

2050 Pathways Platform annual meeting series

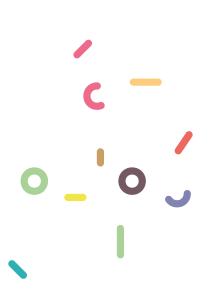
Session 1: Laying the foundations for long-term low-emission development strategies

Wednesday 6 April 2022

Agenda



- Welcome and introductions from the 2050 Pathways Platform Secretariat on the foundations for long-term strategies (LTS)
- Presentations from countries and grantees
 - Adapting LTS to specific country contexts: examples from working with SIDS and LDCs – <u>Climate Analytics</u>
 - Including adaptation and AFOLU considerations in LTS <u>Vivid</u> Economics
 - Land-use modelling for LTS: experiences from Argentina <u>National</u> <u>Agricultural Technology Institute</u> of the Ministry of Agriculture and Fisheries of Argentina
 - Energy sufficiency in long-term decarbonisation scenarios négaWatt
- Q&A session with the audience
- Closing remarks by the 2050 Pathways Platform Secretariat



2050 Pathways Platform in brief



Key facts

- Government and multi-stakeholder initiative launched at COP22 gathering countries with interest on long-term strategies and ambition
- Hosted by the European Climate Foundation
- Funded by philanthropy and public funds
- 36 member countries, working with many more non-member countries to support LTS
- Bringing together a network of donors, international and national think tanks, and climate policy experts on long term planning
- Granting governments, local analytical organizations, local stakeholders, and global think-tanks

Areas of support



FINANCIAL SUPPORT

- Provide financial grants to governments for the development of LTS. This could include support for modelling, stakeholder consultations, or personnel support to coordinate the development of LTS.
- Bring together relevant donors to fund the successful development of LTS.



KNOWLEDGE & ADVISORY

- Organize an annual meeting to bring together governments, donors, and other actors like think tanks, sub national governments, and businesses to discuss different elements of LTS. This meeting presents not just a networking opportunity but also allows countries to keep abreast of the latest developments and best practice.
- Provide communications advice and assistance to governments for increasing the reach of their LTS to international audiences, particularly international donors and the private sector.
- Facilitate connections with international experts on longterm planning to address specific needs of countries.



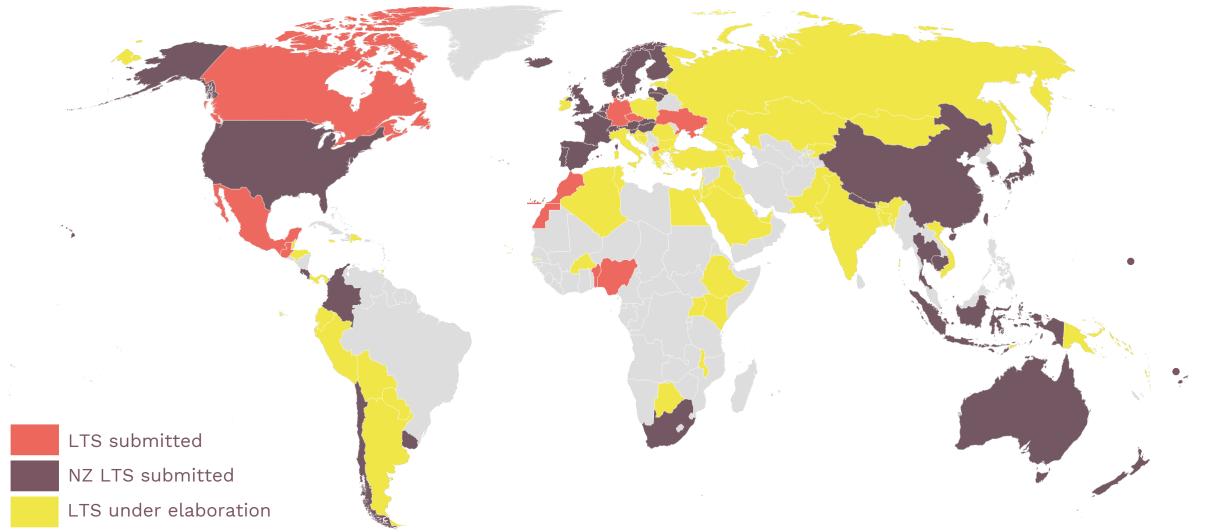
CAPACITY BUILDING

- Conduct training and workshops with government officials and key stakeholders to increase understanding of the main elements and approaches to developing an LTS.
- Support technical teams in charge of modelling to share best practice and lessons from other countries
- Commission global knowledge products to address needs and questions raised by countries in relation to their LTS.

Status of LTS elaboration worldwide

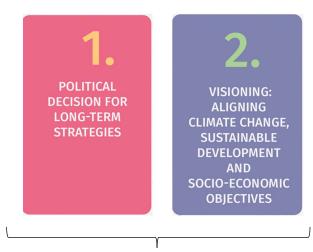


51 submissions to the UNFCCC



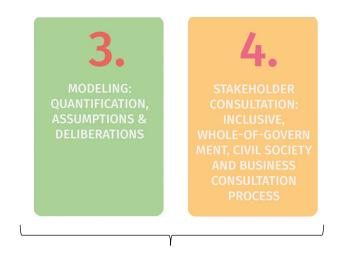
Development stages of a country LTS





Foundational work / Long-term vision

- Political convening
- Inception and training workshops
- Coordination of LTV process
- Development of desktop analysis and stakeholder consultations
- LTV drafting and editing



Overall LTS formulation

- Coordination of LTS process
- Analytical studies & models
- Stakeholder consultations
- Drafting LTS
- Communication on the LTS



Post LTS

- Policy & regulatory analysis
- Definition of progress monitoring & reporting governance
- Analytical work to define finance plan for delivery
- LTS NDC calibration

Long-term visions: foundations of LTS



- LTV set the framework for the strategy to include principles, goals, objectives, serving as the direction of travel for the country to trigger transformational change
- LTV need to be anchored in the economic, geographic, and social circumstances of the country. Goals should draw from existing economic and social objectives, including SDGs, and how these goals may be affected by climate change and interact with the low-GHG and just transition in the future. The climate-development nexus is central to LTS
- LTV help identify the socioeconomic impacts of the transition, highlighting potential barriers and trade-offs to achieving objectives, e.g. challenges for sectors and regional communities due to the transition, lack of technological know-how, lack of societal buyin, financing challenges at the country level, etc.
- LTV are a 'necessity' for the LTS and require a strong involvement of line and crosscutting ministries who will feed-in their priorities for the LTS from this foundational stage of the LTS elaboration process

Sending the right signals through LTS



- **Inform national policy-making:** showcase the future priorities of a country, helping policymakers in aligning aligning public resources, policy and regulations to the long-term objectives
- Showcase intent and ambition: demonstrate concrete ways in which countries intend to transform the economy, especially for those that have committed to net-zero
- **Guide investments:** LTS and related policy signals can guide investment decisions, helping avoid stranded assets or locking in higher levels of emissions in long-lived assets
- **Define and leverage international cooperation:** highlight areas where the country thinks it needs international cooperation and support, to attract finance and investments. MDBs are increasingly aligning their country partnership documents to the long-term transition
- Increase public awareness and trigger action: reach many actors within the country who
 can play a central role in implementation of the LTS (hence the importance of following a
 whole-of-government and cross-societal approach to LTS to be explored further in our
 second session)



Presentation from select countries and grantees on specific components of LTS:

- 1. Adapting LTS to specific country contexts
- 2. Including adaptation and AFOLU considerations in LTS
 - 3. Carbon neutrality of the AFOLU sector
- 4. Energy sufficiency in long-term decarbonisation scenarios



Adapting LTS to specific country contexts, examples from working with SIDS and LDCs

2050 Pathways Platform Annual Meeting Series Session 1: Laying the foundations for LTS

Damon Jones

Head of Climate Diplomacy, Climate Analytics

06.04.2022



LTS in SIDS and LDCs

- Long-term strategies (LTS) can provide blueprint for:
 - a resilient, decarbonised future that is compatible with limiting warming to 1.5°C
 - sectoral transformations through a comprehensive and integrated strategy that covers all sectors

- Can help address other needs and goals:
 - food security
 - air quality improvements and health outcomes
 - job creation
 - reducing impacts on biodiversity





Figure 21: Job potential for illustrative scenario: Job years in Construction and Installation jobs (solar and wind combined)



Lots of challenges...

