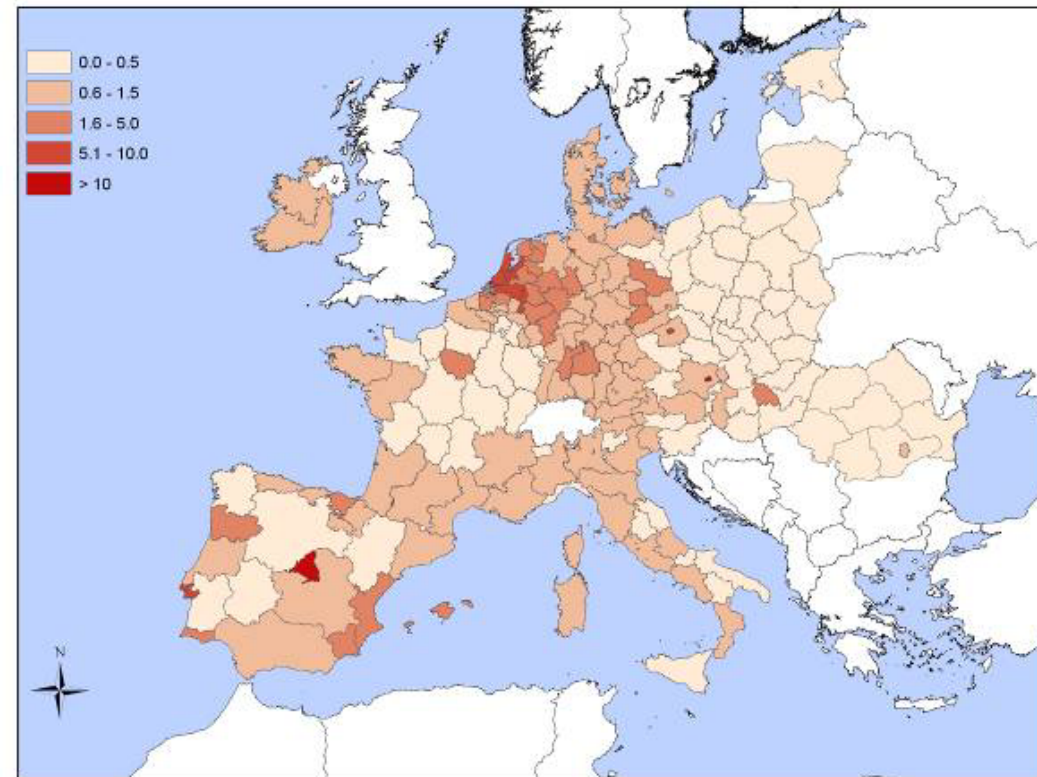
Land take per administrative  
unit in the period 2000-2006

