

INDICATORS SYSTEM

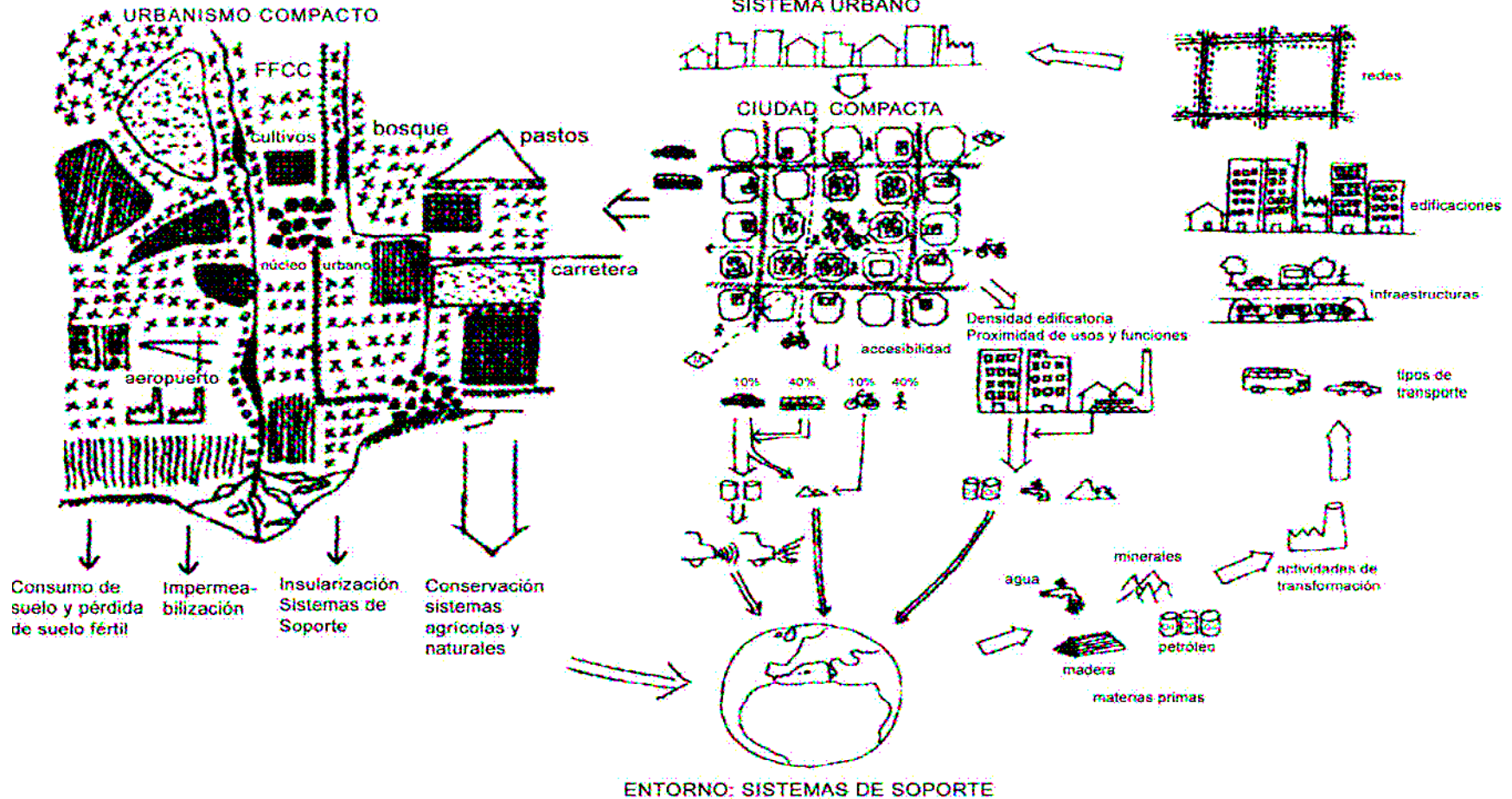
LAP and LSG; Vitoria-Gasteiz

Departamentos Urbanismo – Planificación y
Medio Ambiente



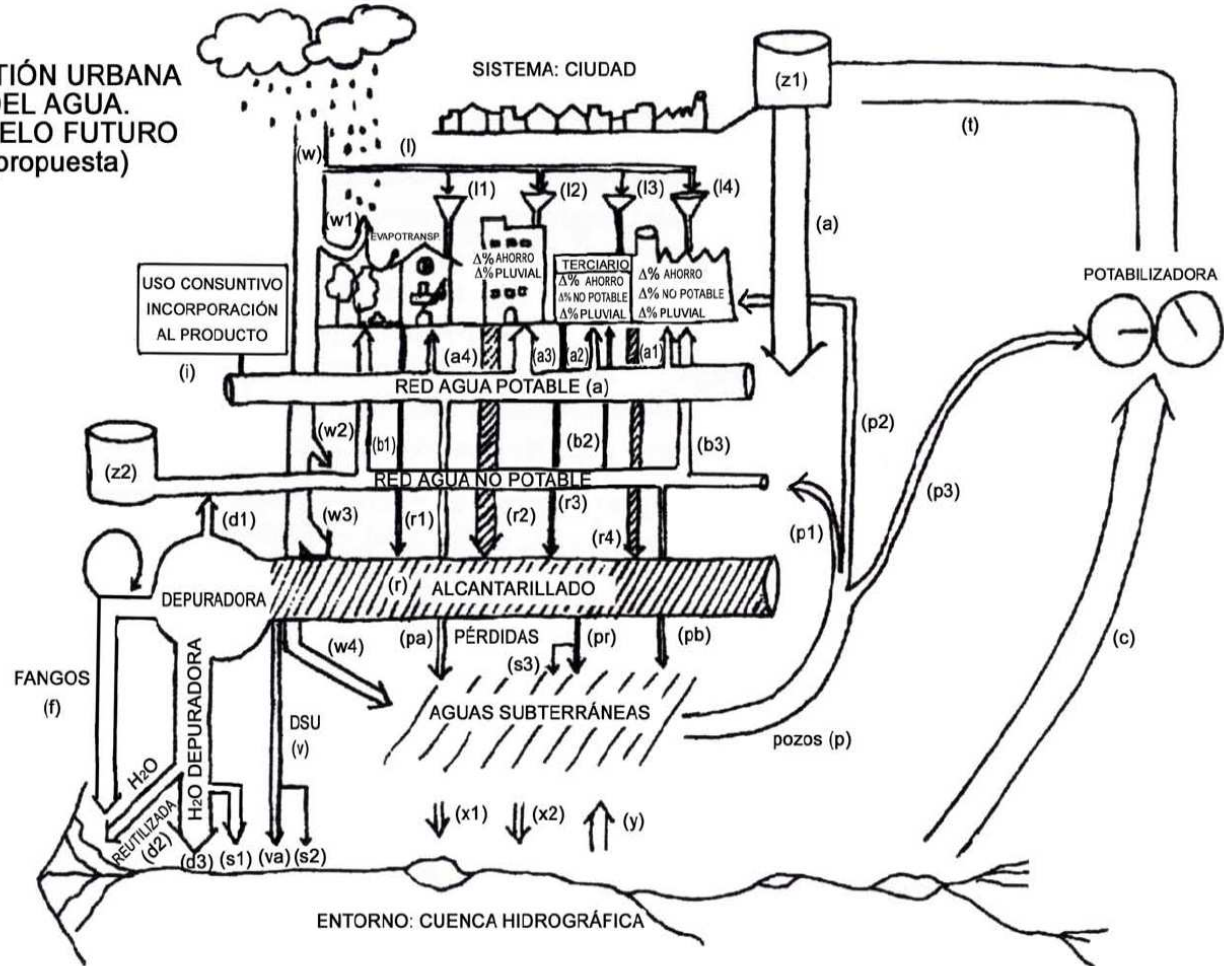
COMPACT CITY MODELS

MODELO CIUDAD COMPACTA