- low level of income and other financial constraints
- highly vulnerability to external shocks
- multiple long standing structural impediments for sustainable development
- human capacity and resource constraints
- lack of robust data collection systems and datasets, making emissions and socio-economic projections difficult
- technical and institutional capacity constraints
- additional challenges with long-term priority setting, vision and policy coherence



...plenty of opportunities

- support for short- and mid-term policy and planning
- avoid stranded assets caused by only short-term planning
- enhance resilience to climate impacts
- climate-resilient infrastructure to avoid future losses
- expanded employment opportunities in new technologies
- facilitate and enhance access to new sources of funding support for development
- greater energy independence/security and consequent cost savings
- expand access to energy to populations

LTS submitted to date

- LDCs
 - Benin
 - Cambodia
 - Nepal
- SIDS
 - Fiji
 - Singapore
 - The Republic of the Marshall Islands
 - Tonga





Key message 1: LTS as critical driver for improved resilience in SIDS and LDCs

- Decarbonisation and resilience instrinsically linked
- Taking vulnerability and exposure to accelerating climate change impacts into account
- Planning of resilient infrastructure and maximising resilience across sectors
- **Energy system resilience** includes ownership, fiscal resilience considerations (e.g. not adding to debt burden)
- Substantial potential economic and social benefits of developing an LTS with resilience built-in
- Incorporating adaptation strategies and addressing loss and damage into long term planning



Key message 2: aligning NDCs and LTS

- Better informed decision making by considering short and long term factors
 - Identify priority sectors with need for long term planning e.g. energy and transport in SIDS, energy and agriculture in LDCs
 - Long-term strategy helps short-term decision making e.g. technology/infrastructure choices to **avoid stranded assets**
- Process synergies and efficiencies
 - Integrating domestic processes
 - Coordinating among ministries, agencies and departments
 - Streamlining of data collection and long-term modelling
 - Stakeholder consultations for LTS and NDC in tandem



Key message 3: coverage across all sectors

- Benefits in long-term strategies covering all sectors
 - allows interactions between sectors to be considered
 - key to a comprehensive and integrated decarbonisation strategy
 - SIDS:
 - energy sector represents the biggest share of emissions for most SIDS
 - as SIDS decarbonise, emissions from other sectors such as agriculture, industrial processes and product use, and waste will grow in relative importance
 - LDCs:
 - largest contribution to emissions: agricultural and land sectors, energy sector
 - for a third of LDCs, combined emissions from agriculture and land sectors account for more than 75% of emissions
 - interventions solely in energy sector won't be sufficient to reduce these countries' emissions profiles



LTS in SIDS

- For majority of SIDS, most emissions come from energy sector:
 - Main lever for reducing emissions will be phasing out of diesel fuel or residual fuel oil
 in power sector and gasoline and diesel in transport sector
 - Replacement with solar PV and wind, with complementary capacity from geothermal, biomass and hydropower, and/or wave and ocean technologies
 - Transitioning to power system with high shares of variable renewable energy + battery storage
 - Shifting away from fossil fuels to reduce fuel imports and increase SIDS' energy independence
 - Increasing penetration of renewable technologies can lead to significant decreases in cost of electricity
- End-use sectors (e.g. transport, buildings) will need to decarbonise through electrification and energy efficiency measures



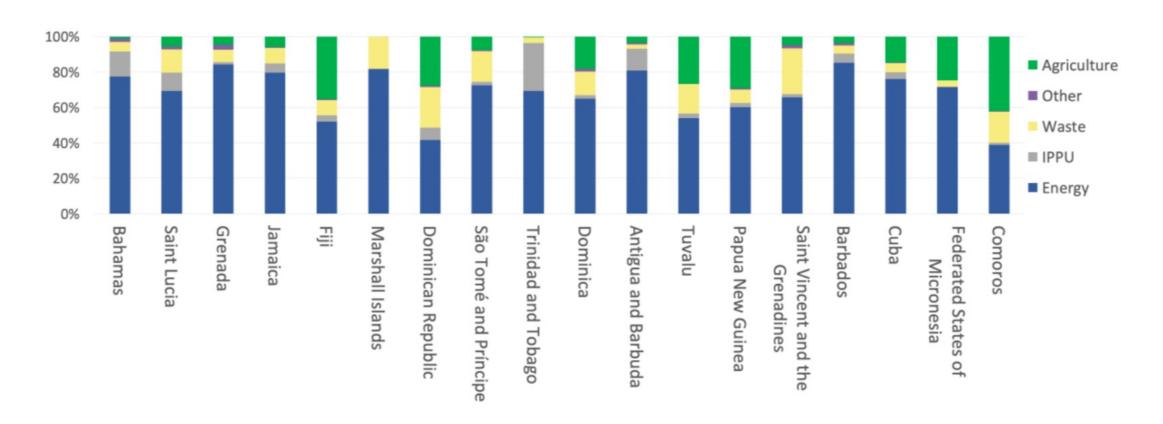


Figure 1: Emissions per sector per country for the year 2017. Energy includes electricity generation, direct use of energy and transportation. IPPU is Industrial Processes and Product Use. Source: (Gütschow et al. 2019).



Illustrative Scenario - Transition to 100% RE by 2050

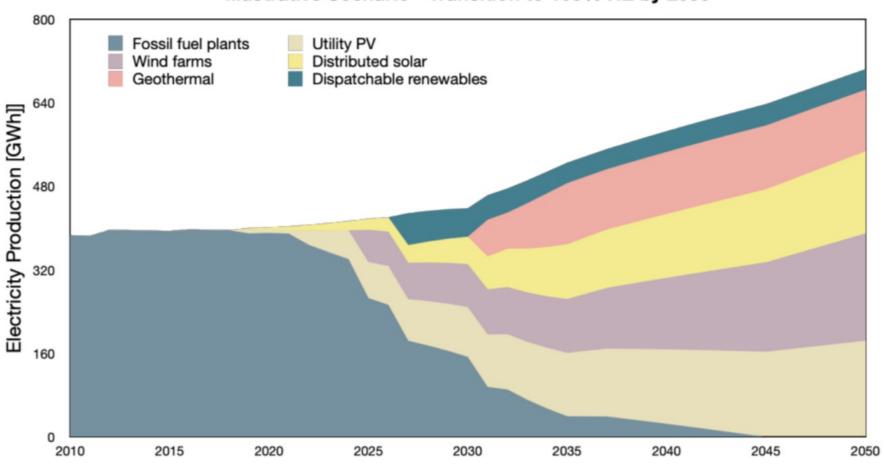


Figure 3: Illustrative electricity output pathway modelled based on overall demand in a SIDS. Own simulation using the LEAP model.