Soil sealed surface in 2006

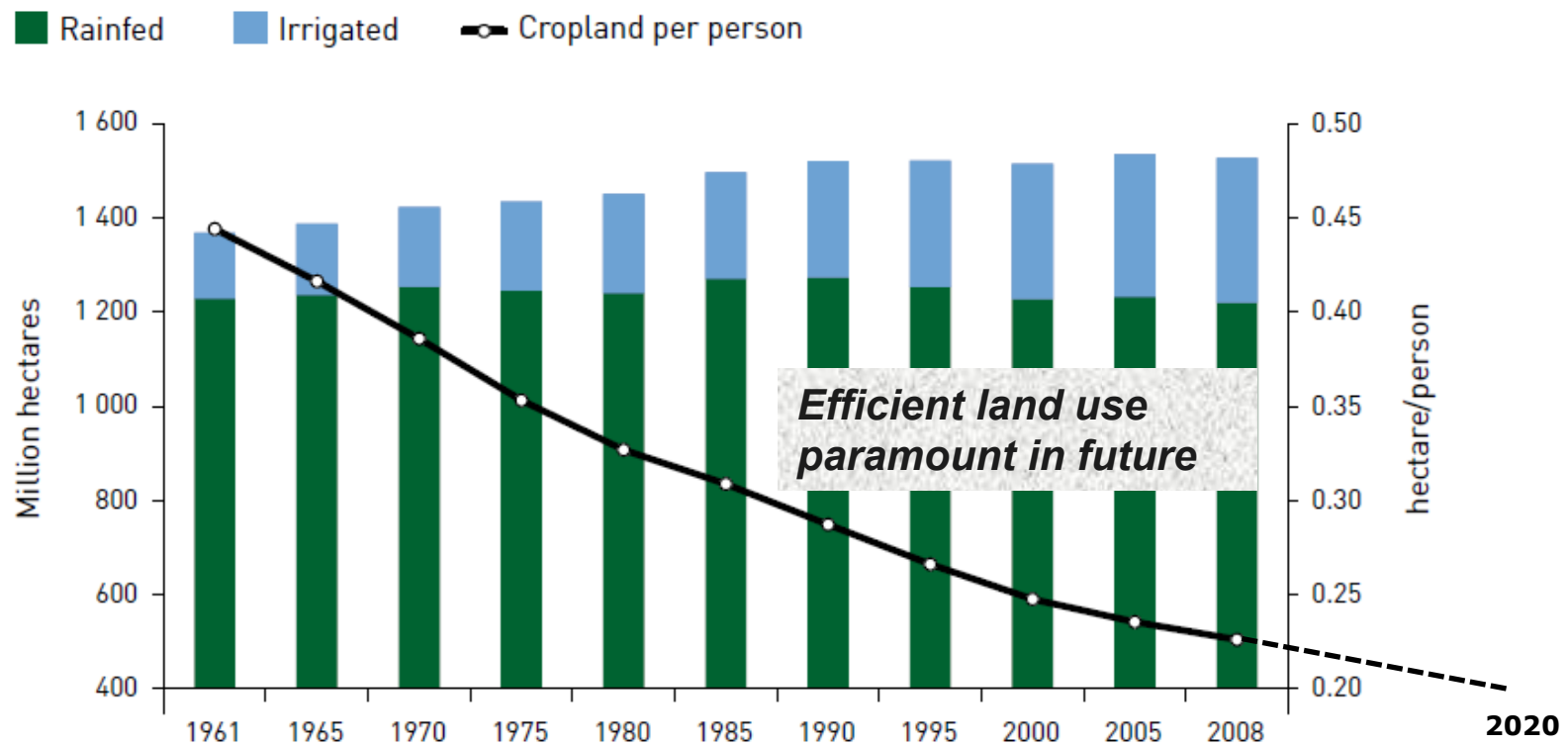
# Hidden costs of land consumption

***6 million tonnes of wheat lost in 19 MSs from 1990-2006***

**(production loss of 1 % within a short time-span)**



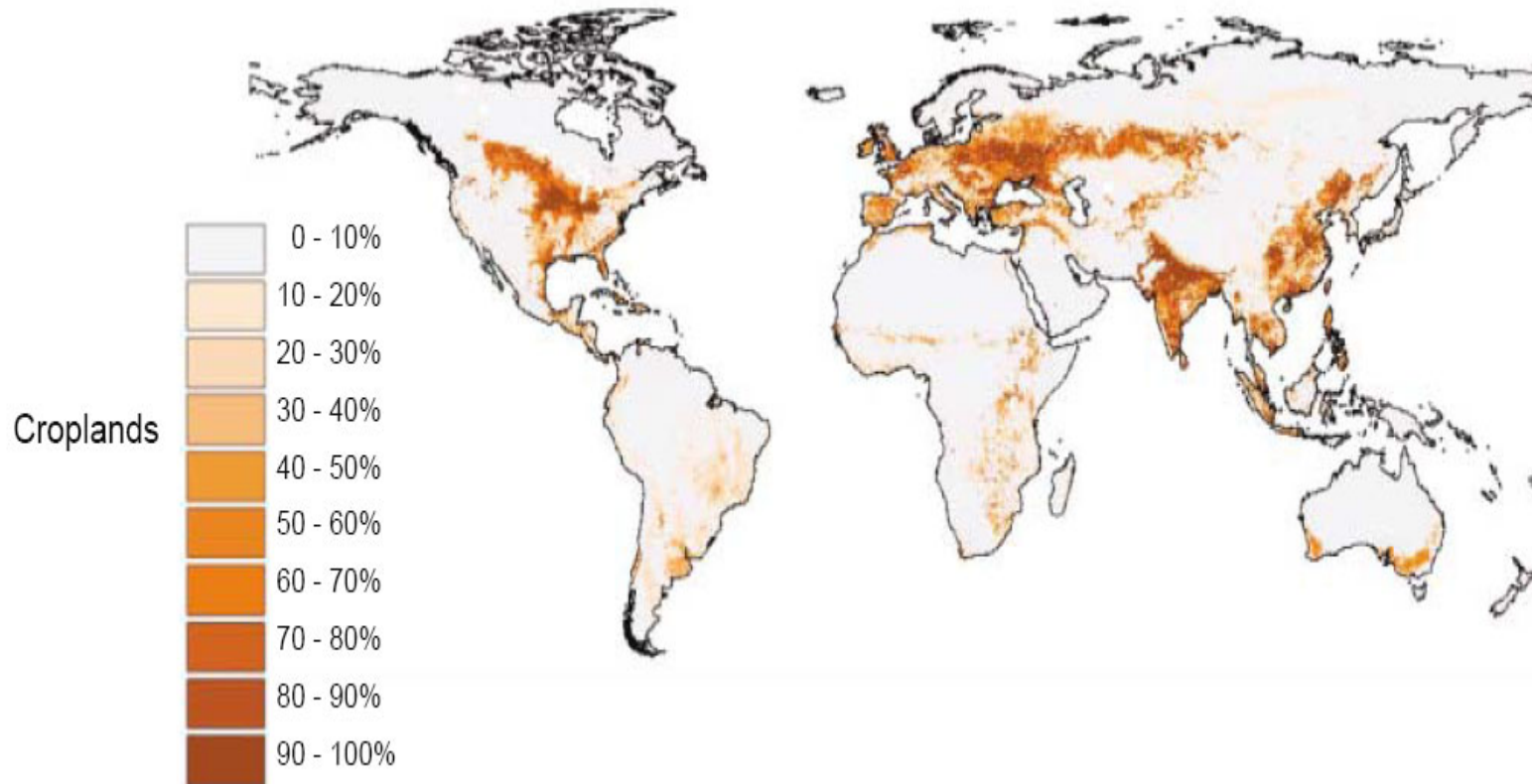
# Global food security - value of land



Source: FAO (2010b)

UNEP 2012: Jährlich 50,000 km<sup>2</sup> Landverluste

# Food security – depending on limited arable land



Foley *et al.* 2005 - Global Consequences of Land Use



# Regional Policy proposals

Cohesion Policy Regulation, COM(2011) 612, 6.10.2011

European Regional Development Fund, COM(2011) 614, 6.10.2011

Investment priority: Protecting the environment and promoting resource efficiency

*... improving the urban environment, including regeneration of brownfield sites and ...*

Objective: Limiting land take on Greenfields and recycling of land, including remediation of contaminated sites

