Feedback from the Malta Chamber of Scientists on the Malta Vision 2050

28th August 2025

Executive Summary

The Malta Chamber of Scientists is providing feedback on the Malta 2050 Vision. The Chamber commends the creation of such a forward-facing and ambitious document, recognising its importance in guiding Malta's long-term development. To prepare its feedback, the Chamber first consulted experts in the various fields relevant to the pillar areas identified in the document. Following this, input was also gathered from the broader scientific community to ensure a wide and representative perspective.

This submission offers evidence-informed feedback on Malta's Vision 2050 across key strategic areas. While the Chamber supports the Vision's overarching ambition, it highlights the need for greater clarity, specificity, and actionable pathways to transform aspirational goals into measurable outcomes.

Key recommendations include developing a cohesive spatial strategy grounded in Malta's unique land and sea realities; advancing sustainable economic sectors such as high-end manufacturing, medical devices, and digital games; and embedding a human-centred approach in the deployment of technologies like AI and blockchain. The Chamber calls for the urgent expansion of quality open data infrastructure, increased investment in academic and industrial R&D, and the establishment of coordinated, long-term governance mechanisms—particularly in cybersecurity, urban planning, and national defence innovation.

Education and upskilling are identified as foundational pillars, with an emphasis on cross-disciplinary competencies, mental well-being, and personalised lifelong learning pathways. Environmental sustainability, industrial symbiosis, and circular economy principles are strongly endorsed, as are measures to safeguard social and spatial justice, climate resilience, and affordable housing.

In sum, the Chamber underscores that national transformation must be inclusive, transparent, and strategically coordinated. Malta's future resilience will depend on its ability to align vision with delivery, fostering a society that is innovative, equitable, and ready to thrive in a rapidly evolving global landscape.

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Introduction

The Malta Chamber of Scientists welcomes the Malta 2050 Vision as an ambitious and forward-looking framework to guide the nation's long-term development. This document presents the Chamber's evidence-based feedback on the Vision, drawing on expert consultation and input from the wider scientific community.

The feedback highlights both opportunities and challenges across key sectors—ranging from tourism, aviation, and high-end manufacturing to healthcare, education, energy, cybersecurity, and land use. While supporting the Vision's overarching ambition, the Chamber stresses the importance of moving from aspiration to implementation through greater clarity, actionable strategies, and measurable outcomes.

Above all, the Chamber emphasises that Malta's sustainable future depends on investment in research, education, and innovation, underpinned by transparent governance and inclusive policy-making. Only through coordinated, long-term commitment can the country achieve resilience, competitiveness, and equity in the decades ahead.

Sustainable Economic Growth

Tourism

The Chamber welcomes the broken-down, more granular approach taken toward the so-called "Tourism Industry" in the Malta 2050 Vision. It is indeed time to recognise that this industry is an amalgam of distinct niches, each with its own SWOT profile, and with little in common beyond the fact that it involves the physical movement of people—usually foreigners—across borders.

Different market segments call for tailored strategies of supply. Notable segments include convention and conference tourism, film tourism, gastronomy (food and drink) tourism, scuba diving, English language learning, and faith tourism. Vision 2050 rightly aims for a daily visitor spend of around €250 (at today's prices). If the goal is to strengthen value over volume, then the hospitality and catering sectors must be equipped to deliver and maintain the expected quality standards.

There is also a need for a broader range of local souvenirs that are genuinely "Made in Malta." Recent entrepreneurial initiatives in the jewellery sector are good examples to build upon. The upkeep of roads and public spaces must also be improved, and a general state of lethargic mediocrity addressed and eliminated.

The Chamber expresses unease with the idea of a theme park. Malta is neither large enough nor suited to host a Coney Island-, Gardaland-, or Disneyland-style development. Such a project would risk clashing with Malta's successful positioning as an authentic, culturally rich destination.

A further potential bottleneck relates to the Grand Harbour. While incentivising Malta as a start-and-end point for specific cruise itineraries is commendable in principle, it will increase traffic in and out of a port that cannot expand in size. One possibility worth exploring is a major infrastructure development in Mġarr, Gozo, so that it too could accommodate cruise ships—albeit of a certain, reasonable size.

Finally, the Chamber urges that the Maltese tourism experience should involve genuine interactions with Maltese citizens, not just foreign workers. The islands' dense population over a small area makes such interactions almost inevitable. This culturally ingrained sense of hospitality must not be undermined by what is sometimes described as "overtourism"—which is, in truth, simply poor management of tourism. A local public worn down by noise, night-time disturbances, unruly behaviour, blocked pavements, and other infrastructural chokepoints (such as power cuts, drainage overflows, overcrowded buses, and traffic jams) cannot reasonably be expected to deliver even a forced smile.