LTS in LDCs

- Goals of LTS in LDCs focus on:
 - developing sustainably along a low-carbon growth path
 - avoiding the installation and use of carbon-intensive infrastructure
 - while planning for **increased resilience** against climate impacts across all sectors





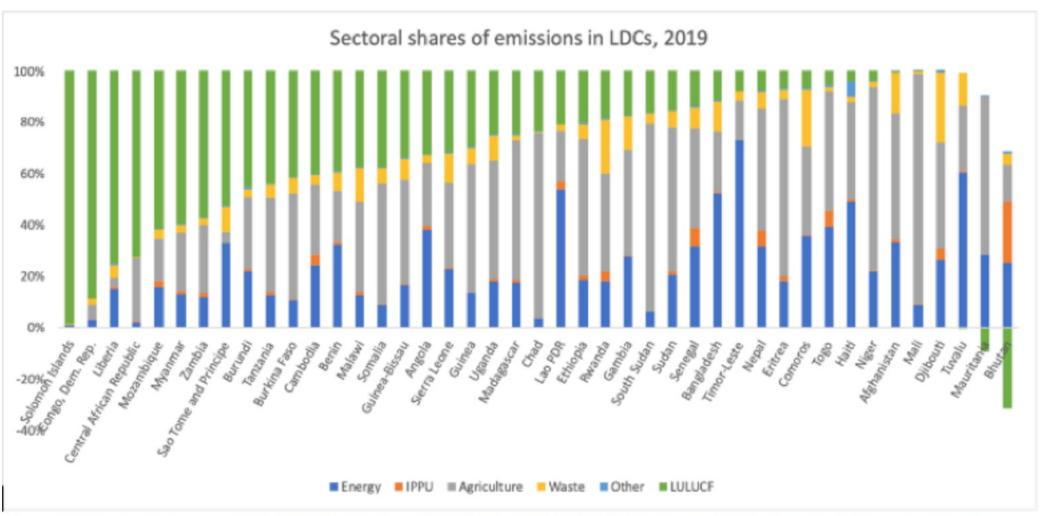


Figure 12: Sectoral shares of total GHG emissions (MtCO₂e in AR4 GWP). (Gütschow, J.; Günther, A.; Jeffery, L.; Gieseke 2021) used for non-LULUCF sectors. (FAOSTAT 2022) for LULUCF.²



Example: agriculture sector in LDC LTSs

- Nepal and Benin have adopted Climate-smart agriculture (CSA) as a central pillar of their LTSs
 - CSA aims to support transformation of agri-food systems to sustainably increase agricultural productivity and incomes, while **supporting adaptation**, **resilience** and emissions reduction outcomes
 - Development of LTS allows for long-term planning to incorporate mitigation
 options that also support resilience e.g. CSA practices such as establishing
 agroforestry systems, planting climate resilient crops, developing reserve capacity
 to build resilience to climate disruption



Synergies across sectors remain key...

Nepal's LTS

Vision: Nepal aspires to minimize emissions and sustainably achieve net-zero emissions by the year 2045.

Key elements of the 2045 vision

- Increase the use of clean/renewable power in all sectors, including fuel switching to clean and modern energy in all economic sectors.
- Improve energy efficiency and maximize benefits by utilizing clean energy efficiently in the residential, industrial, and transportation sectors.
- Adopt clean, secure, and connected mobility. This includes decarbonizing the transportation sector through the use of alternative modes of transportation, shifting to electric mass transportation, and increasing the use of clean fuels.
- Increase carbon sinks by managing forests and natural resources in a sustainable manner.
- Encourage sustainable agriculture and land use management to maximize co-benefits.
- Expand the circular economy to improve industrial sustainability, promote industrial sector modernization through installations, and invest in new carbon-neutral and circular-economy compatible technologies and systems.
- Maximise the benefits of the mitigation of clean energy trade.
- Enhance international cooperation and support (technical and financial) for climate actions.

Source: Government of Nepal (2021, p. 8)

Resources for preparation and implementation of LTS LYTICS

- LDCs have limited domestic resources that can be mobilized for LTS development and implementation, and will need to draw on significant international financial support
- The challenge of limited resources in LDCs is often addressed through securing resources to meet short-term needs, resulting in a project-by-project approach to finance can create inconsistencies in policies across different sectors that could be avoided by a more holistic, long-term approach
- A LTS can help LDCs access funding to deliver on the strategy and its related initiatives demonstrates country ownership and commitment
- All three LDCs LTS present estimations of the overall costs or level of investment required for implementing key activities in their strategies, and each LTS contains a specific chapter covering a resource mobilization plan for addressing implementation needs









Including adaptation and AFOLU considerations in LTS

06 April 2022



Vivid Economics has been working with the 2050 Pathways Platform to prepare guidance for Long Term Strategies

The guidance focuses on three themes: Adaptation and Resilience; Agriculture, Forestry and Other Land Use (AFOLU); Macroeconomic and Fiscal¹

1. Scoping

Establish best practice, understand gaps in capacity to deliver and identify priority focus areas.

2. Guidance: overview

Overview of how countries can integrate theme across information, intervention and implementation.

3. Guidance: focus areas

Step-by-step guidance supplemented with case studies in identified priority focus areas.

4. Reporting & launch

Deliver user-friendly, practical guidance for each theme

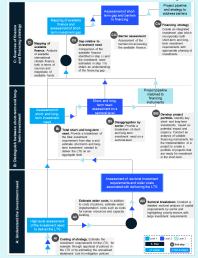
Example outputs from the analysis



Exhibit 1: thematic checklist

heformation	Macroeconomic and fiscal analysis What are the key dinate-change natiod side and opportunities for the dement's commy? What are the impact of climate change and dimits body on hisy macroeconomic indicators (employment, inflation, QDIP)?	identify core channels of impact	lidentify key daks and apportunities	☐ Identifyksy teks and opportunities ☐ Develop scenarios für ecoromy, climate change, climate palicy.	☐ Identify key risks and opportunities ☐ Develop scenarios for economy, climate change, climate policy
		implications for the domestic economy and fiscal position	Outsitative assessment of risks and apportunities	 Sectoral modeling of risks and opportunities Leverage mixing macrosconants models to analyse means fiscal impact. 	☐ Sectoral modeling of risks are opportunities.☐ Leverage existing macrosconomic models to analyse reconficial impetit.
	Capital investment need What is the required load of investment needed to deliver the LTS? What are the jaconestic and international pources of finance are available?	Understand the investment need	Entimate investment need associated with delivering LTS	 Estimate investment need associated with delivering LTS by sector 	 Estimate investment need associated with delivering LTS sector
		Outline a portfolio of interventions	☐ Identify priority short-term investments	Outre atmotre of investments by sector	Outline portfolio of projects with clear timing of delivery
		Sources of finance and financing strategy	☐ Analyse available sources of finance ☐ Estimate investment gap	☐ Quantify gaps in finance ☐ Identify barriers and solutions	☐ Quantify gaps in finance ☐ Identify barriers and solutions ☐ Develop investment stellegy
Intervention	Green flucal instruments - Him cast (scaling/tuments because for finance to CTS and enable the besiden?)	identify available instruments and levers	Analyse relevant fiscal instruments in place Identify polantial facel options	☐ Analyse relevant fiscal instruments in place ☐ Identify potential fiscal options	Analyse relevant focal instruments in place Identify potential focal options
		Assess subshifty of instruments	Assess suitability of focal spilons	Assess suitability of facal options Assess potential revenues and costs of facel options	Access suitability of facel options Access potential revenues are costs of facel options
		instrument ediect- ion and design	Phioritize high impact fecal aptions	☐ Prioritize focal options	Prioritize fiscal options Broader green fiscal reform.
	Fiscal risk management What are the main climate charge related tool risks How continues tisks be managed?	Assess physical and transition flocal risks	I identify key focal risks from physical climate risk and the global law carbon teamilian Outlies channels of impact of fiscal risks on key indicators	☐ Identify key fiscal risks from physical directs disk and the global live cation transition ☐ Outine channels of impact of fiscal risks on key indicators ☐ Quantitatively analyse fiscal risks	☐ Identify key fiscel risks from physical climate risk and the global like cathon transition.☐ Outline channels of impact of fiscal risks on key indicators.☐ Quantitatively analyse fiscal risks.
		Risk management strategy	 Identify options for managing facel risks (deserter risk financing, economic investments) 	 Appraise policy options for managing facel risks (deaster risk financing, economic investments) 	☐ Develop statingy to manage fiscal risks ☐ Strengther irrelational processes for managing climate related fiscal risks
	Green Industrial strategy * What are the economic opportunities from a global true carbon transition? **How cambrines opportunities be realized?	identify key sectors	☐ Identify grean subsections with potential for growth ☐ Prioritize subsections with comparative advantage	☐ Identify gram subsectors with potential for growth ☐ Prioritics subsectors with companions adventage ☐ Analysis benisms growth in prioritised subsector	Identify green subsection with potential for growth Prioritize subsections with comparative advantage Analyse barriers to growth in prioritised subsector.
		Policy and regulation prioritisation	 Identify priority policy and regulatory options for subsector growth 	 Identify printly policy and regulatory options to support subsector growth 	Identify priority policy and regulatory options to support subsector growth Integrate interventions within sectoral and restoral strategie
hyphementation	Accessing interrectional climate finance - Hair can climate finance - Hair can climate finance - modificate in interrection of common available interractional climate finance)	Assessment and scenarios	Analyse existing sources of stimate finance Identify opportunities to occoss new sources of climate finance	☐ Analyse existing sources of climate finance ☐ Identify oppodunities to access new sources of climate finance	Analyse existing sources of directs finance Identify apportunities to access new sources of climate finance
		Sector and project prioritisation	 Identify which sectors are best suited to international climate finance 	It Identify which sectors are best suited to climate finance If Match project pipeline to specific sources	☐ Identify which section are best suited to climate finance ☐ Match project pipuline to specific sources
		Berriers to accessing finance	identify key oversithing barriers	☐ Identify oversetting barriers ☐ Identify instrument/sector specific barriers	☐ Identify everanding banions ☐ Identify instrument/sector specific banions
		Clinate finance readiness	☐ Develop donor partnerships ☐ Identify factors for medimes	Develop donor partnerships Develop shalogy to improve readiness	Decelo dono patrendips Decelo sining to improve readness
	Enabling private sector investment How can private sector investment be incertived?	Develop investment plan	☐ Mentify priority shartners investments	Outline a Smeline of investments by sector, identifying investments with role for private sector.	Develop investment plan Develop pipeline of potential private projects
		Identify barriers and solutions	☐ Identify key barriers and educate to unboding private sector finance	☐ Identify sector-specific barriers and solutions to unlasting private sector finance	☐ Identify key barriers and adultions to unlocking private sector finance
		Support project implementation			Develop institutional framework to coordinate project finance with investors