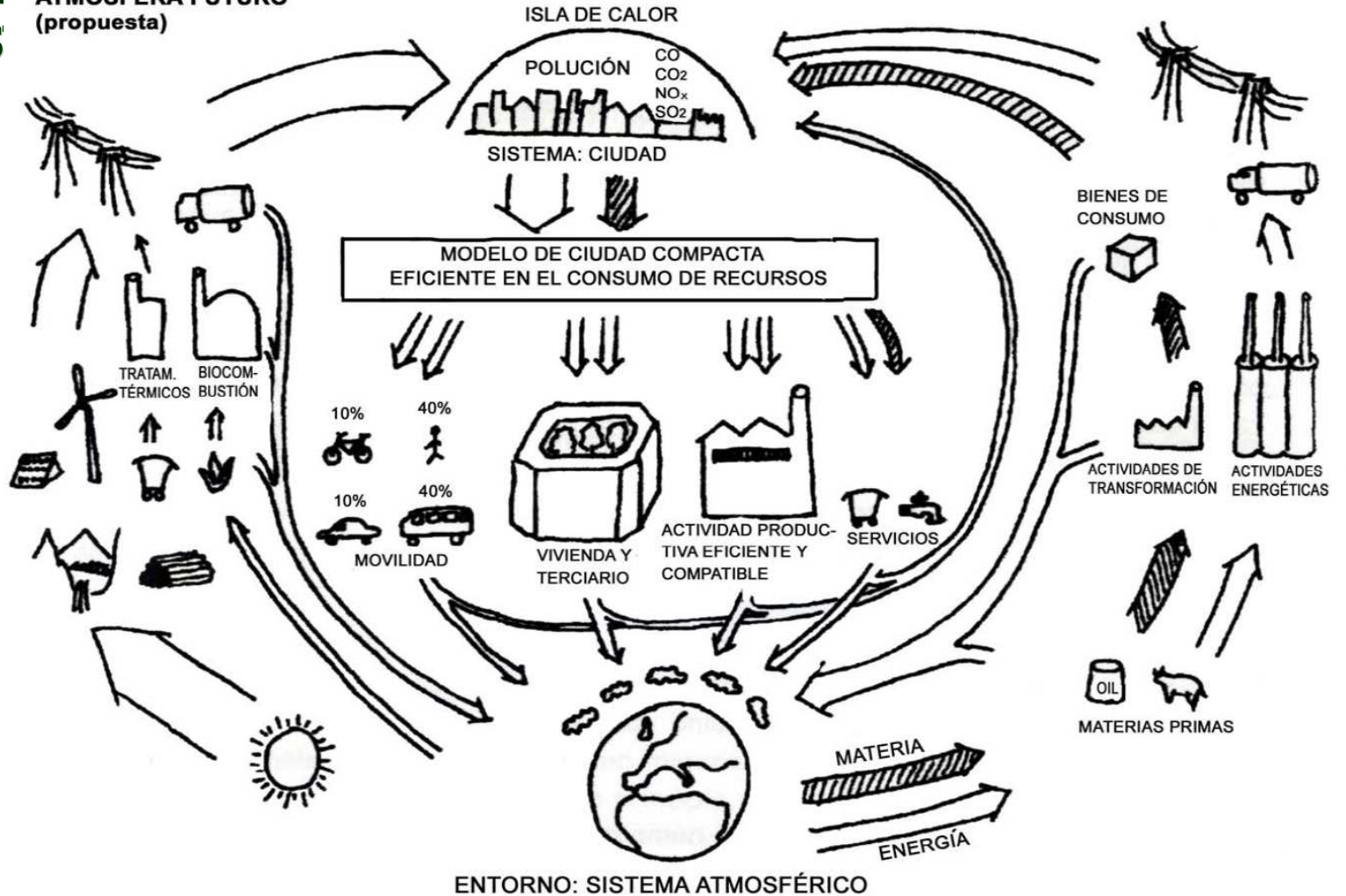
WATER CYCLE (SUGGESTED)

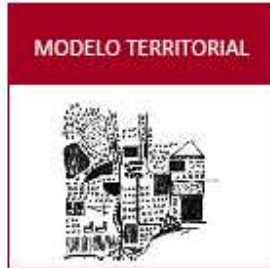
GESTIÓN URBANA
 DEL AGUA.
 MODELO FUTURO
 (propuesta)



EMISION (SUGGES

EMISIONES A LA ATMÓSFERA FUTURO (propuesta)





MODELOS DE ORGANIZACIÓN URBANA



MODELOS DE METABOLISMO URBANO



PROYECT

PART I: Sustainable city concept and stability in the city ecosystem.

PART II: Indicators system and adaptation of indicators to the sustainable city concept.

