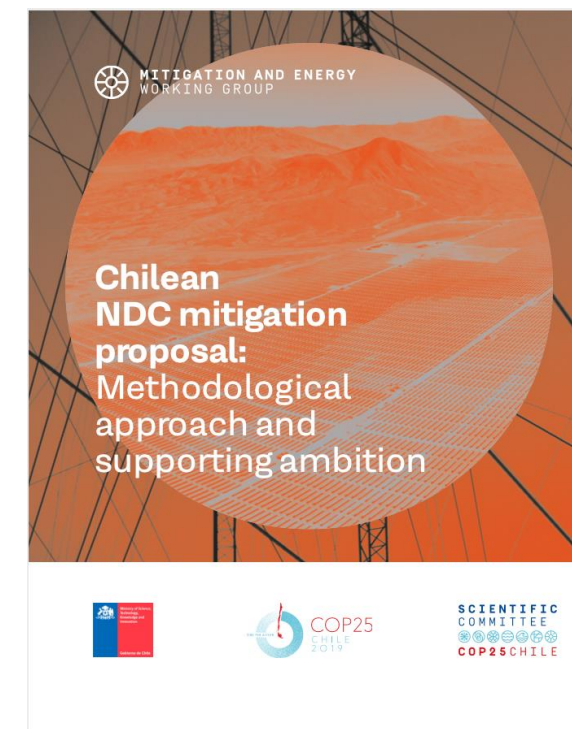
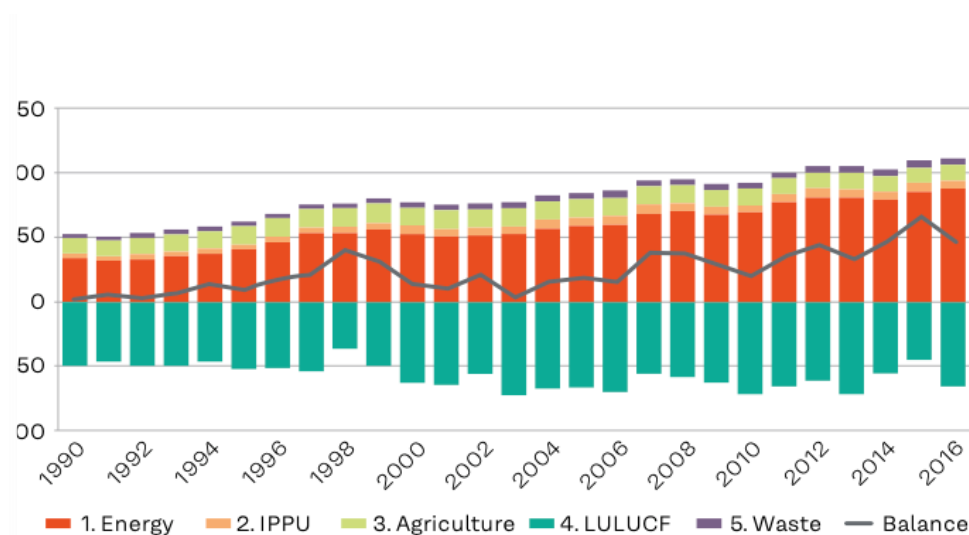
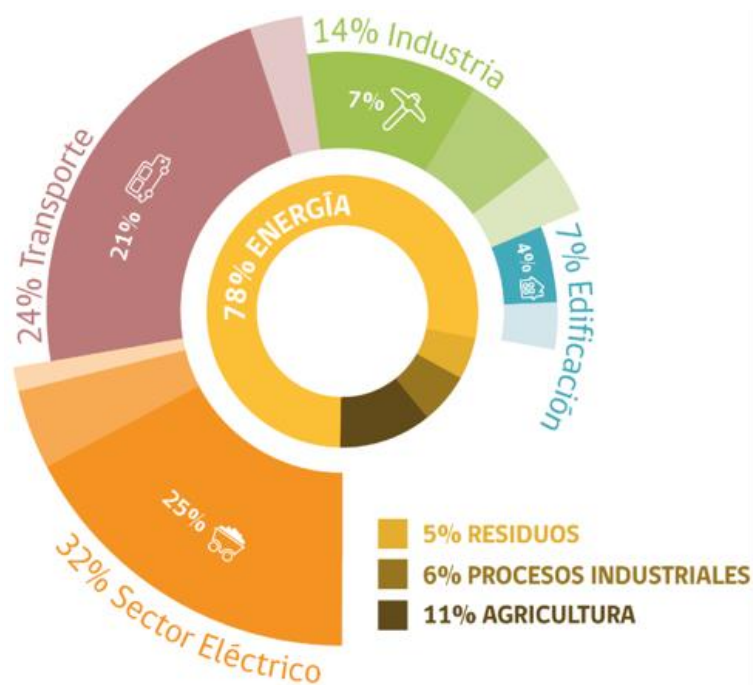


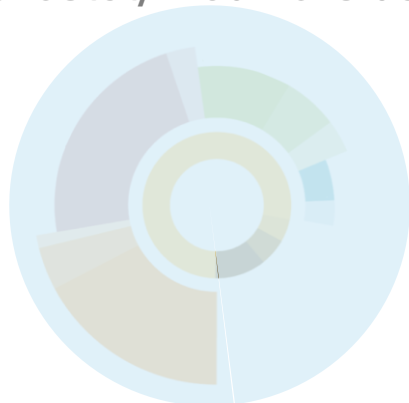
PRESENTACIÓN DE ANTECEDENTES GENERALES DE CHILE

Taller 2: Transporte y desarrollo urbano



Taller 4: Forestal/Biodiversidad

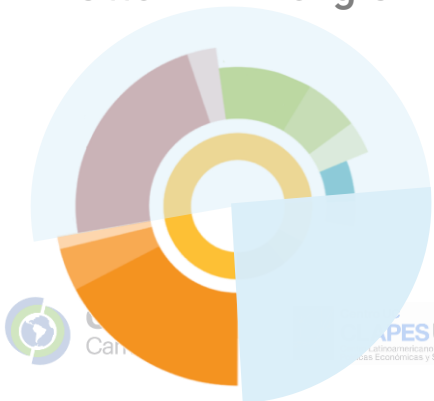
Taller 5: Industrial, Minería e Infraestructura