Exhibit 2: flow-chart for deepdive

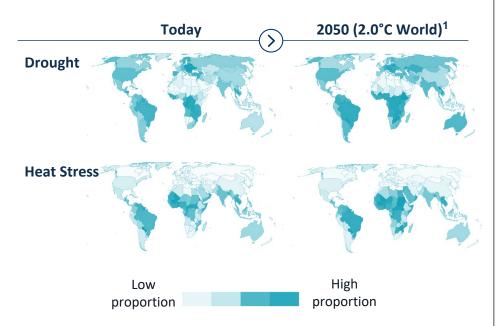


Examples from Macroeconomic & Fiscal theme



Climate risks will have pervasive impacts on development trajectories in low and middle income countries, the LTS is an opportunity to respond to those risks

~50 Countries have over half of their population exposed to climate hazards



Advanced geospatial analytics reveals 3.3 billion people today are exposed to heat, drought, urban water stress and flooding, with temperatures 1.0°C above preindustrial levels

LTS can use physical risk scenarios to prioritise adaptation interventions, appraise investment needs and mobilise adaptation finance



Adaptation strategies often neglect long-term climate risks

•An assessment of climate risk, that accounts for both uncertainty and socioeconomic development scenarios, can help define flexible, adaptive pathways for effective management of long-term climate risk



Adaptation interventions often lack prioritisation and integrated decision-making

- •LTS can support developing a flexible portfolio of interventions for effective risk management, including risk reduction, retention and transfer
- •LTS can serve as an entry point for integrated decision making that maximises synergies between mitigation and adaptation planning Adaptation interventions are disproportionately underfinanced



•LTS can more fully appraise investment needs, articulate financing plans, and leverage adaptation finance





Three focus areas for step-by-step guidance were determined based on an assessment of the gaps in current LTS as well as stakeholder input



Priority areas

Information

Qualitative and quantitative analysis to inform target-setting and prioritisation

Assess:

 long-term climate risks, uncertainties and impacts on sustainable economic development, taking into account changing exposure and vulnerabilities

- Assess long-term physical risks and associated climate impacts to inform adaptation policy
 - Argentina's Climate Risks Map System
 (SIMARCC) to inform LTS and NAP
 development

Interventions

Identification and appraisal of key policies and actions

Prioritise:

- adaptation and mitigation synergies to avoid trade-offs
- effective balance between risk reduction, retention and transfer to manage climate risk
- Realise synergies between mitigation and adaptation is key to prioritising appropriate interventions
- Tonga's LTS identifies synergies between mitigation and adaptation

Implementation

Supportive enabling environment to ensure credible implementation

Enhance capacity for:

- mobilising adaptation finance to meet investment needs
- a dynamic, flexible adaptation strategy which allows re-appraising adaptation interventions
- just transition opportunities to be realised in adaptation interventions, such as co-benefits for vulnerable groups
- Enhancing capacity for accessing international climate finance
- Kenya's National Adaptation Plan (NAP)
 estimates costs and mobilises international
 finance using adaptation metrics



The LTS is an opportunity to leverage cross-cutting interventions in the AFOLU sector

Climate interventions in the AFOLU sector can simultaneously contribute to mitigation, adaptation, rural development and the protection of nature and ecosystems



The LTS is a tool to reduce the large and growing share of GHG in the AFOLU sector

• The AFOLU sector is responsible for a large and growing share of global emissions (24%, rising to 30% under BAU) and has large potential for mitigation



• The LTS is an opportunity to prioritise cost-effective mitigation options with the highest abatement potential across the AFOLU sector



The AFOLU sector is highly vulnerable to climate change

• The AFOLU sector is highly vulnerable to climate risk – key crop yields could fall by 30% in parts of Africa



• An integrated LTS allows countries to develop an appropriate adaptation plan for the sector and leverage the adaptation cobenefits of mitigation



A high share of vulnerable people depend on the AFOLU sector for their livelihoods

• Globally, 65% of people living below the poverty line of \$1.90 a day depend on agriculture for their income



• The LTS can be made more inclusive as well as contribute to wider socioeconomic development by engaging with rural marginalised communities



There are many interactions between the natural environment and the AFOLU sector

 AFOLU affects and depends upon natural capital, including soil, water, forests and biodiversity



 Climate action can protect and improve the environment and minimise the environmental damages created by the AFOLU sector



Four focus areas for step-by-step guidance were determined based on an assessment of the gaps in current LTS as well as stakeholder input





Information

Qualitative and quantitative analysis to inform target-setting and prioritisation

Analyse:

- emissions mitigation potential for the AFOLU sector
- physical climate risks affecting the AFOLU sector
- climate change impacts on socioeconomic and ecosystem indicators
- Analysis of sector physical climate risks
- * Chile has developed tools to monitor and analyse physical climate risks to the AFOLU sector

Interventions

Identification and appraisal of key policies and actions

Develop:

- strategy for LTS to leverage cross-cutting interventions and minimise trade-offs between priorities in the AFOLU sector
- strategy to leverage Nature Based Solutions (NBS) and nature-positive interventions
- Leveraging cross-cutting interventions
- Costa Rica has developed a quantitative framework for policy appraisal
- Integration of NBS and naturepositive interventions
- Colombia's LTS was informed by an analysis of natural capital and spatial prioritisation of NBS