Gaming

The Chamber notes that the long-standing practice of associating iGaming (including eSports) with digital content creation and development of video games poses a significant challenge for any educational, training, research, or development efforts related to video games in Malta. As the iGaming sector is both much larger and carries a more negative public connotation, this association has the effect of unfairly limiting the perception and potential of the video games sector. While the rationale for clustering the two sectors together is understood, it is clear that such an approach will not enable video games to grow and thrive. At the very least, these sectors should be treated and presented separately.

Furthermore, the Vision document does not appear to mention or envisage research and education collaborations for the video games sector. This represents a missed opportunity, especially given that Malta hosts one of the world's most prestigious research and educational centres in game technology, game AI, and game design—the Institute of Digital Games at the University of Malta. There is substantial potential to develop this sector further through initiatives such as scholarships in game studies, travel grants, and visa-waiver programmes to attract international students who could then transition into employment within Malta's gaming industry.

Aviation

The Chamber notes that while Malta Vision 2050 rightly identifies aviation as a strategic sector, with commendable focus on enhancing international connectivity, MRO capabilities, air cargo infrastructure, and aircraft registration, it fails to explicitly address the development of the drone (or Uncrewed Aerial

Systems / Unmanned Aerial Vehicle) industry. This omission is significant given the rapid global growth and strong economic potential of the sector. To address this gap and position Malta as a regional innovation leader in emerging aviation technologies, the Chamber recommends the inclusion of dedicated initiatives to develop a National UAS Innovation Ecosystem. This would involve establishing prototyping and testing facilities with designated and segregated airspace, particularly over the sea, and identifying dedicated testing sites such as Xewkija, Gozo. It should also support scientific payload experimentation, training programmes for UAS operators and technical professionals, and provide incentives for foreign drone companies to relocate to Malta while supporting local companies involved in drone design, operations, and training. The development of use-cases such as logistics, environmental monitoring, agriculture, emergency response, and notably cargo drone services for transporting critical goods like medical supplies within and between the Maltese Islands and beyond is equally important.

The Chamber also highlights Malta's unique strategic advantages, including its English-language environment that facilitates international collaboration, a flexible and forward-looking civil aviation regulator (Transport Malta), an all-year-round Mediterranean climate ideal for flight operations, and naturally low-risk, unpopulated maritime zones for testing. Furthermore, the Chamber encourages the proactive implementation of U-space as a critical element of Malta's digital airspace transformation. This should enable proof-of-concept drone services delivered through U-space Service Providers (USSPs), ensure integration with Air Traffic Management operations near the airport, and align with European frameworks such as EASA and SESAR to guarantee safe, scalable drone operations.

Policy recommendations for Vision 2050 should therefore include a clear national commitment to UAS innovation, test infrastructure, and R&D funding, as well as cross-sector collaboration among government, academia (including the Institute of Digital Games and other research centres), and industry. It should designate U-space corridors, secure funding for early deployment pilots, and actively promote Malta as a regulatory and operational testbed for advanced aerial systems. The Chamber also advocates for initiatives such as visa-waiver programmes, scholarships, and travel grants to attract students and professionals into Malta's drone and gaming sectors. By incorporating these measures, Malta can establish itself not only as a Mediterranean hub for traditional aviation, but also as a leader in advanced, sustainable, and competitive aerial technologies for the 21st century.

High-end Manufacturing

The Chamber notes that while the government's focus on high-value sectors such as semiconductors and pharmaceuticals is welcome and aligned with global trends, it is equally important to recognise the potential of niche, innovation-intensive sectors such as medical devices, which can serve as powerful engines of sustainable growth. These sectors build on Malta's established strengths in health, research, and digitalisation, offering opportunities to create high-skilled jobs, attract foreign investment, and foster close synergies with academia and clinical networks.

Moreover, as Malta advances its manufacturing transformation, the Chamber notes that Industry 4.0 represents the current state of the art—marked by digitalisation, smart factories, automation, and data-driven optimisation. While embracing Industry 4.0 is essential, a long-term vision toward 2050 should also plan for the early adoption of Industry 5.0 principles.

Industry 5.0 brings a more human-centric, sustainable, and resilient approach to manufacturing. It envisions close collaboration between humans and advanced technologies such as collaborative robots (cobots), the integration of circular economy practices to reduce waste and environmental impact, and the capacity to deliver highly personalised products.