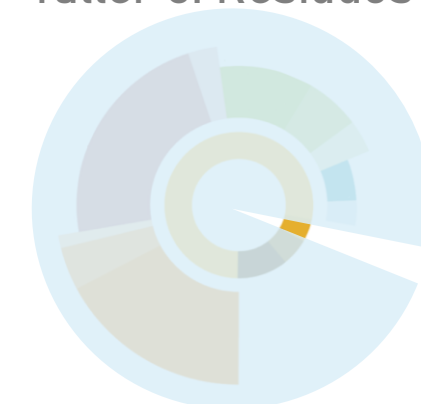
Taller 2: Transporte y desarrollo urbano



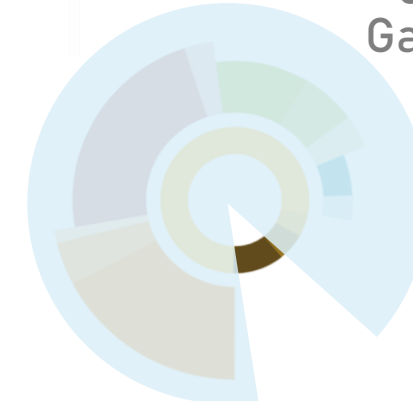
Taller 1: Energía



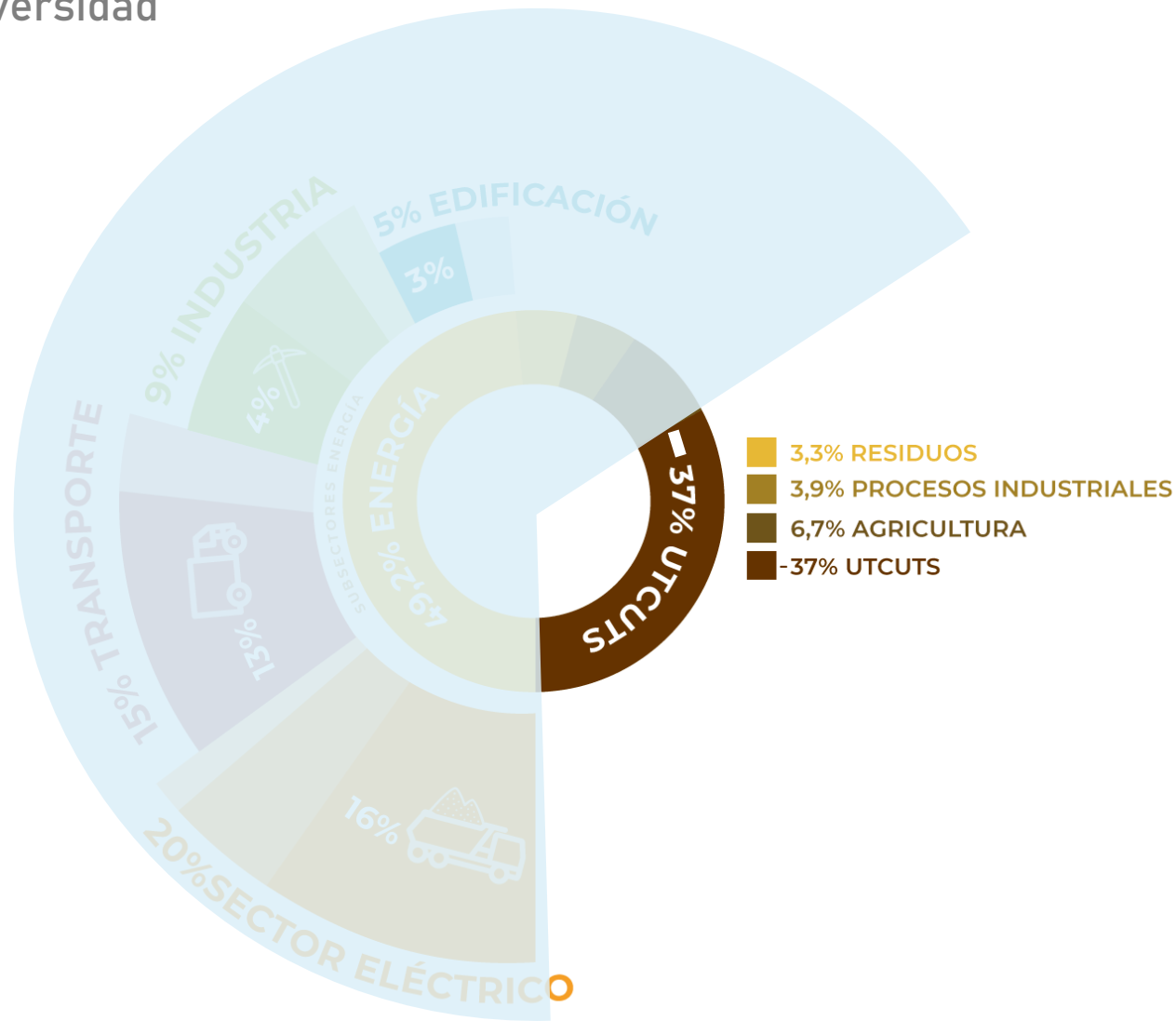
Taller 3: Residuos



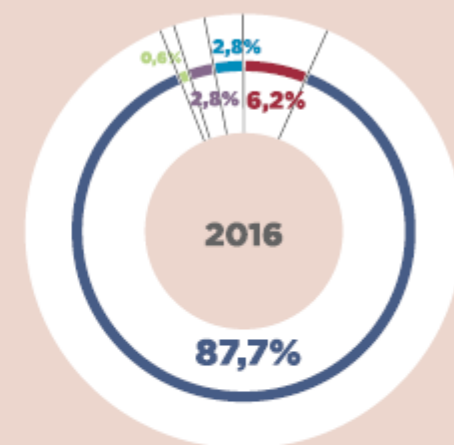
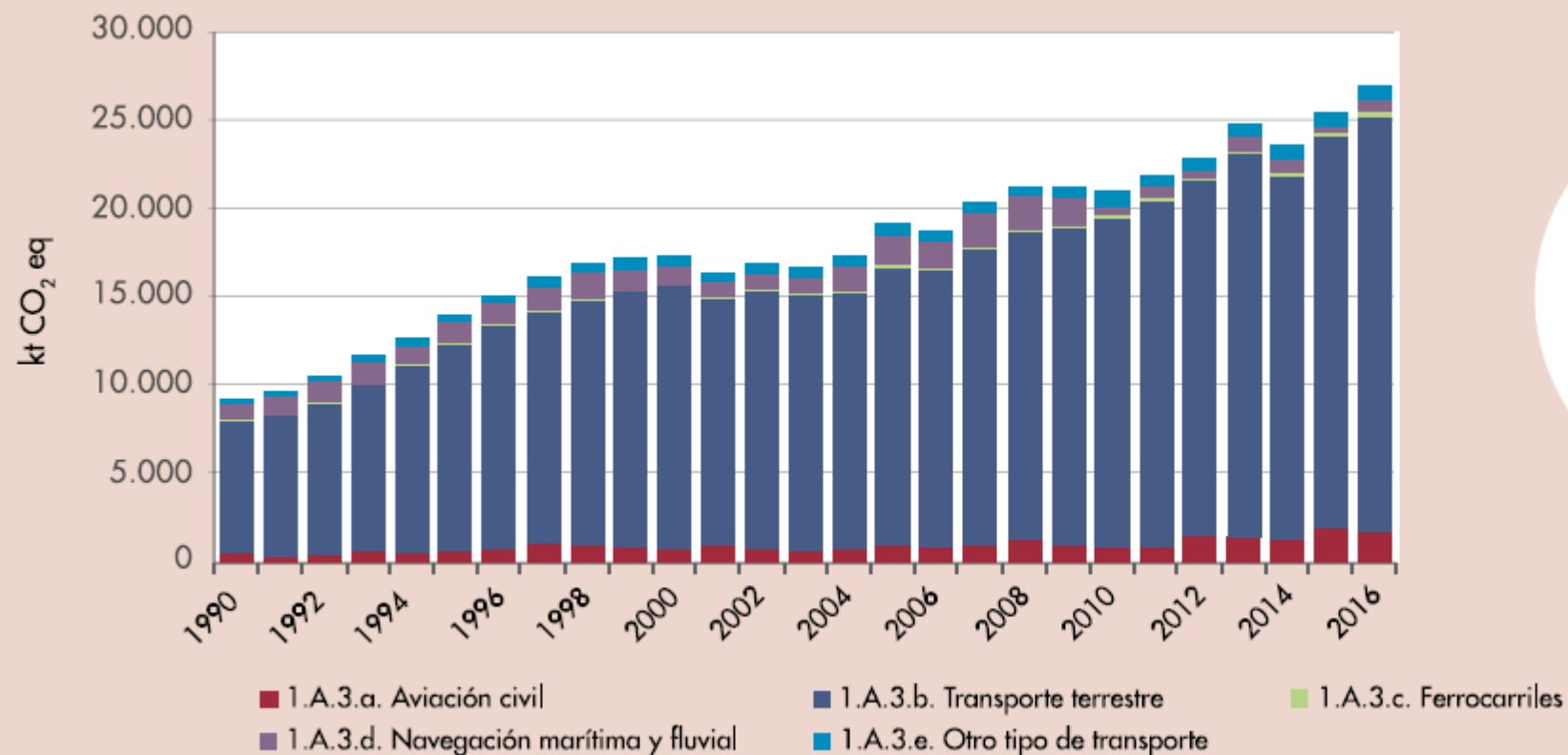
Taller 6: Agricultura/Ganadería