Implementation

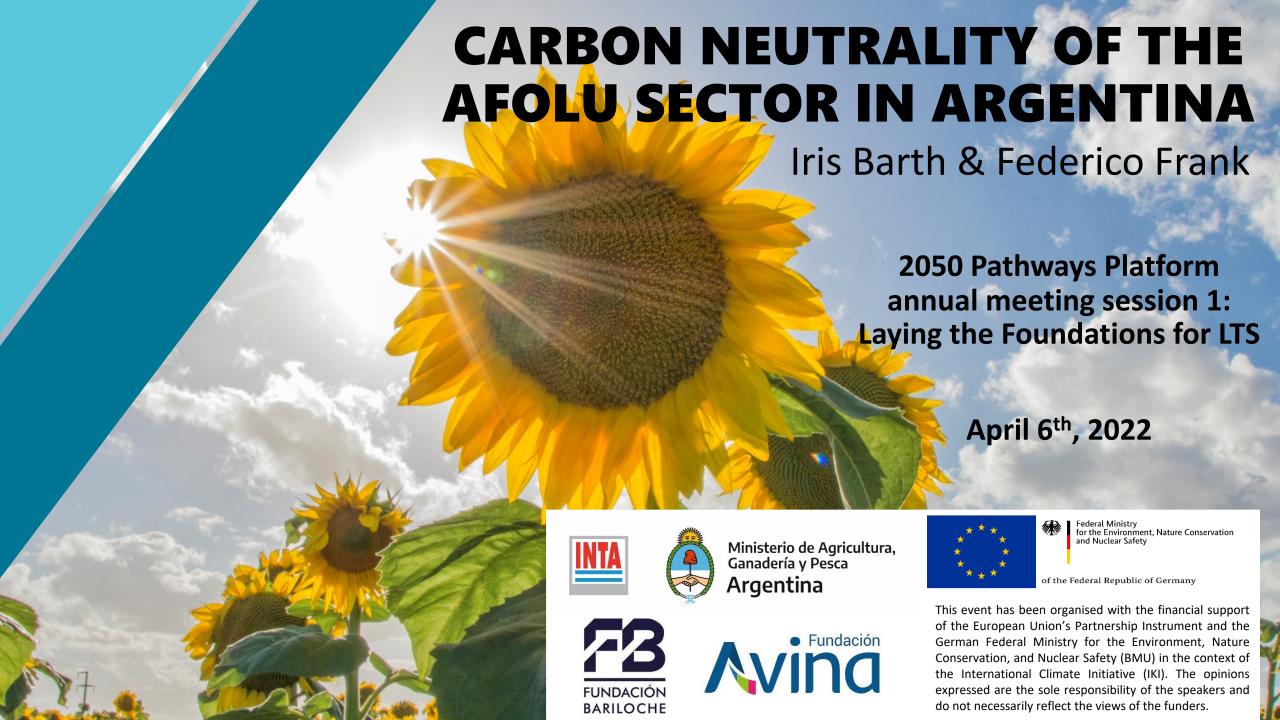
Supportive enabling environment to ensure credible implementation

Enhance capacity for:

- defining institutional arrangements
- financing of interventions in the AFOLU sector
- mainstreaming inclusivity throughout policy design and target-setting
- Consideration and support of disadvantaged communities
 - Colombia's LTS was informed through engagement with marginalised communities



:Q&A



THE SPIPA PROJECT - ARGENTINA

Towards a Long Term National Development Strategy with low Greenhouse Gases emissions for the AFOLU sector (Agriculture, Forestry and Other Land Uses).





















Policies



2019

2020





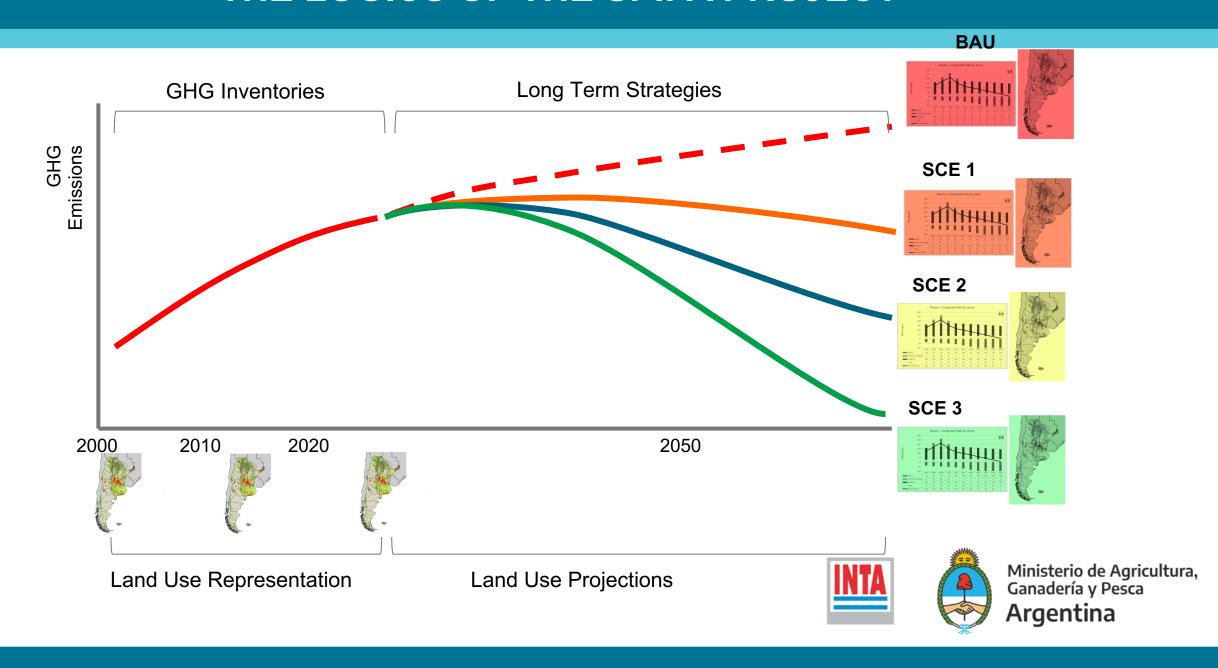
OBJECTIVE OF THE SPIPA PROJECT

To bring scientific evidence to the Ministry of Environment and Sustainable Development (MAyDS), and the Ministry of Agriculture, Husbandry and Fishery (MAGyP), for the elaboration of Long Term Strategies for the AFOLU sector of Argentina

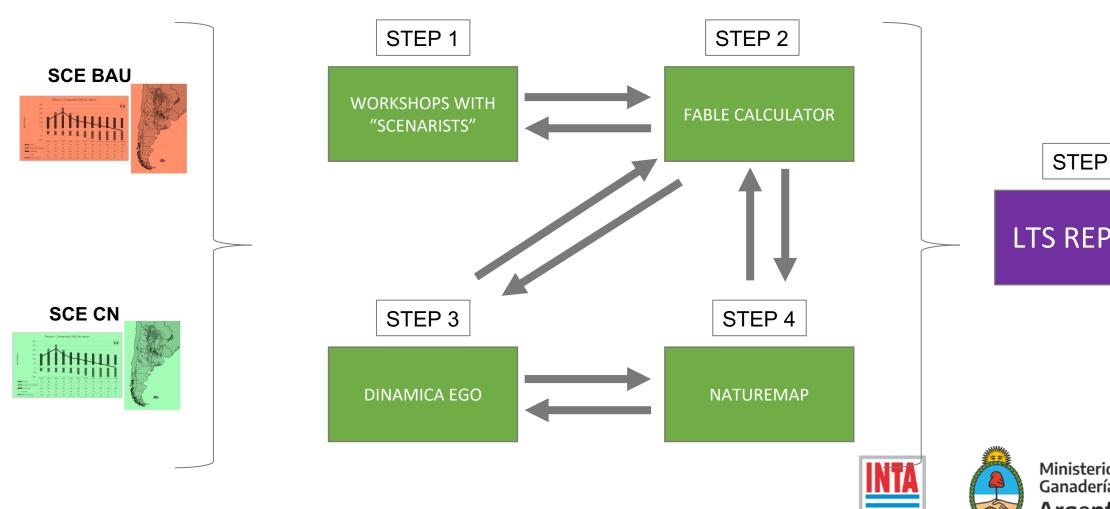




THE LOGICS OF THE SPIPA PROJECT



OVERVIEW OF THE SPIPA PROJECT

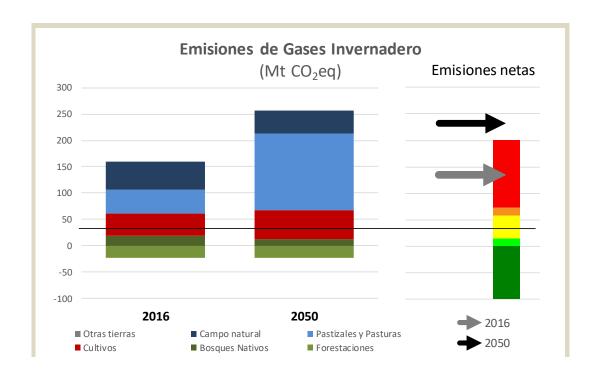


STEP 5 LTS REPORT

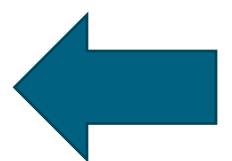




WORKSHOPS WITH "SCENARISTS"