For Malta, this transition offers opportunities in high-end, innovation-intensive manufacturing, including medical devices, precision engineering, and advanced electronics. It also enables cross-sector synergies—for example, linking manufacturing to Malta's growing digital games industry by supporting the local design and production of specialised gaming hardware peripherals, controllers, or simulation equipment, all designed to high-quality, user-centred standards.

To achieve this, the Chamber recommends that Malta's manufacturing strategy explicitly include the development of a National Design Strategy Framework, positioning product design as a key enabler of competitiveness in advanced manufacturing. Design-led innovation represents a strategic differentiator that can strengthen economic resilience, support the goals of digital transformation, and enhance Malta's international reputation for quality and innovation.

Accessible Citizen-Centered Services

Healthcare

The Chamber notes that to achieve the ambition of developing an AI-driven health platform, it is essential to involve a multi-disciplinary team comprising individuals specialised in artificial intelligence, human-technology interaction, and specifically in how people interact with AI systems. Equally important is ensuring that the clinical, management, and other relevant professionals engaged in such initiatives possess a deeper understanding of the nature and limitations of AI-assisted systems. While it is commendable to embrace the potential of AI to improve human health and quality of life, it is critical to recognise that improper handling, use, or understanding of AI can introduce serious challenges. These include the erosion of the personal touch in the provision of healthcare services, potentially resulting in the alienation of patients who may ultimately turn away from the services they need.

The Chamber also emphasises the importance of creating conditions where researchers in multi-disciplinary teams can work together easily, with streamlined processes that facilitate the bureaucracy associated with tasks such as ethical approvals for obtaining data, while at the same time

rigorously safeguarding patient privacy. Such an approach is vital to ensure that research and development proceed efficiently without compromising ethical standards or public trust.

Moreover, it is essential to involve experts who can proactively detect and prevent misdiagnosis, bias, and other well-documented issues that can permeate AI-assisted systems. Such vigilance is necessary to ensure that the deployment of AI in healthcare remains trustworthy, equitable, and truly patient-centred, safeguarding both the quality of care and public confidence in these emerging technologies.

Mobility

The Chamber notes that while the plan places significant emphasis on land-use, rather than directly on mobility, it is clear that the two are closely interlinked. The document contains a number of commendable statements of interest, including commitments to "Smart Land & Sea Usage," promoting efficient spatial planning and conservation of natural resources for long-term ecological balance; a construction sector that will prioritise renovation, sustainable spatial planning, and citizen well-being through the built environment; and recognition that Malta's limited land and maritime space requires careful, forward-looking planning to balance development with environmental stewardship and long-term well-being.

The pillar on intelligent land and sea use emphasises growth that respects the carrying capacity of the country while enhancing quality of life. It promotes sustainable architectural practices, strategic land allocation to support livable, compact communities, and long-term spatial plans prioritising functionality, resilience, and visual harmony. Initiatives such as Green Malta aim to expand urban and rural green spaces, protect agricultural land from overdevelopment, and support the transition to cleaner fuels—including biofuels—to reduce environmental pressure and enhance biodiversity. The plan also mentions cautiously exploring land reclamation projects rooted in sound environmental and economic assessments, ensuring that such interventions deliver long-term public value and align with sustainability goals.

While much of this vision is commendable in its wording, the Chamber observes that the "how" is not clearly articulated in the document. There is also a concern that some current policy directions may not yet fully align with these stated goals, suggesting that meaningful adjustments may be required to realise this vision in practice. The plan has relatively few concrete details on transportation. Achieving compact urban communities will likely depend on a careful rethinking of Malta's public transportation system to ensure it can meet future needs effectively. While the overall language of the plan is positive and ambitious, the Chamber encourages further work to address these important implementation questions so that the vision can be achieved in a coherent and practical manner.

Resilient Country and Modern Education System

Education and re-skilling

The Chamber notes that Malta Vision 2050 provides a vital long-term vision, recognising education and reskilling as essential pillars for national transformation. The shared understanding across contributions is that preparing learners for 2050 requires more than curriculum updates—it calls for a fundamental shift in how education is conceived, delivered, and supported.

The Chamber supports the Vision 2050 call to update national curricula to promote STEM and future-proof skills, but emphasises that such a goal must move beyond content delivery to embrace competence-oriented, digitally enriched, and learner-centred models. Education should enable learners to become creators and innovators, not just consumers of technology. This requires embedding computational thinking and cross-disciplinary knowledge at the core of the curriculum and pursuing more ambitious national goals, such as improved performance in international benchmarks and measurable progress in digital and scientific literacy.