Taller 4: Forestal/Biodiversidad



EMISIONES GEI SECTOR TRANSPORTE



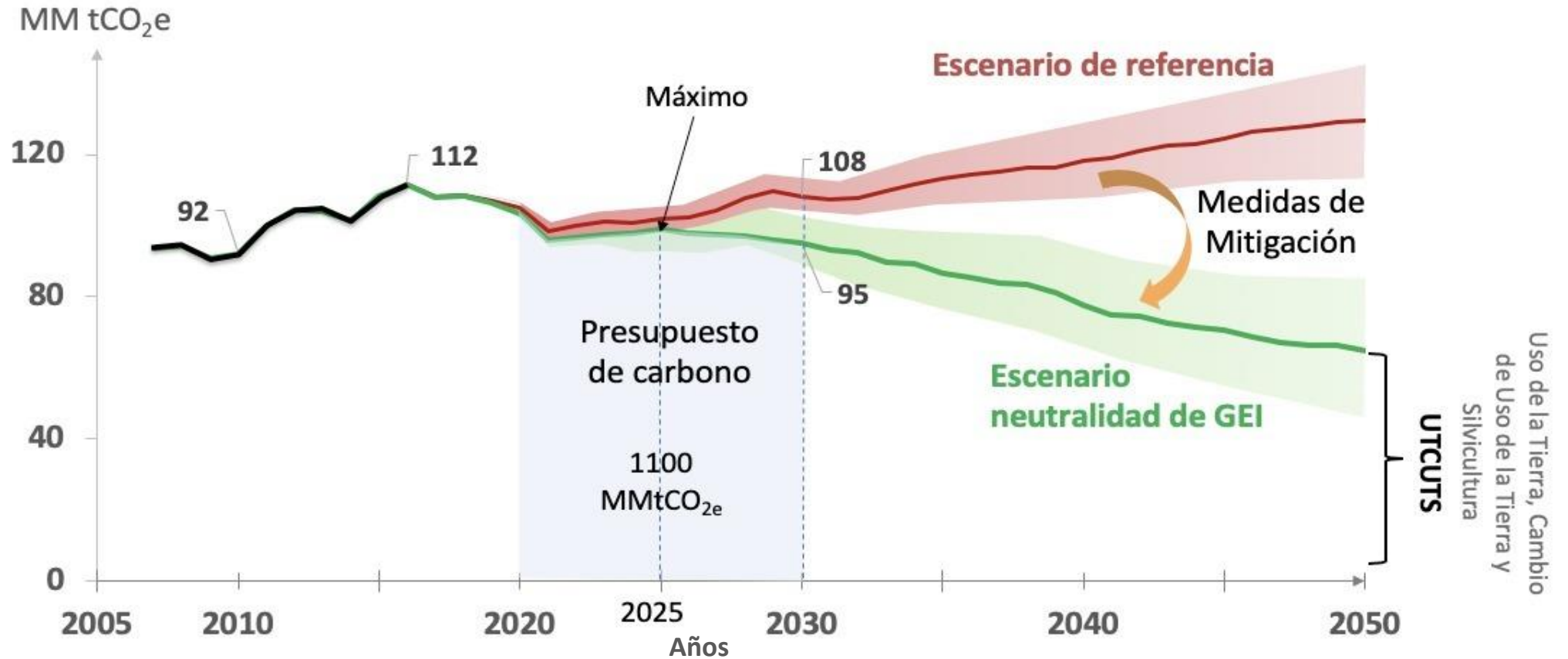
MOTIVACIÓN

Representación
Gráfica del Centro de
Energía, U. de Chile

**CONTRIBUCIÓN DETERMINADA
A NIVEL NACIONAL (NDC)
DE CHILE**



ACTUALIZACIÓN 2020



Note: Figure does not include land use sector, land use change and forestry (LULUCF).

Source: Chilean NDC Mitigation Proposal: Methodological Approach and Supporting Ambition. Mitigation and Energy Working Group Report. Santiago: COP25 Scientific Committee