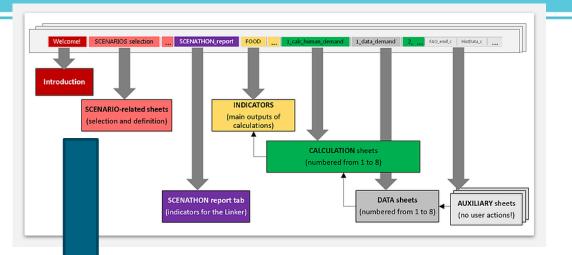


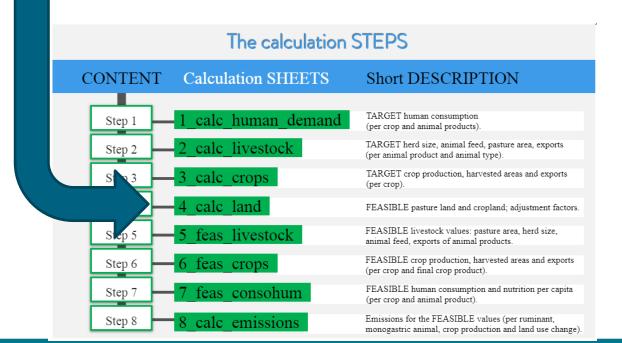
INFORMATION AND
NARRATIVES
FOR THE MODELING
WORK

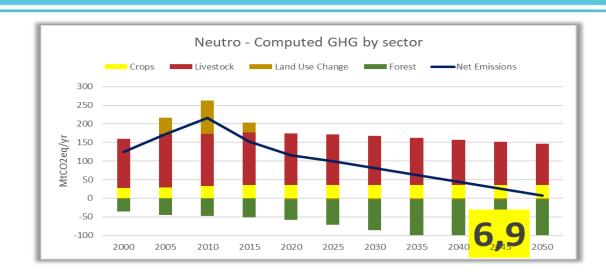


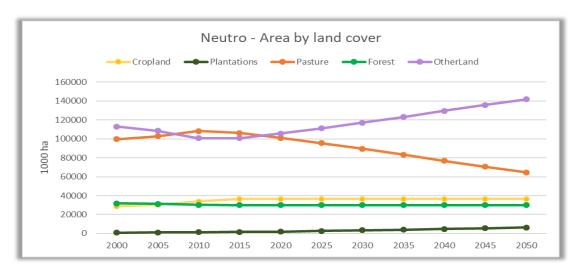


MODEL: FABLE CALCULATOR







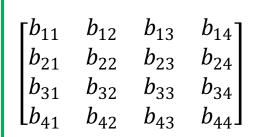


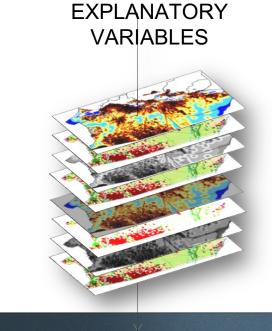
MODEL: DINAMICA EGO



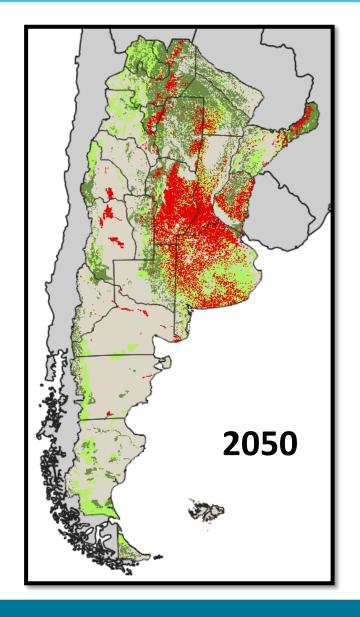
TRANSITION MATRIX

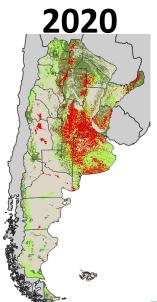
$[a_{11}]$	a_{12}	a_{13}	a_{14}
a_{21}	a_{22}	a_{23}	a_{24}
a_{31}	a_{32}	a_{33}	a_{34}
a_{41}	a_{42}	a_{43}	a_{44}



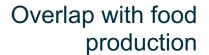


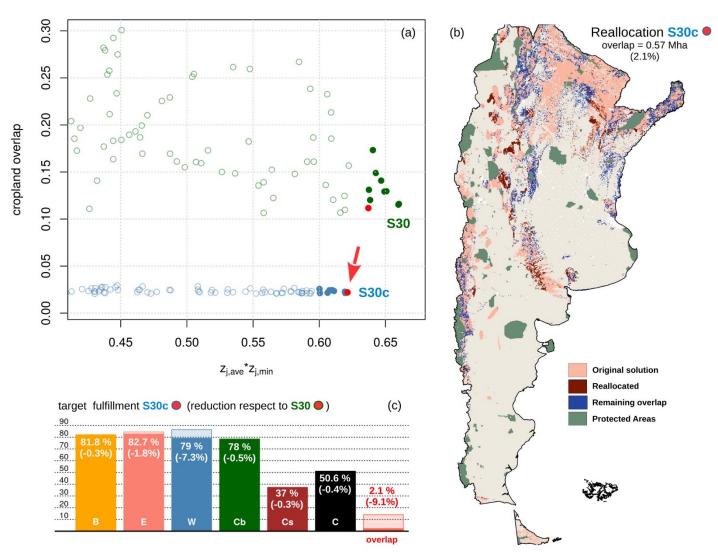






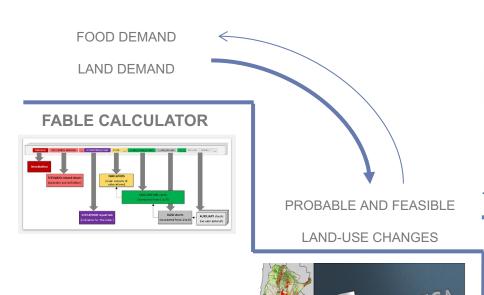
MODEL: NATUREMAP





A Long Term Strategy that is also compatible with Biodiversity Conservation

SYNTHESIS



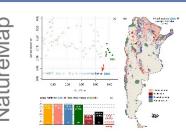
CONINAGRO EL PUTURO ESTA EN EL MONTE Aapresid



ECOSYSTEM SERVICES PROVISION

WATER + BIODIVERSITY + CARBON

NatureMap



Mesa Ampliada del Gabinete Nacional de Cambio Climático



POLICY BRIEF N° 2
SEPTIEMBRE DF 2021

Carbono-neutralidad en el



POLICY BRIEF N° 1
AGOSTO DE 2021



Avina

de Largo Plazo para el sector AFOLU de Argentina

Aportes para una Estrategia

MENSAJE DESTACADO



CARBON NEUTRALITY OF THE AFOLU SECTOR IN ARGENTINA



□ Iris Barth: <u>barth.iris@inta.gob.ar</u>

☐ Federico Frank: frank.federico@inta.gob.ar









Annual meeting

Session 1

Laying the foundations for long-term low-emission development strategies

The role of sufficiency

Energy sufficiency as a key enabler to meet climate urgency and build long-term sustainability

Yves Marignac – Spokeperson 6 April 2022 – Visioconference



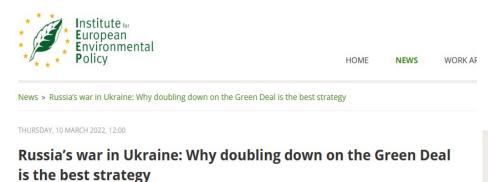
Sufficiency emerges as a short-term response...





