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Innovation Networks for Cork, Resins & Edibles

"Resin resource monitoring & modelling in a context of climate change"

Inter-regional workshop INIA Madrid

January 21/22, 2019

YIELD DATA AND MODELS FOR A SUSTAINABLE RESIN SECTOR IN THE MEDITERRANEAN AREA

GrupoRB | LURESA RESINAS SL

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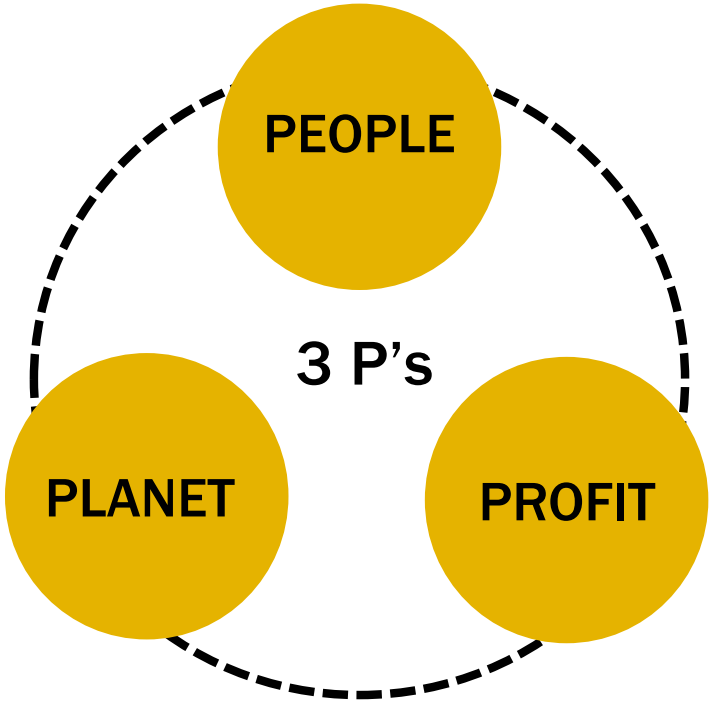
SUSTAINABLE DEVELOPMENT

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
ONU, 1987



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RESIN SECTOR IN THE WORLD WIDE CONTEXT

NON-RENEWABLE SOURCES
PETROLEUM BASED

RENEWABLE SOURCES
PINE TREE BASED:

TALL OIL ROSIN: BY-PRODUCT OF PAPER INDUSTRY
WOOD ROSIN: EXTRACTION OF ROSIN FROM AGED WOOD STUMPS
GUM ROSIN: SAP COLLECTED FROM LIVE TREES

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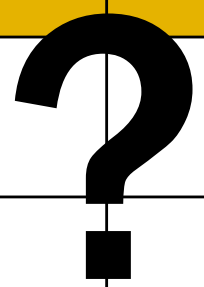
GLOBAL COMPETITION

All these resins are raw material for the chemical industry and compete directly in a global market, regardless of source or origin

SOURCE	ORIGIN	PRODUCTION	CAPACITY	MARKET SHARE	PRICE
HYDROCARBON					
TALL OIL ROSIN					
WOOD ROSIN					
GUM ROSIN					



GLOBAL COMPETITION

How do these resins compete in terms of sustainability?

SOURCE	ORIGIN	PEOPLE	PLANET	PROFIT	PRICE
HYDROCARBON					
TALL OIL ROSIN			?		
WOOD ROSIN					
GUM ROSIN					

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MAIN ACTIVITIES OF OUR SPECIFIC RESIN SECTOR

These activities depend on each other but are held separately.
Sustainability must be assessed for each activity independently.

EXTRACTION / TAPPING

INDUSTRIAL PROCESSING

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GLOBAL COMPETITION – INTRODUCING EXTRACTION / TAPPING

How do these resins compete in terms of sustainability?

SOURCE	ORIGIN	EXTRACTION / TAPPING			PRICE
		PEOPLE	PLANET	PROFIT	
HYDROCARBON			?		
TALL OIL ROSIN					
WOOD ROSIN					
GUM ROSIN					

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YIELD DATA AND MODELS REGARDING TAPPING ACTIVITY

SOCIAL DEVELOPMENT - PEOPLE

What does this represent in terms of direct and indirect jobs?

What does this represent in terms of avoiding rural abandonment and maintaining rural communities alive?

What kind of social models can we have for tapping activity - independent or autonomous tappers, cooperatives, associations, private companies? Are there any other social models that can be used, that can be taken as model?

What do these direct jobs represent in terms of salaries, social security, assurance, working conditions, safety?

What do these costs mean within price of raw material of this first step?

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YIELD DATA AND MODELS REGARDING TAPPING ACTIVITY

ENVIRONMENTAL PROTECTION - PLANET

We can start mentioning raw material source as a renewable source... and, the differentiating element regarding other natural resins is: exploitation is held with live pine trees, we don't have to cut trees to extract de crude gum! What does this mean for environment?

What would carbon footprint for this activity be like?

What kind of waste and contamination does the activity generates - stimulants, plastics bags or pots to collect sap, drums to transport?

What kind of energy resources are consumed? Is energy a relevant factor here?

How does this activity contribute to protect forest and prevent fires and plagues and diseases?

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YIELD DATA AND MODELS REGARDING TAPPING ACTIVITY

ECONOMIC DEVELOPMENT - PROFIT

Does tapping generate the proper profit for all players in the chain?

Is raw material price for this first step competitive when compared with other resins?

Are all the positive externalities derived from the activity being duly compensated?

How is balance between offer and demand?

What is current availability of raw material versus production capacity?

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GLOBAL COMPETITION – INTRODUCING INDUSTRIAL PROCESSING

How do these resins compete in terms of sustainability?

SOURCE	ORIGIN	EXTRACTION / TAPPING			PRICE	INDUSTRIAL PROCESSING			PRICE
		PEOPLE	PLANET	PROFIT		PEOPLE	PLANET	PROFIT	
HYDROCARBON									
TALL OIL ROSIN			?						
WOOD ROSIN									
GUM ROSIN									

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YIELD DATA AND MODELS REGARDING INDUSTRIAL PROCESSING

ENVIRONMENTAL PROTECTION - PLANET

What kind of energy is used to power industrial units? Renewable or non-renewable? Can we consider any kind of circular economy in resources?

What does carbon footprint look like in this case?

What kind of waste, residues, contamination are produced, how are they taken care of? What cost does this mean?

Is there an efficient and conscious use of resources? How is water used and processed?

How is safety handled?

YIELD DATA AND MODELS REGARDING INDUSTRIAL PROCESSING

SOCIAL DEVELOPMENT - PEOPLE

Direct and indirect jobs and what they represent?

How do these units affect surrounding communities as a positive or negative influence?

Are communities willing to support this kind of industry in their neighborhood, subject to due distances of course?

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YIELD DATA AND MODELS REGARDING INDUSTRIAL PROCESSING

ECONOMIC DEVELOPMENT - PROFIT

Is final price competitive enough?

Does it pay for all the costs and gives benefit?

Are all the players of the chain being fully rewarded?

Is this a growing activity?

What kind of future may we foresee for the natural resin sector?

How is balance between offer and demand?

What is current availability of raw material versus production capacity?

How does global market accept ”European Gum Rosin”?

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SUSTAINABLE DEVELOPMENT = BALANCE

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We plant the FUTURE!

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