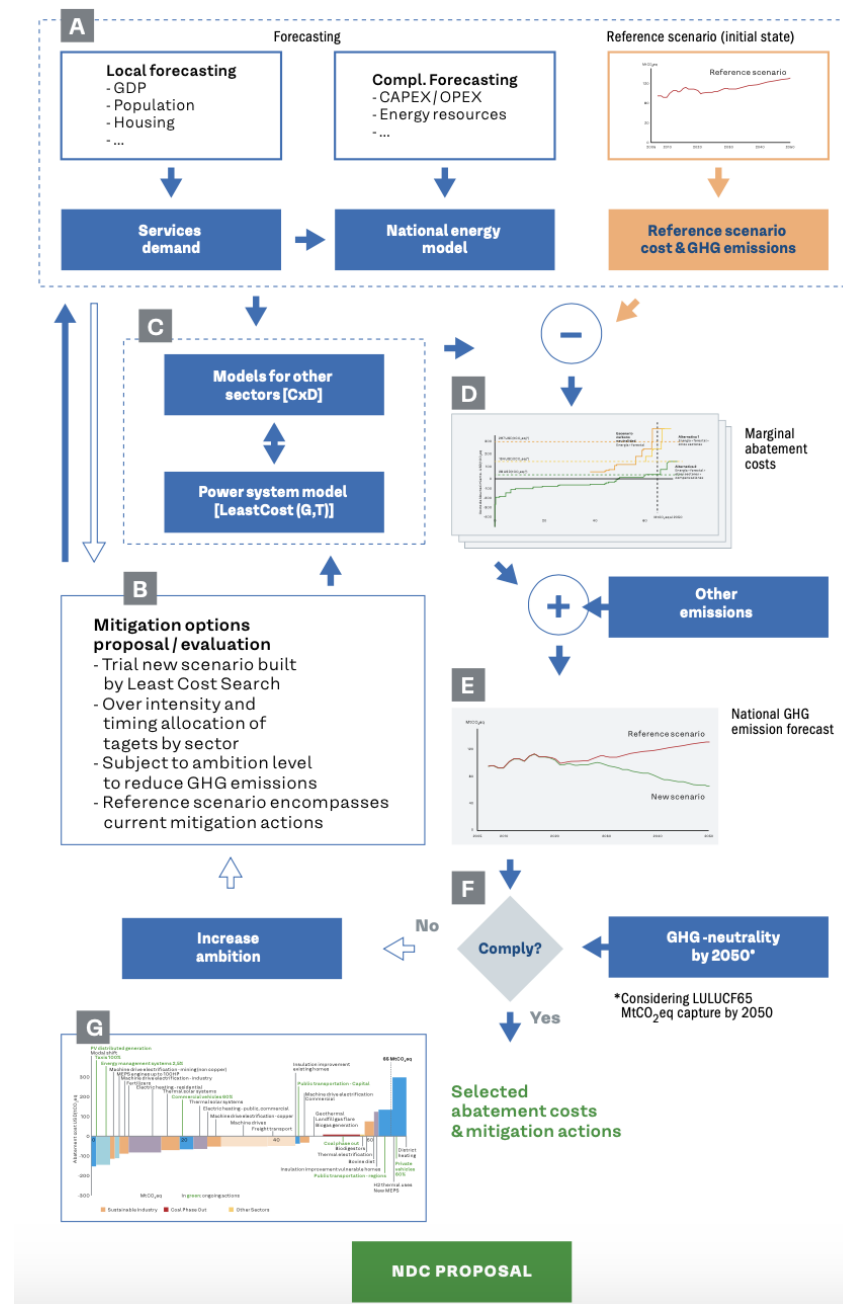
TRADICIÓN DE PROCESOS PARTICIPATIVOS EN EL SECTOR ENERGÉTICO



MODELAMIENTO Y HERRAMIENTAS

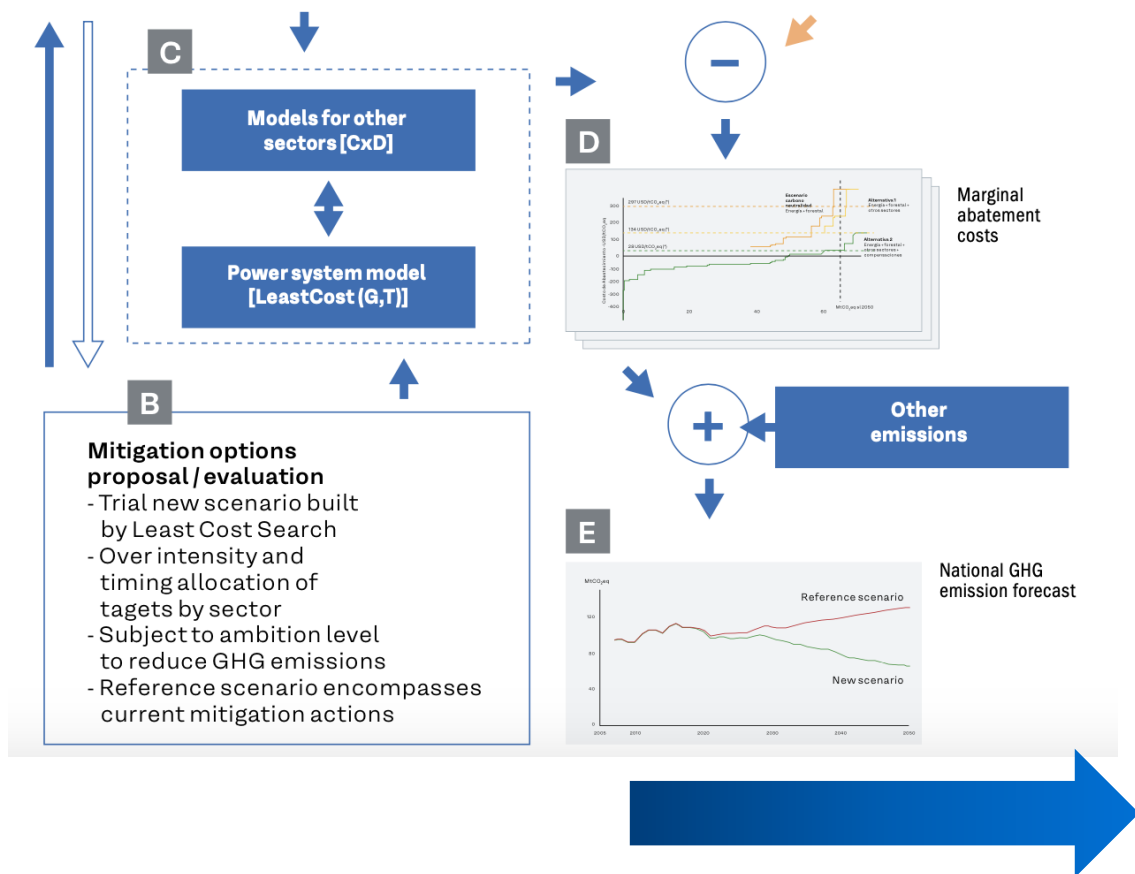
ESQUEMA GENERAL

- A: Datos de Entrada
- B: Medidas de mitigación
- C: Modelos / Simulaciones
- D: Curvas MAC
- E: Estimación de emisiones
BAU / Neutralidad
- F: Cumple
- G: Resultado y propuesta