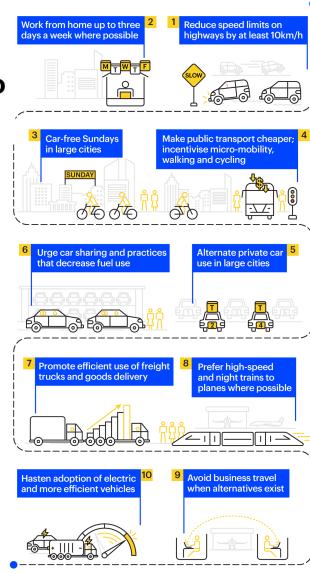






POLICY BRIEF March 2022
Phasing out dependence on
Russian natural gas: what
strategies for the EU and France?

IDDRI



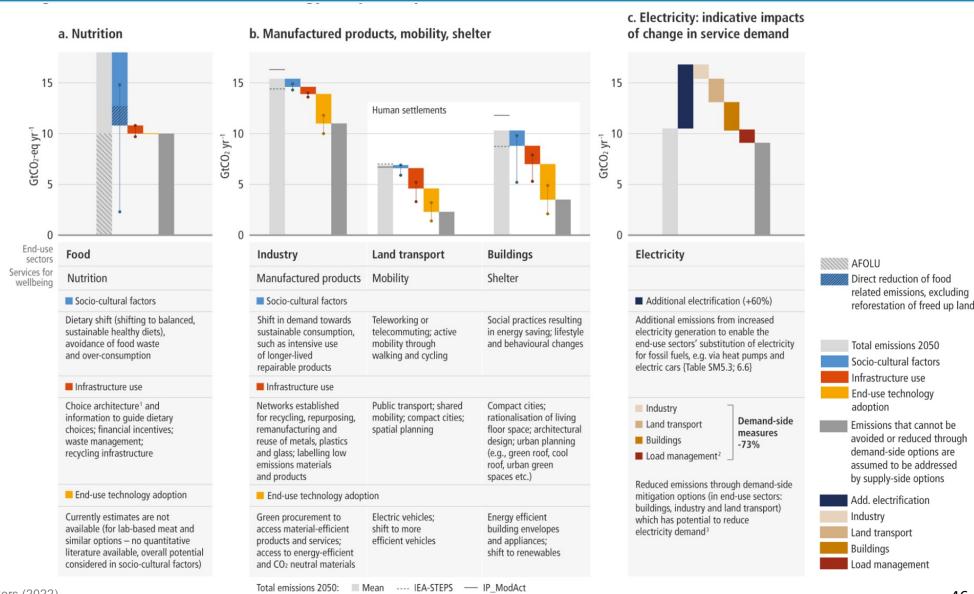


... and a long-term structural lever



IPCC, 2022:

"Demand-side mitigation can be achieved through changes in socio-cultural factors, infrastructure design and use, and enduse technology adoption by 2050"



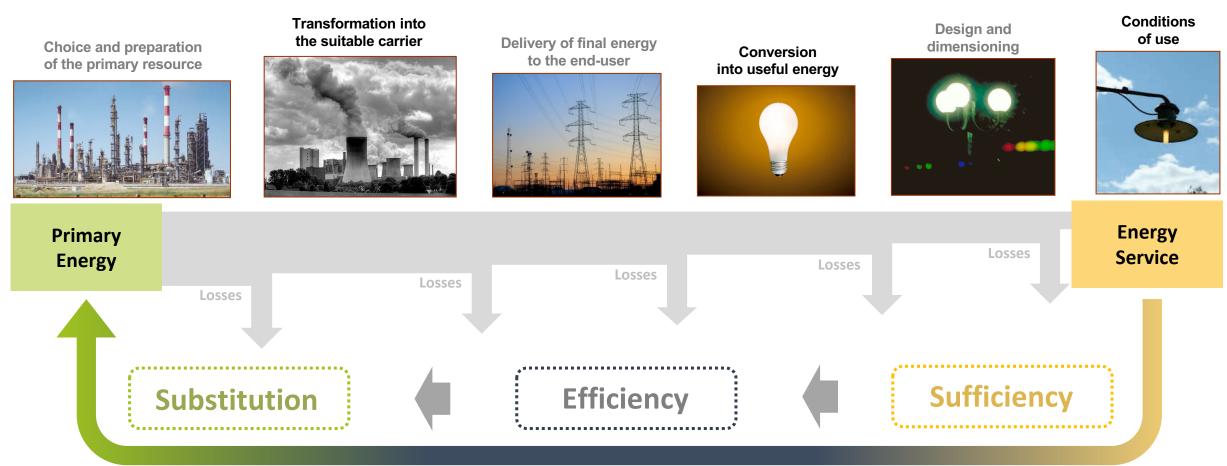
Source: IPCC, AR6-WG III, Summary for Policymakers (2022)



Sufficiency at the start of a systemic approach



IPCC, 2022: "Sufficiency policies are a set of measures and daily practices that avoid demand for energy, materials, land and water while delivering human wellbeing for all within planetary boundaries."



Sufficiency leverages



1 Servicial

Intensity and duration of use of equipments





2 Dimensional

Size, nominal capacity of equipments







3 Organisationa

Collective planning and sharing





Raising awareness

Incentives Regulation

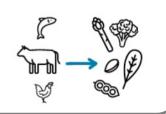
Information

Land-use and urban planning

Building of infrastructures

Sufficiency on other goods and food





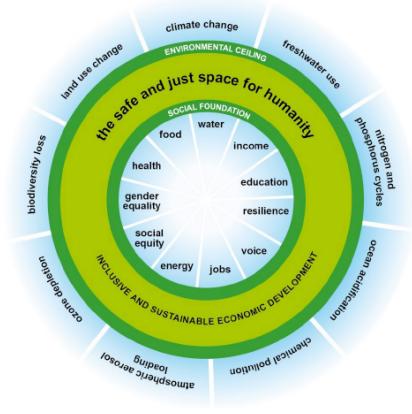
+ Consistency and comprehensiveness



Sufficiency at the core of a sustainable approach



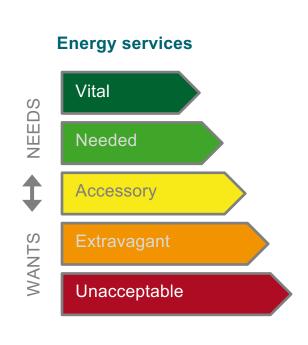
IPCC, 2022: "Sufficiency policies are a set of measures and daily practices that avoid demand for energy, materials, land and water while delivering human wellbeing for all within planetary boundaries."



The "doughnut economy" concept (Raworth et al.)

Bringing **individual services** between sustainability boundaries:

- A **ceiling** of sound collective levels: the ecological limits beyond which living conditions are threatened
- A **foundation** of decent live levels: the social minimums below which life in society is degraded
 - Moderate global consumption while reinforcing solidarity and redistribution



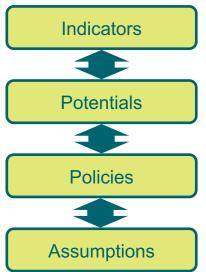


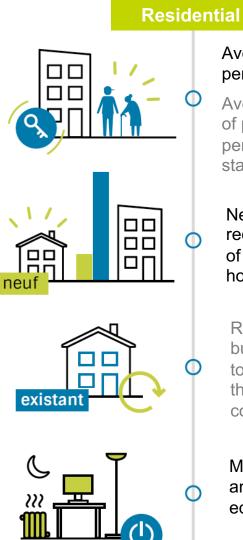
Sufficiency in scenarios



Building energy sufficiency assumptions

in models and scenarios





Average m² per person stabilized

Average number of people per household stabilized

New built: reduced share of individual houses

Retrofit of existing buildings to reduce the rate of new construction

Moderate rate and size of equipment

Mobility









Modal shift:

- plane to train
- car to collective
 transport and soft modes

15% reduction of traveled distances (telework, urban planning...)