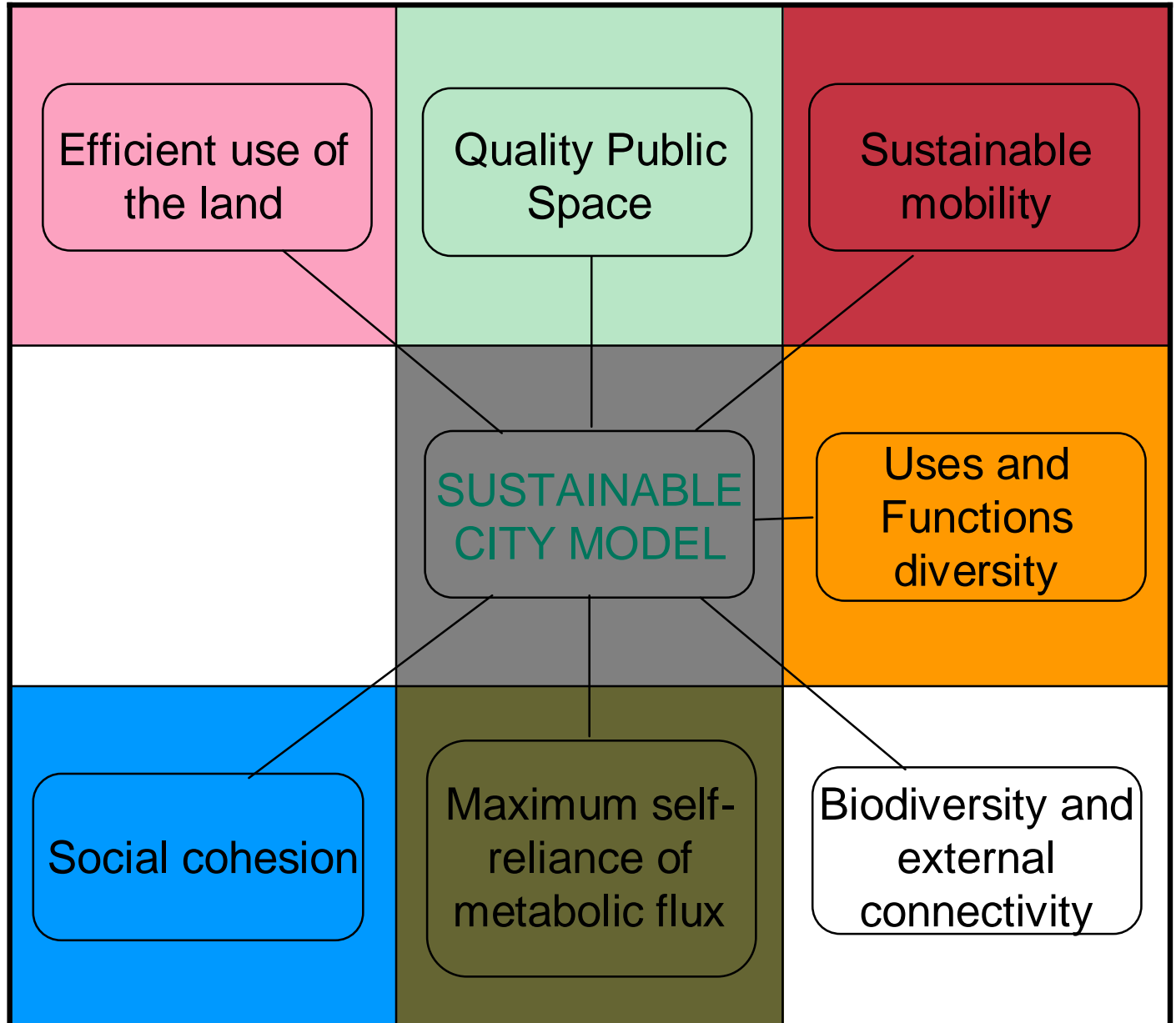
- Each Indicator pretend an specific aim, with basic guidelines for calculating it and comments concerning the results shown by the indicator.
- Indicators are evaluated for the current moment (2009) and for two future moments, 2.020 and 2.050.



CONCEPTUAL FRAMEWORK

- The Urban sustainability Indicators System is a tool to evaluate in quantity and quality the urbanization process in the city.
- The evaluation is made in an integral and systemic way and with sustainability criterias.