MODELAMIENTO Y HERRAMIENTAS

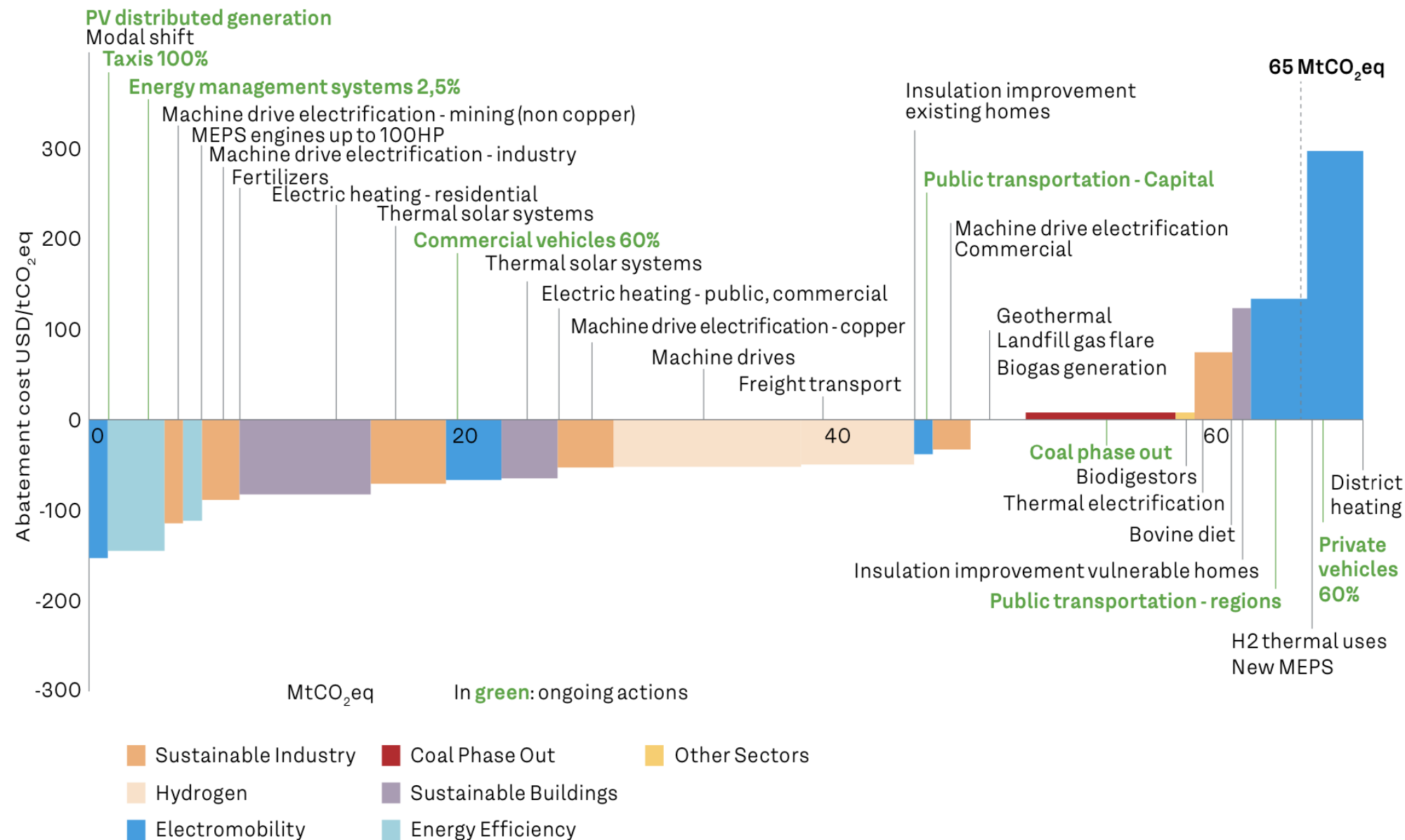
ESQUEMA GENERAL



Description			Reference Scenario	GHG-Neutrality Scenario
Action	Policy	Sector		
Coal Phase Out	Renewable energy in replacement of coal	Energy	Decommission of 2,500 MW by 2050	Decommission of 5,500 MW by 2040
	Insulation improvement and electric heating	Energy	General Ordinance of Urban Planning and Construction (OGUC)	OGUC & 57% of houses (70% of apartments) use electric heating by 2050
	Thermal solar systems	Energy	No actual measures	52% and 10% for hot water uses in houses and hospitals respectively, by 2050
Sustainable Buildings	PV distributed generation	Energy	1,278 GWh Residential and 3,633 GWh commercial by 2050	1,800 GWh residential and 5,657 GWh commercial by 2050
	Insulation improvement of vulnerable homes	Energy	No actual measures	20.000 homes per year
	New MEPS	Energy	No actual measures	MEPS on TVs, dishwashers, tumble dryers, electric ovens and microwaves
	Electric heating in the public and commercial sector	Energy	No actual measures	Supermarkets, retail, private clinics use: 84%, 76% and 48% by 2050
	Geothermal heat pumps	Energy	No actual measures	35 GWh nationally by 2050
	District heating	Energy	No actual measures	0.2% of the energy matrix for heating
Electromobility and modal shift	Electric taxis	Energy	21% of taxis by 2050	100% of taxis by 2050
	Public transportation - capital	Energy	20% urban public transportation in Santiago by 2050	100% urban public transportation in Santiago by 2040
	Public transportation - regions	Energy	0% urban public transportation in regions by 2050	100% urban public transportation in regions by 2040
	Private vehicles	Energy	21% private vehicles by 2050	58% private vehicles by 2050
	Commercial vehicles	Energy	21% commercial vehicles by 2050	58% commercial vehicles by 2050
	Modal shift	Energy	No actual measures	Replacement of private motor transportation for buses and bicycles
	Freight transport	Energy	No actual measures	71% of freight transport by 2050
Hydrogen	Machine drives	Energy	No actual measures	12% of machine drives in industry and mining by 2050
	Thermal uses	Energy	No actual measures	Replacing natural gas for thermal use: 7% of housing and 2% of industrial by 2050
	Thermal solar systems	Energy	No actual measures	10% thermal use in industry and 16% in copper mining
	Electrification of machine drives - mining (non-copper)	Energy	No actual measures	52% in mining (non-copper) by 2050
	Electrification of machine drives - industry	Energy	No actual measures	67% in miscellaneous industries by 2050
	Electrification of machine drives - commercial	Energy	No actual measures	56% in the trade sector by 2050
	Electrification of machine drives - copper mining	Energy	No actual measures	57% in open pit mines by 2050 and 74% in underground mines by 2050
	Biogas generation	Energy	No actual measures	New landfill sites with electricity-powered centrals
	Thermal electrification	Energy	No actual measures	Additional thermal use of 25% in industrial and mining sectors
	Energy Management Systems	Energy	Annual savings of 0.6%	Annual savings start at 0.6 % and increase up to 2.5%
	MEPS engines up to 100HP	Energy	No actual measures	Full replacement by 2030
Sustainable Industry	Thermal solar systems	Energy	No actual measures	10% thermal use in industry and 16% in copper mining
	Electrification of machine drives - mining (non-copper)	Energy	No actual measures	52% in mining (non-copper) by 2050
	Electrification of machine drives - industry	Energy	No actual measures	67% in miscellaneous industries by 2050
	Electrification of machine drives - commercial	Energy	No actual measures	56% in the trade sector by 2050
	Electrification of machine drives - copper mining	Energy	No actual measures	57% in open pit mines by 2050 and 74% in underground mines by 2050
	Biogas generation	Energy	No actual measures	New landfill sites with electricity-powered centrals
	Thermal electrification	Energy	No actual measures	Additional thermal use of 25% in industrial and mining sectors