Car sharing and car pooling (40% reduction of number of new cars)

Reduced speed limits



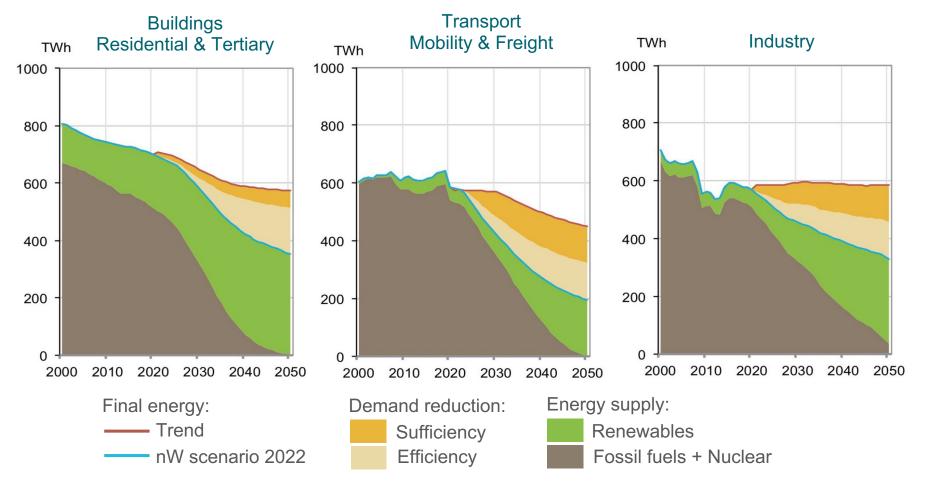
Similar set of assumptions for other sectors : tertiary, freight, industry, agriculture



Impact of sufficiency



The impact of sufficiency in the négaWatt scenario 2022 for France



2022-2050

Sufficiency

· accounts for

~ 20%

drop in the **demand** of final energy)

out of 53% in total

- contributes to meeting
 net-zero carbon footprint
 - also contributes to strongly reducing
 net primary materials footprint
 - and brings multiple
 co-benefits

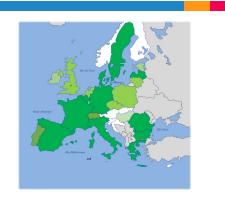
Source: négaWatt, Scénario 2022-2050 (2021)



Building sufficiency on a European level (1/2)



European Scenario



A collaborative European low energy scenario for Europe to bridge the climate and sustainability gap through energy sufficiency, efficiency and renewables

A bottom-up approach relying on **national partners** allows us to define **corridors** on important indicators which enable to discuss a **convergence on ambition** while considering **national specificities**

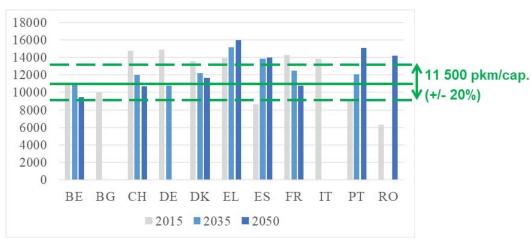
Average residential floor area per person (m²/cap)

Corridor of projections based on the first set of national trajectories



Average distance covered per person (p.km/cap)

Corridor of projections in the first set of national trajectories





Building sufficiency on a European level (2/2)

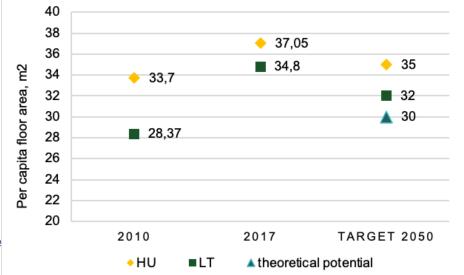




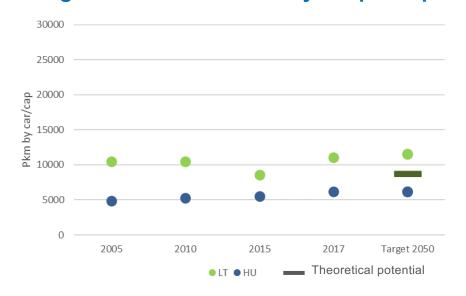
A project on energy sufficiency and its integration into climate and energy strategies in the Central and Eastern European (CEE) context

A specific work with partners in Hungary (REKK) and Lithuania (LEI) on the **potential for energy sufficiency** in their national contexts and ways to build energy sufficiency assumptions in operating models to develop energy sufficiency-based policies

Target level for floor area per capita



Target level for distances by car per capita





Supported by

Conclusion and next steps



- 1. Energy sufficiency is a key enabler to
- accelerate the reduction of GHG emissions
- contribute to building deep sustainability
- develop resilience to shocks and crisis
- 2. Integrating energy sufficiency in models, scenarios and policies is needed and possible
- 3. Further work is needed to consolidate experience and strengthen confidence

European Scenario

First findings published in June 2022
First European trajectory published in December 2022
Publication of the final scenario in Spring 2022

https://www.negawatt.org/An-ambitious-energy-and-climate-scenario-for-Europe



Final results to be published in May-June 2022

https://cactus-energy-sufficiency.eu/



Starting a H2020 project on sufficiency based lifestyle changes as part of ambitious climate policies, November 2021-October 2024

http://fulfill-sufficiency.eu/

We are happy to share, extend our network and develop new exchanges about sufficiency-based, ambitious energy and climate scenarios and policies in Europe



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https://negawatt.org/en



Discussion / Q&A





Date	Time	Session title	Session aims
Thursday, April		Session 2: Engaging stakeholders in the context of	Present best practices to date to ensure broad participation of stakeholders in the elaboration and implementation of LTS, and on how to communicate around LTS. During the session, we will hear from
7	13:00 pm	LTS to ensure a cross-societal buy-in	countries about their experiences for a whole-of- government and cross-societal LTS process. We will also be touching upon the growing traction of climate citizens assemblies
Tuesday, April 12	– 14:30 pm CEST	Session 3: International funding for LTS design and implementation	Present the ecosystem of support for LTS elaboration and implementation to countries and enable coordination amongst partners supporting LTS. During the session, we will hear from bilateral and multilateral development banks on their technical cooperation programmes for LTS
Wednesday, April 13	sday, April development planning: the macro-economic and financial implications of the transition the session, where the macro-economic and financial in the LTS properties in the session, where the session is the session, where the macro-economic and financial in the LTS properties.		Reflect on the importance to draw near-term macro- economic and financial issues out of the LTS and on what expertise in economics and finance needs to be mobilised in the LTS process to start addressing these issues. During the session, we will also explore how to account for macroeconomic and fiscal issues in the LTS

Resources



- <u>UNFCCC repository of long-term strategies</u>
- Handbook, 2050 Pathways Platform
- Horizon to Horizon, Climate Works Centre, 2018
- Quality Assurance Checklist: For long-term low greenhouse gas emission development strategies, WRI and UNDP 2021
- Making Long-Term Low GHG Emissions Development Strategies a Reality, GIZ 2020
- Designing and communication net-zero targets, WRI 2020
- Good governance for long-term low-emissions development strategies, WRI 2019
- Long-term low emissions development strategies, cross-country experience, OECD 2020
- Insights on the First 29 LTS Submitted to the UNFCCC, WRI 2021