Special ERDF objective: **Sustainable urban development**



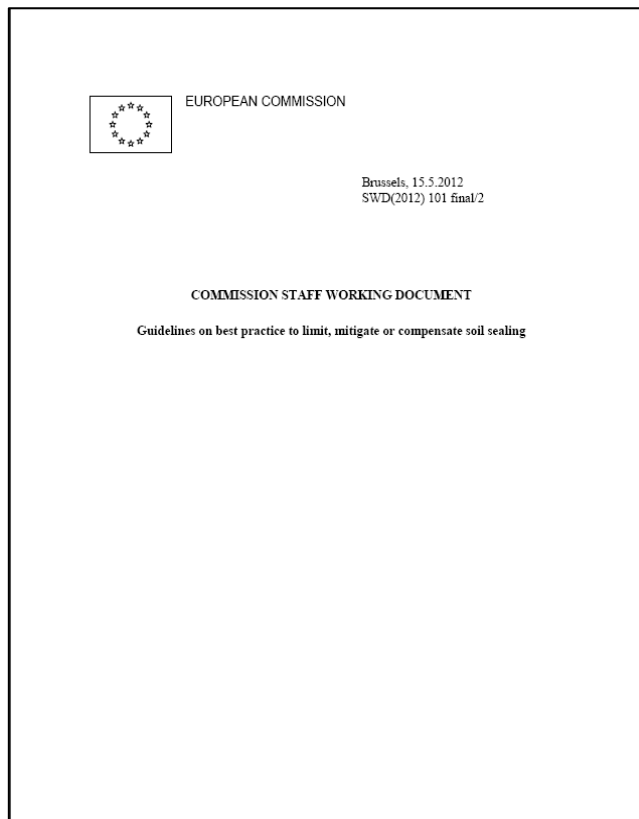


European  
Commission

# Guidelines on best practice to limit, mitigate or compensate soil sealing

SWD(2012) 101 final/2, 15 May 2012

[http://ec.europa.eu/environment/soil/sealing\\_guidelines.htm](http://ec.europa.eu/environment/soil/sealing_guidelines.htm)



Available  
in all EU  
official  
languages



Available  
in selected  
EU official  
languages







# Living well, within the limits of our planet

COM(2012) 710, 29.11.2012

*Proposal for a general Union  
Environment Action Programme*

Priority objective 1: To protect, conserve and enhance the EU's natural capital:

*(23) To reduce the most significant man-made pressures on land, soil and other ecosystems in Europe, action will be taken to...*

*The Rio+20 Summit outcome, recognising the economic and social significance of good land management, called for a '**land degradation neutral world**'. The EU and Member States should reflect on how best to make such a commitment operational within their respective competencies.*

*The EU and Member States should also reflect as soon as possible on how **soil quality issues** could be addressed using a targeted and proportionate risk-based approach **within a binding legal framework**. ...*







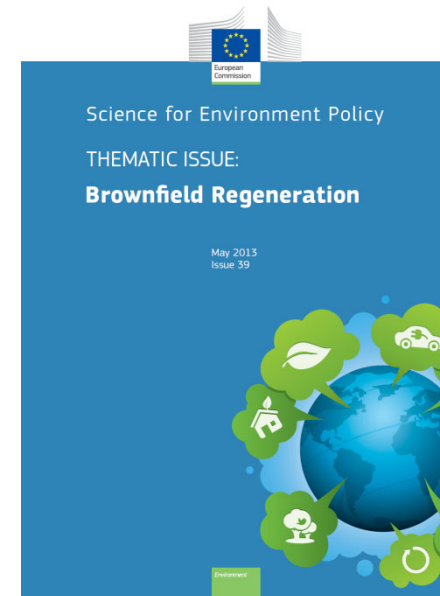
# LIFE – Outreach and awareness

## Other useful material

- [Soil Contamination: Impacts on Human Health](#) – Science for Environment Policy In-Depth Report (2013)
- [Brownfield Regeneration](#) – Science for Environment Policy Thematic Issue (2013)
- [Soil Sealing](#) – Science for Environment Policy In-Depth Report (2012)
- Video '[Soil sealing - Destroying earth's living skin](#)' (2012)
- JRC reference report '[The State of Soil in Europe](#)' (2012)
- URBAN SMS project brochure '[Soil in the City](#)' (2012)
- SoCo-Project: [Sustainable Agriculture and Soil Conservation](#)
- Environment for Europeans, September 2008, Green Week 2008 - [Only One Earth](#)
- [LIFE projects on soil, land use and agriculture](#)
- [LIFE project SOWAP \(Soil and Water Protection\)](#)



# LIFE and policy making





# How to profit on DG ENV's information services:

➤ Science for Environment Policy *News Alert* service:

[http://ec.europa.eu/environment/integration/research/newsalert/index\\_en.htm](http://ec.europa.eu/environment/integration/research/newsalert/index_en.htm)

➤ How to suggest a publication :

[http://ec.europa.eu/environment/integration/research/newsalert/communicate\\_with\\_us.htm](http://ec.europa.eu/environment/integration/research/newsalert/communicate_with_us.htm)

➤ Thematic Issues:

[http://ec.europa.eu/environment/integration/research/newsalert/specialissue\\_en.htm](http://ec.europa.eu/environment/integration/research/newsalert/specialissue_en.htm)



# Thank you for your attention!



<http://ec.europa.eu/environment/soil/index.htm>

