In 2019 the Uruguayan government and Finnish multinational UPM reached a record-setting USD 3 billion agreement to construct a pulp mill in central Uruguay. The studio asked:
- Can a massive capital investment into pulp manufacturing infrastructure become a vehicle for a transformative blueprint for sustainable development?
- Can traditional development investment do more than imagined?

**About the studio**
A studio is a design based approach to help create transformative innovations on large-scale challenges. Because key decision makers sometimes only see the parts rather than the whole of a problem, they may be blind sided by the unintended consequences of their choices. By working across different areas of expertise, the cross-disciplinary team provided:
1. A framework for strategic improvement.
2. A “top 10” architecture, or portfolio, of implementable interventions.

These outcomes of the studio team should be seen as a beginning of a co-design process that could continue to grow, evolve, and help guide Uruguay’s development.

+++ A STRATEGIC FRAMEWORK FOR CHANGE +++

**The country has had a good run, but it now faces diminishing returns.**
Both internal and external dynamics increasingly demonstrate that the easy phase of extractive commodity-led growth based on large foreign direct investment is over. Don’t interpret the current slowdown as the end of a cycle; we believe this should be seen as the end of an era.

**Fundamental assets will generate Uruguay’s prosperity.**
However, the assets need investing in and some are under stress. Today, risk is increasingly found in the status quo, not in the formerly exotic challenges of investing in sustainability and the knowledge economy. Therefore, it is important to apply a new understanding of where risk actually lies to be prosperous in the 21st Century. Uruguay can either prepare for and manage a radically different future, or it can respond reactively to the changes that will come.

**Relying solely on incremental change will not get the job done.**
Uruguayans will need to choose which assets to invest in and to what extent. Once locked into infrastructure, institutions and behaviors, they can be hard to change. Locking in the wrong assets can lead to them being stranded or devalued with long term liabilities.

**Transformative innovation must be at the heart of Uruguay’s development model.**
This means two things: first, Uruguay must put nature and people at the center of decision making. These are design principles for the future. Second, Uruguay should build a helix approach, integrating public and private sectors together with the academy and civil society for transformative innovation. This must be at the heart of Uruguay’s development model for the future.

The strategy is simple: **use the current reality to create a new reality.**
1. **Shift the narrative**
   “From an extractive commodity-based economy to a knowledge-based economy”

2. **Recognize timing:** “This is an important moment for Uruguay.”
   Today’s actions or inactions can either lock the country into a status quo trajectory or towards a transformative trajectory. There is a window of opportunity for change:
   - There is on the groundwork that is happening now- with adjustments the current solutions can provide greater return.
   - There is a longer-term project that could seed a new, knowledge-based economy those opportunities need to be planted now to bear fruit later.
   - Options are still available, but the time for action is limited.
   - A new political window of opportunity has opened.

3. **Work towards five strategic outcomes**
   These provide clear directions and focus to enable a greater, overall transformation.

   **Clean & Plentiful Water Heritage**
   Water in a national strategic asset. Managing it and maintaining it for future generations will help ensure a foundation for thriving generations to come.

   **Evolved Commodities Industry**
   The world increasingly needs evolved commodities. Uruguay can build on existing expertise to become a world leader in sustainable & traceable commodities.

   **An economy where all Uruguayans thrive**
   Future success will depend on Uruguay’s ability to ensure that everyone thrives. A shift to a knowledge economy can help provide not just jobs, but good jobs for all.

   **Upgrade Governance a la uruguaya**
   To achieve its 2050 ambitions, a new consensus will be required. A people-centered approach is increasingly required to build trust in Uruguay’s future.

   **Territorial Cohesion**
   Despite decentralized strategies being implemented by the regions it is important that they have a say with regards their development pathway. A multilevel approach is required to generate a comprehensive vision of territorial issues. This will build new
innovation capabilities by enhancing their autonomy and synergies.

AN ARCHITECTURE OF INTERVENTIONS
There is no single silver bullet to deliver a strategic shift in Uruguay’s current development path. Rather, it will require a set of interventions designed to create positive sum towards its strategic outcomes. The studio team identified the following interventions, understood as a set of actions that work together to create movement towards the desired outcomes.