MODELAMIENTO Y HERRAMIENTAS

ESQUEMA GENERAL



ACCIONES DE POLÍTICA Y ESTRATEGIAS

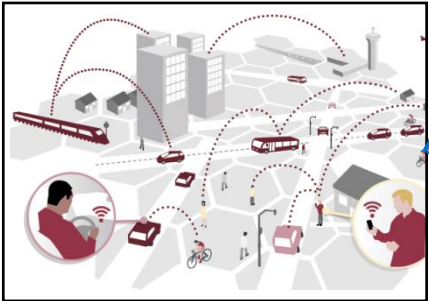
Medida de mitigación	Reducción de emisiones (millon tCO2e)		Costo abatimiento (US\$/tCO2) periodo 2020-2050	
	Año 2030	Año 2050	Tasa 0%	Tasa 6%
Taxis eléctricos	0,5	1,6	-478	-153
Electromovilidad – Transporte público RM	0,4	1,1	-164	-38
Electromovilidad – Transporte público regiones	0,4	3,3	332	134
Electromovilidad – Vehículos particulares 60%	-0,002	2,2	866	297
Electromovilidad – Vehículos comerciales	0	3,6	-298	-66
Cambio modal transporte	0,1	0,1	-542	-208
Hidrógeno– Transporte de carga	1,2	  6,1	-222	-50

ACCIONES DE POLÍTICA Y ESTRATEGIAS

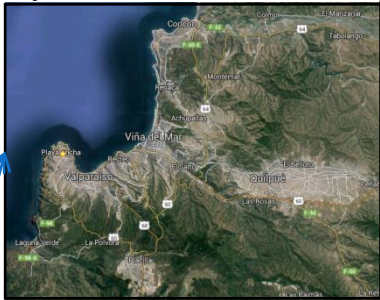
Planificación integrada de uso de suelo y movilidad



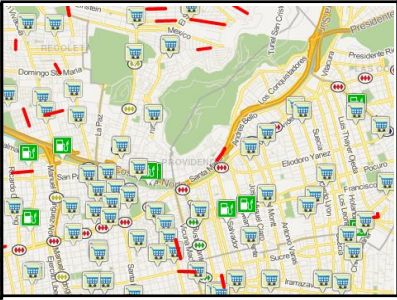
Uso de las tecnologías de la información



Control del crecimiento urbana y densificación



Distribución de servicios



Plasticidad laboral y teletrabajo



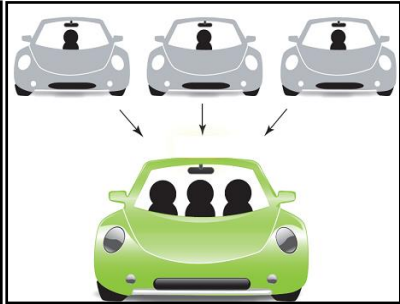
Crecimiento sustantivo del transporte público mayor



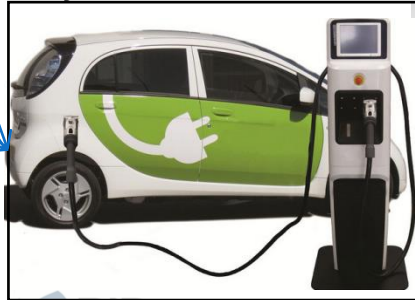
Promoción del uso de modos no motorizados



