



# Implementation of Renewable Energy in the Republic of Moldova

- SOCIETY AND LANDSCAPE IN TRANSITION



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Swedish University of Agricultural Sciences  
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Department of Landscape Architecture



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# IMPLEMENTATION OF RENEWABLE ENERGY IN THE REPUBLIC OF MOLDOVA

- society and landscape in transition

Implementering av Förnyelsebar Energi i Moldavien  
-samhälle och landskap i förändring

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## ABSTRACT

The Republic of Moldova is situated in eastern Europe and a former part of the Soviet Union. It is currently experiencing a phase of transition in both society and landscape. There are fossil fuel deposits and they are currently dependent on Russian gas, with 97% of energy needs imported. The new elected government wants to move towards the EU and this is generally seen as the way to grow and reduce poverty. Security in the energy sector is important and one goal is the use of renewable energy sources.

Through interviews, texts and visits I have studied the implementation of renewable energies in Moldova through a society development perspective. The study has aimed to investigate the social and technical complexity of this subject and to discuss the potentials and way of dealing with the subject in the specific cultural context of Moldova. In my local interviews I have focused on the village Lozova.

The biggest potential in RE in Moldova lies in biomass: agricultural residues and wood. Solar energy also has a large potential. Technologies implemented need to be effective, inexpensive and comfortable. The main barriers are the immense interest rates and political instability making it difficult to plan long term. The main resources are the human resources. Moldova has a well educated population with many international experiences.

Uncertainty and risk are relatively high in a collectivist society with a strong hierarchy. Avoiding uncertainties and risks needs to be considered.

## SAMMANFATTNING PÅ SVENSKA

Moldavien ligger i östra Europa och var tidigare en del av Sovjetunionen. De är nu i en fas av förändring i både samhället och landskapet. De har i stort sett inga fossila tillgångar närvarande bortsett från gas. De importerar 97% av sitt energibehov. Den nyvalda regeringen vill närma sig EU och detta ses generellt som vägen att gå för att skapa tillväxt och minska fattigdomen. Det är viktigt att skapa energisäkerhet och ökad mängd förnyelsebara energikällor.

Genom intervjuer, texter och besök har jag studerat implementeringen av förnyelsebara energier i Moldavien ur ett samhällsutvecklingsperspektiv. Studien har syftat till att utforska det sociala och tekniska komplexiteterna och att diskutera potentialen och hur man kan hantera i den specifika kulturella kontexten i Moldavien. I mina lokala intervjuer har jag fokuserat på byn Lozova.

Den största potentialen finns i biomassa: halm, andra jordbruksrester och hamlingsavfall. Solenergi är också lämpligt. Teknologier som införs behöver vara effektiva, billiga och bekväma. De största barriärerna är höga räntor och den instabila politiska situationen som gör det svårt att planera långsiktigt. Den största tillgången är humankapitalet. Moldavien har en välutbildad befolkning med internationella erfarenheter.

De kulturella dimensionerna bör respekteras när man arbetar internationellt. Moldaviens relativt konservativa och hierarkiska samhälle med en stark hierarki och osäkerheter och risker bör beaktas.

## FOREWORD

The work with this thesis has been a journey, both geographically and personally. I have grown professionally, increased my knowledge and gained a big network in Moldova and good friends.

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## ABBREVIATIONS

ANRE	National Agency for Energy Regulation	RM	Republic of Moldova
ASM	Academy of Sciences of Moldova	SEK	Swedish krona (Swedish currency)
CAPMU	Consolidated Agricultural Project Management Unit	Sida	Swedish international development cooperation agency
CBM	Swedish Biodiversity Centre	TUM	Technical University of Moldova
CDM	Clean Development Mechanism	UD	Ministry of Foreign Affairs, Swedish Government
DNA	Designated National Authority	UN	United Nations
ELC	European Landscape Convention	UNDP	United Nations Development Programme
ENP	European Neighbourhood Policy		
ESTI	European Solar Test Installation		
EU	European Union		
GDP	Gross Domestic Product		
IEA	International Energy Agency		
MDL	Moldovan leu (Moldovan currency)		
mtoe	Million tonnes of oil equivalent		
NGO	Non Governmental organization		
NLP	National Land Program		
PCF	Prototype Carbon Fund		
PV	Photo Voltaic		
RE	Renewable Energy		
REAW	Renewable Energy from Agricultural Waste (Project)		
RES	Renewable Energy Sources		





















































































































