- Portfolio Management for Success
- Future Proof Procurement
- Co-Design Forum
- Uruguay Invests - A New Legal Framework
- Future Bonds
- Transformative Train Fund
- Fiscal Stabilization Fund
- Water Summit
- Water Forum
- MI: Mujeres Innovadoras
- Metrics That Matter
- Municipal Tech Bootcamps
- Tacuarembó y Durazno Technology Hubs
- Paso de los Toros Tracker
- Elder Friendly Towns
- National Environmental Mandate
SUMMARY OF INTERVENTIONS

Portfolio Management for Success
Central to the success of achieving the shifts needed for a healthy, thriving Uruguay in 2030, is a holistic methodology for managing to ensure success. Most program management methodologies are mechanistic and focused on completion over quality, and rigidity over effectiveness. Using a portfolio management methodology provides the cohesion, integration and flexibility that embodies the kind of strategic oversight needed for success with complex solutions.

Future Proof Procurement
The public procurement of goods and services can be a significant lever to help stimulate new markets, create new types of jobs and opportunities. Building on Uruguay’s existing supply chain innovations, this is focused on helping accelerate the shift towards more sustainable goods and services aligned with a Uruguay 2050 vision and the SDGs. These include prioritizing the procurement of local, sustainable, and healthy, low-carbon food for all public schools; purchasing services from targeted demographics like low/zero carbon businesses or certified women-owned vendors, and building on-ramps for small businesses to subcontract and build capacity before they take on contracts directly.

Co-Design Forum
When stakeholders are not engaged, communities become disenfranchised and distrust is the result. A carefully facilitated public debate, inspired by the Hybrid Forum that resulted in the development and implementation of the Sustainable Reconstruction Plan (PRES) in Constitución, Chile after the 2010 Earthquake. This is designed to efficiently deploy solutions with the balance of motives, capabilities and authority of experts, politicians, business leaders and citizens. This initiative would be deployed along the train’s path in order to bring in the needs of impacted communities and ensure that investments in neighborhoods become a public good that is aligned with their needs.

Uruguay Invests - A New Legal Framework
A national committee to reshape our legal framework to invest in a 21st century government. Three laws have served the country well in its quest for investments: Ley Forestal (Forestry Law), Ley de Zonas Francas (Free Trade Zone Law), and Ley de Promoción de Inversiones (Investment Promotion Law). After 30 years this framework has to be transformed looking for incentives that attract and engage investors willing to partner with Uruguay in building the product, services and skills of the 21st century. This committee will work for one year with technical teams, political representatives, through consultation with the private and public sector.

Future Bonds
A public borrowing instrument whose price will depend on investors’ perception of risk. Performance will be measured against Sustainable Development Goal metrics. Confidence in successful public sustainability policy will raise the price, so the government has ‘skin in the game’ (through institutional investors, pension funds and the fiscal fund) showing a commitment to excellence in key development categories. The ultimate goal with these bonds is to ensure that both large scale innovation in Uruguay and its transition into new economy is secured and well-funded.

Transformative Train Fund
Funds accrued on the basis of rail use to be syphoned towards a trust fund for future rail and infrastructure improvements and route modifications. Important to note that this is not intended for the maintenance of the railway. The Transformative Train Fund would be earmarked to enable accessibility, community cohesion and a safe urban environment through various interventions, especially the eventual separation of freight and passenger lines.
**Fiscal Stabilization Fund**

The Fiscal Stabilization Fund will save fiscal proceeds from commodity exports (pulp, soybean and meat), triggered by upward fluctuations in prices. This will have two desirable effects: first, the fund provides an effective tool to prevent Dutch Disease (rising exchange rates, which risk making exporters uncompetitive). Second, though the fund will invest mostly in foreign securities, a small allocation would be set aside to buy domestic securities (such as the Uruguayan Future Bonds and other impact investment vehicles). This has the potential to become Uruguay’s entry point into the important world of ESG (Environmental, Social and Governance) investing.