More
Sustainable
City Model:
Intervention
Fields



The classification of the 49 indicators chosen, is organized in eight different fields:

- A01 OCCUPIED LAND
Efficient land use
- A02 PUBLIC SPACE AND HABITABILITY
Quality Public Space
- A03 MOBILITY
Sustainable mobility
- A04 URBAN COMPLEXITY
Diversity of uses and functions
- A05 URBAN METABOLISM
maximum self-reliance of metabolic flux
- A06 URBAN BIODIVERSITY
Enhancing urban biodiversity
- A07 SOCIAL COHESION
Increased social cohesion
- A08 SUSTAINABILITY GUIDE ROLE
Efficiency of the urban system

A01 OCCUPIED LAND

Intensity of use

01 Housing density

02 absolute compactness

A02 PUBLIC SPACE AND HABITABILITY

Planning

03 Corrected compactness

Quality of Public Spaces

04 Habitability index

05 Air Quality

06 Acoustic comfort

07 Thermal comfort

08 Pedestrian public road accessibility

09 Perception of the urban green space

A03 MOBILITY

Network configuration	10 Population displacements
	11 Proximity to alternative transport system (not the car)
Funcionalidad	12 Distribution of public road
Dotación de infraestructuras	13 Proximity to bicycle parking
	14 Proximity to bicycle loan service
	15 parking for the private vehicle out of the street
	16 Deficit parking for private vehicles
	17 Loading and unloading off road

A04 URBAN COMPLEXITY

Diversidad	18 Urban complexity
	19 Balance between residence and activity
	20 proximity activities
	21 Dense knowledge activities
Funcionalidad	22 Spatial and Functional continuity of the street corridor

A05 URBAN METABOLISM

Energy	23 Energy consumption
	24 Energy Self-Sufficiency
Water	25 Water Consumption
	26 Water Adequacy
Food	27 Food Self production
Waste and the cycle of materia	28 selective waste manegement
	29 Construction waste
	30 Collection systems' energy consume
	31 Provision of waste collection containers
	32 Proximity to collection point
	33 proximity to Clean Points
	34 Closing of organic materia cycle
Atmosphere	35 Emission of gases with greenhouse effect

A06 URBAN BIODIVERSITY

Structure	36 Soil permeability index
	37 Green area per capita
	38 Biodiversity of birds index in the city
	39 Proximity to green areas
Potential	40 Index of functionality of parks and gardens
	41 Trees' biodiversity per area
	42 Connectivity of urban green corridors

A07 SOCIAL COHESION

Population mix	43 Ageing index
	44 Población exForeign populationtranjera
	45 College graduates
Housing	46 Social hpousing
Equipments	47 Provision of equipments
	48 Proximity to basic equipments

A08 SUSTAINABILITY GUIDE ROLE

	49 Efficiency of the urban system
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TIMEFRAME

- The external expertise has delivered the draft of the indicators system, this week.
- Technicians will make some suggestions and changes next two weeks.
- Beginning of October will be explained to the Local Support Group, and the group will suggest some more changes.
- The test will start in January 2011

Name	Organisation	Name	Organisation
Juan Carlos Alonso	Vice Mayor	Alfonso Sanz	Director of Territorial Planning Department. Basque Gov.
Javier Maroto	Political Groups, representative in the Planning Commission.	Miguel Virizuela	Environment and mobility department
Malentxo Arruabarrena		Alfredo Piris	Ensanche 21 municipal corporation
José Navas		Gonzalo Arroita	ARICH municipal corporation
Antxon Belakortu		Rafael Fernández de Carranza	Landázuri Society (Heritage preservation)
Esther Fernández		Neighbourhood associations, elected in the citizen participation Commission	Martín Gartziandia
Carlos Sevillano	Miguel Ibarondo		TUVISA municipal corporation
Angel Luis Bellido	Architects Institute	Carmen Calles	GILSA
Juan Manuel Martínez	Engineers Institute	José Ramón Alonso	Environmental Studies Centre
Manuel Ramírez	Social Council of the City	Susana Vizcarra	Urban development-planning department
Aitor Ortiz de Zárate		Jesús Marcos	Urban development-infrastructures department
Luciano Omar de Giovanni	Accessibility sectoral council	Eugenio Ruiz	University of the Basque Country
Luis Ganuza	Environment Sectoral council	Andrés Ozaeta	Chamber of commerce and Industry
Javier Mendoza	Commerce promotion sectoral council		

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