The Chamber acknowledges that commendable efforts are already underway through initiatives led by entities such as DDLTS and eSkills Malta Foundation (now part of MDIA), including summer bootcamps, Esplora, and Science in the City, all of which contribute to increased engagement in STEM. However, the Chamber stresses the need for a more coordinated national effort to reduce fragmentation, ensure strategic alignment, and amplify the impact of these important initiatives.

In line with the evolution from STEM to STEAM (including the Arts) or STREAM (adding Reading), education must nurture critical consciousness, creativity, ethical reasoning, AI literacy, digital ethics, data fluency, and systems thinking. This broader foundation will support the development of a generation capable of thriving in a rapidly evolving socio-technical landscape.

Education must also be holistic. The Chamber strongly supports integrated learning pathways that connect families, communities, and schools, embedding mental health services and ensuring early, equitable, and sustained support. Schools should adopt preventative mental health models that include social-emotional learning, digital well-being, and trauma-informed pedagogies. Educators should be trained in neuroscience-informed strategies that address memory, motivation, learning variability, and emotional safety—recognising that learning is a neurobiological process shaped by environment and experience.

The Chamber highlights the importance of teacher professional development that is evidence-informed, personalised, and continuous, moving beyond one-off workshops to include lesson study, learning communities, design-based research, and practice-embedded approaches. To drive innovation,

educators should be supported through funded sabbaticals, cross-sector residencies, and collaborative R&D opportunities, particularly in fields such as digital education and interdisciplinary technologies.

In this regard, the Chamber calls for enhanced cross-fertilisation across domain areas, including programmes that train ICT professionals to operate at the intersection of disciplines. A successful example is the Centre for Distributed Ledger Technologies, which has offered postgraduate training that bridges law and technology. Similar models should be extended to other fields, helping develop hybrid profiles that support the evolving needs of the knowledge economy.

While the Chamber supports the Vision's call to develop industry-specific skills frameworks, it cautions against reducing education to mere labour market responsiveness. Instead, frameworks should be co-designed with industry but grounded in human agency, sustainability, and digital democracy. The Chamber underscores the importance of providing far-reaching training across sectors, including the continuous upskilling of teachers themselves. The emergence of new sectors such as marine biotechnology, digital health, blockchain governance, and AI ethics should be reflected in dynamic skills taxonomies, integrated with learning trajectories from compulsory education to vocational training and higher education.

To support lifelong learning and flexibility, tertiary education should move beyond rigid, siloed structures toward personalised pathways composed of micro-credentials, digital badges, and portable attestations that are valid across institutions and national borders. These should be supported by AI-driven guidance systems and well-defined career pathways aligned with national priorities.

Finally, the Chamber recommends embedding educational neuroscience as a strategic framework for all education-related initiatives. Policies must reflect developmental windows, foster brain-friendly learning environments, and ensure that educators are trained in the science of learning. Education policy must evolve from system-level mechanics to brain-level insights, building environments that support cognitive development, emotional well-being, and meaningful social interaction—laying the groundwork for a more adaptable, equitable, and future-ready society

Energy and Environment

The Chamber notes that Industrial Symbiosis is currently non-existent in Malta, representing a significant untapped opportunity to enhance the country's resource efficiency, environmental performance, and economic resilience. To address this gap, the Chamber recommends the creation and facilitation of structured Industrial Symbiosis within Eco-Industrial Parks, where resource flows are systematically mapped, waste-to-resource exchanges are identified, and shared utility systems are implemented to optimise infrastructure and reduce environmental impact.

Given Malta's limited land area and the geographical proximity of its industrial zones, the country could be effectively conceptualised as a single, integrated Eco-Industrial Park. This would allow for

national-level coordination of symbiotic relationships across sectors, supporting the transition to a circular economy, reducing reliance on imported raw materials, and fostering cross-sector collaboration in line with the sustainability goals of Vision 2050.

The Chamber also highlights the urgent need to reassess consumption patterns, which have increased significantly over the past two decades. While economic growth has traditionally been driven by rising consumption, this model is no longer environmentally sustainable. A shift toward sustainable consumption is necessary, including the expansion of repair infrastructure, the promotion of long-life products, and the discouragement of disposable goods. Sectors such as fast fashion and consumer electronics exemplify the need for more durable, repairable alternatives. A practical example raised during recent discussions is the use of agricultural plastic in local fields. While alternative materials exist that reduce or eliminate single-use plastics, their high cost remains a barrier. Supporting the adoption of such materials would be a simple yet effective way to reduce plastic waste originating from agricultural activities.