Vehículos compartidos



Vehículos de cero o baja emisión



Vehículos autónomos

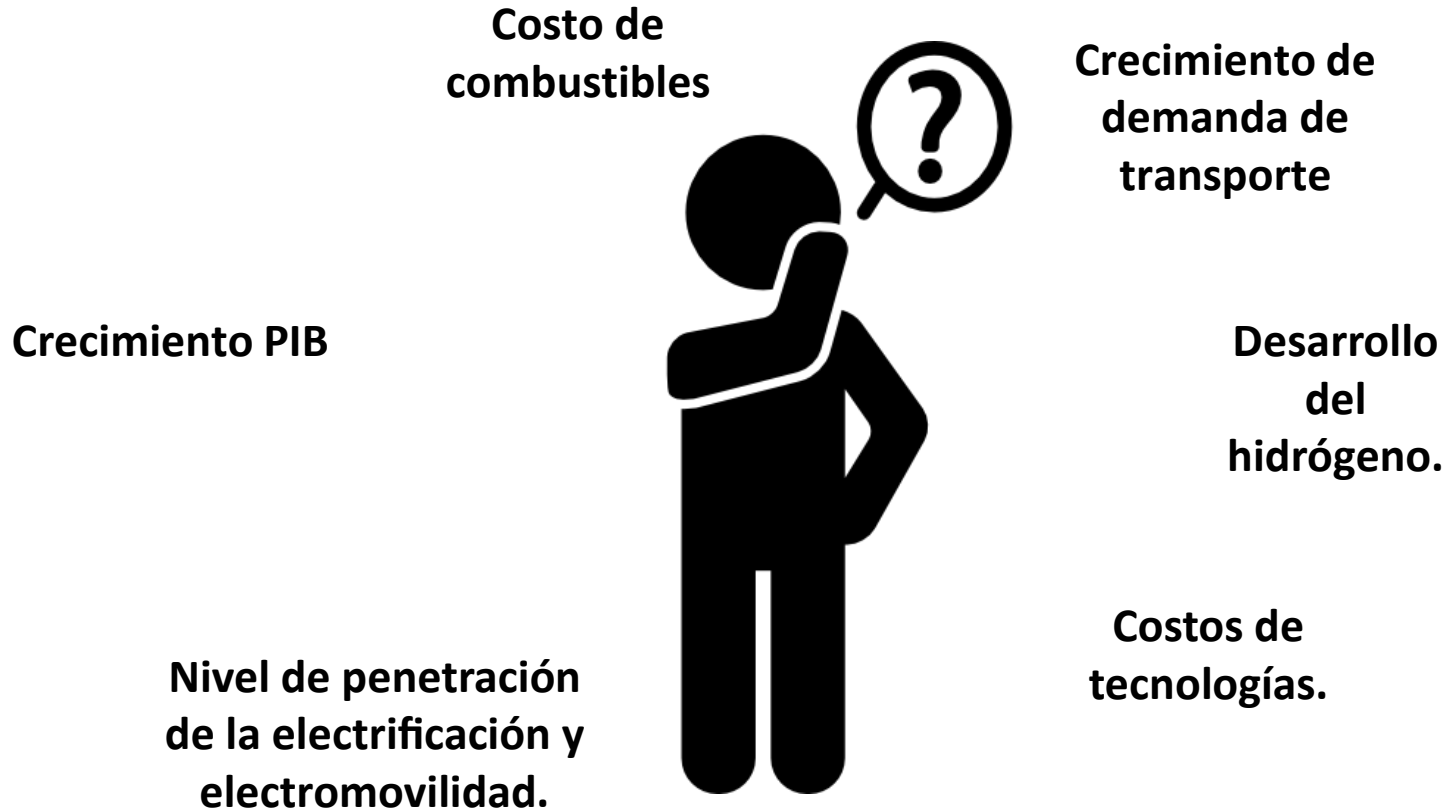


Smart vehicles

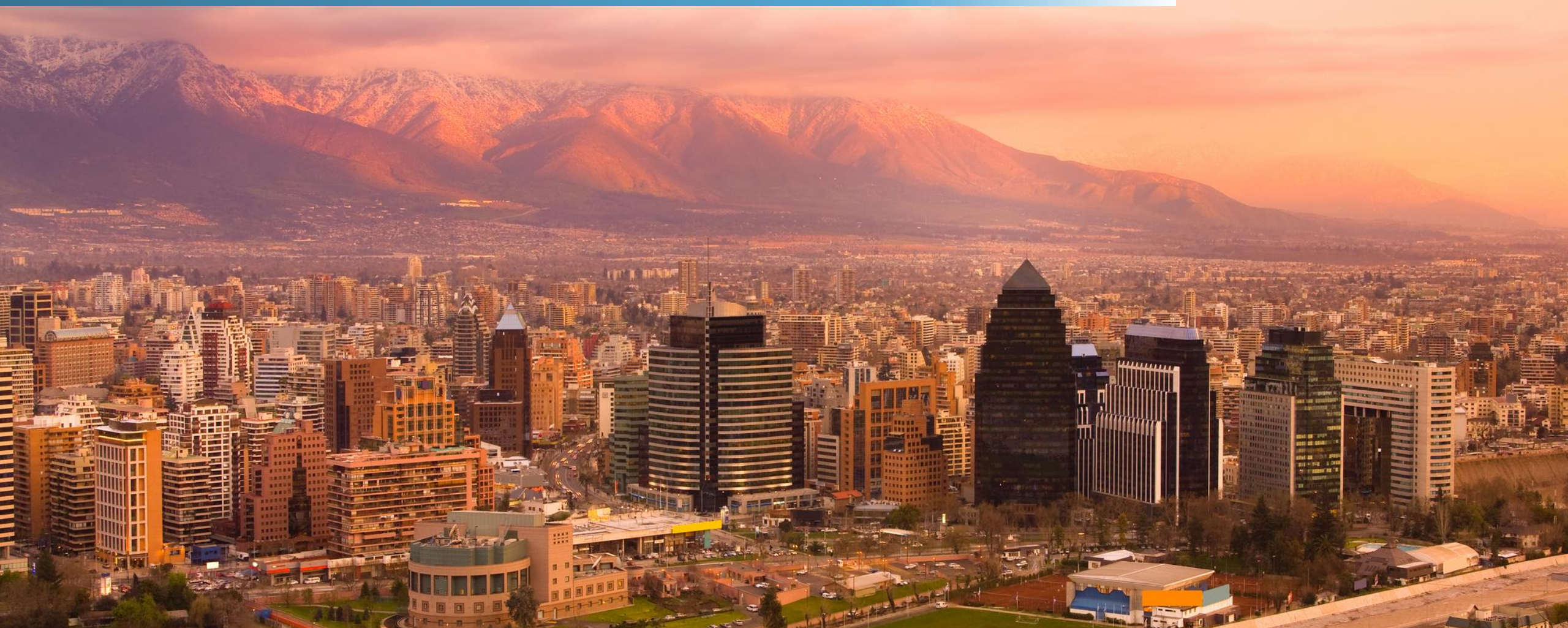


INCERTIDUMBRES

Es relevante hacer notar el listado de variables que tendrían un potencial más importante para modificar los resultados y conclusiones de trabajo:



TRANSPORTE Y DESARROLLO URBANO



Centro UC
Cambio Global



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Políticas Económicas y Sociales