**Water Summit**

Regional water dialogue convened in Paso de los Toros hosting interested and affected parties from local, district, national and regional water users to define issues and opportunities for sustainable water use. Stimulate transfer of experience, innovations, technologies, issues and interventions to provide a framework for a regional water management strategy delivered by local water and land use forums. Generate collaborations and local initiatives.

**Water Forum**

District and Water Basin-level multi-stakeholder collectives engaged in managing and monitoring responsible water use, including the restoration of water basins and riparian habitats, sustainable use and stewardship of water quality to ensure the long-term security of water supply in a healthy, function and resilient ecosystem. A structure that will be delivered by non-hierarchical “chapters” delivering transboundary (international) strategic water management objectives at a local level, under a common framework.

**MI: Mujeres Innovadoras**

Silicon Valley incubators like Ycombinator (birthplace of Airbnb and Dropbox) are accelerators of innovation and economic growth. Uruguay cannot transform its economy without the full participation of women. Incubator curriculum, pitch competitions and a fund will support a twice yearly cohort of Whiskerias, Elder & child care, Transportation, Restaurant hospitality and tourism related businesses.

**Metrics That Matter**

You cannot manage what you do not measure. Coordinated initiatives that measurement and track changes in prosperity and economic success. New, up-to-date relevant metrics can help better inform business decisions, support sustainable finance and hold policymakers accountable on delivering outcomes. Delivered through crowdsourced citizen science, social monitoring and collaborative research in partnership with universities, local communities and local authorities.

**Municipal Tech Bootcamps**

Systems engineers & computer scientists aren’t the only people who can have successful careers in technology, many entry level jobs need only basic training that can be successfully provided with an intensive 3-6 month curriculum. Corporate partnerships can be brokered to ensure that local or remote jobs await graduates upon completion. This provides an accessible entry point into the knowledge economy for the underskilled or unemployed, and lower-cost tech talent for large multinationals.

**Tacuarembó y Durazno Technology Hubs**

Upward mobility requires access to continuous learning, that’s no different in tech. In partnership with global industry leaders like Google, IBM, and Microsoft, existing technology centers (i.e. UTEC) can be turned into R&D hubs and training centers for targeted technology training and certification that will ensure the tech workforce remains relevant as technology evolves.
Synergies between the two hubs should be intentionally designed to ensure a thriving ecosystem with optionality and growth potential. The ultimate goal here is a country-wide technology corridor is including Montevideo and the country's interior.

**Green Central Train**
Converting to an electric train - partly using surplus energy generated by the UPM plants (plus windmill generators) - will transform the south-north axis of Uruguay into a smarter, decarbonised and more sustainable corridor. The Green Central train contributes to navigating Uruguay “beyond fossil” and enhancing its global profile as a responsible production center, which is in high demand from increasingly discerning high-income markets. Splitting freight and passenger tracks will allow for urban regeneration in key districts within Montevideo’s metropolitan areas and neighboring small towns.

**Paso de los Toros Tracker**
Uruguay already has citizen access to digital resources supporting programs such as Ibi-rapitá. The Paso de los Toros tracker builds on that by providing independent, verified monitoring of social and environmental parameters based on a set of both recognizable and innovative benchmarked indexes for Paso de los Toros. Transparent and accountable web-based reporting to key stakeholders (population, activists, government, and UPM) enables open dialogue through citizen science and provides reliable, consistent, fact-based updates on progress that all stakeholders can rely upon.

**Elder Friendly Towns**
A pilot program to make Paso de los Toros a 100% age friendly town addressing accessibility, care and employment would turn the town into an urban laboratory not only setting the standards on a local level but also generating exportable products and institutional knowledge based on learnings from serving ageing neighbors. A cross-institutional program driven by the municipality would convene the public sector, the private operators and the community in building best practices.

**National Environmental Mandate**
Building on electoral promises, this would deliver a participatory process that clarifies and strengthens the environmental management frameworks for Uruguay. Moreover, a community-created mandate supports the development of capacity to implement strong environmental governance across all sectors. The mandate would include landscape level strategic environmental assessment that informs future land use and land management and discussions about a possible Ministry of Environment.

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ABOUT

The studio was enabled by UNDP, taking place in Montevideo, Uruguay during the week of December 8-13, 2019.

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