In relation to Point 69 (Page 57) of the Vision 2050 document, which proposes to "introduce advanced recycling technologies," the Chamber requests further clarification on which waste streams are being targeted. Given Malta's small waste volumes, particularly when disaggregated by type, such high-cost infrastructure may not be justified without regional collaboration or export-based models. A more targeted and cost-benefit-informed strategy may be more effective in the local context.

Finally, the Chamber proposes that economic growth be assessed through the lens of environmental accounting. This means explicitly incorporating the environmental costs of economic activities, such as waste generation from tourism or construction, into national growth metrics. Without factoring in the costs of waste management, resource depletion, and pollution, the true extent of Malta's economic progress cannot be accurately evaluated. Embedding environmental externalities into national accounting frameworks is essential to ensure that growth is both genuine and sustainable.

National Defence and Maritime Security

The Chamber notes that it is a net positive to consider the modernisation of Malta's law enforcement capabilities, particularly in light of the current lack of inter-agency communication. This critical shortcoming must be addressed through the introduction of secure, interoperable communication and data-sharing systems, ensuring that relevant entities can coordinate effectively while maintaining robust safeguards around privacy and data protection.

However, the Chamber expresses caution regarding the concept of "predictive policing", particularly when this implies the use of artificial intelligence (AI) to forecast criminal behaviour or pre-emptively identify individuals as potential offenders. While AI holds promise in supporting decision-making through data analysis, its use in law enforcement raises serious concerns related to bias and algorithmic opacity.

AI models trained on historical data may replicate or reinforce existing biases, especially in the absence of carefully curated, representative training sets. Additionally, many AI systems operate as black boxes, producing decisions through processes that are difficult—or impossible—to explain or audit.

When deployed in a law enforcement context, these characteristics create a dangerous combination: potentially biased outputs combined with decisions that lack explainability and legal robustness, possibly resulting in harm to innocent individuals or outcomes that are legally challengeable. Such risks not only jeopardise individual rights but can also erode public trust in institutions and undermine the legitimacy of enforcement actions.

In light of these risks, the Chamber recommends a shift in focus away from "predictive policing" and toward the use of statistical modelling and data-driven hotspot analysis that is transparent, auditable, and implemented with appropriate oversight. These systems can support the strategic deployment of law enforcement resources, enabling authorities to pre-position personnel and capabilities in areas where historical patterns and environmental indicators suggest increased policing needs. This approach balances data-informed decision-making with the need for accountability, public trust, and protection of civil liberties.

Furthermore, the Chamber considers the macro-initiative on security and defence to be largely positive, but in its current form, unnecessarily narrow in scope. The emphasis on maritime security, while important, does not fully capture the evolving nature of regional defence collaboration. Malta should actively invest in and participate in strategic initiatives that incorporate broader security and defence elements. Two such flagship initiatives already underway in Malta highlight the country's growing capacity in this domain.

First, a project led by the University of Malta and funded under the EU's Horizon Europe Programme is using submarine telecommunication fibre-optic infrastructure to monitor geophysical processes and provide early warnings of potential threats to this critical asset. This initiative has significant implications not only for infrastructure resilience but also for regional stability and defence readiness.

Second, the EuroQCI initiative, locally implemented through the PRISM project, is establishing an ultra-secure quantum communication network linking Malta's critical infrastructure, data centres, and law enforcement agencies. This network, which already includes a preliminary connection to Sicily, marks the first step toward a regional and eventually EU-wide quantum-secure communication architecture.

The Chamber therefore suggests that broadening the current focus beyond maritime security to include technological defence infrastructure and cyber-resilience could deliver significant benefits to national security and the safety of citizens, while positioning Malta as a proactive contributor to European security innovation.

Cybersecurity

The Chamber welcomes the emphasis placed on cybersecurity within the national vision and notes that recent developments—such as the National Cybersecurity Strategy 2023–2026, the establishment of the National Cybersecurity Coordination Centre (NCC), and the launch of the Coordinated Vulnerability Disclosure Policy (CVDP)—signal an encouraging and strategic commitment to strengthening Malta's cyber resilience.

At the same time, the Chamber echoes the view that the proposed creation of a Cybersecurity and Infrastructure Resilience Unit (CIRU) must be approached with careful consideration of Malta's existing institutional landscape. Malta already hosts two key cybersecurity entities with overlapping mandates: the Critical Infrastructure Protection Directorate (CIPD), which includes CSIRT Malta, and the MITA CSIRT. The boundaries between their responsibilities are not always clearly delineated. In this context, rather than introducing a new standalone entity or legal framework, the Chamber recommends a strategic consolidation exercise to clarify roles and responsibilities, streamline operations, and deploy the proposed CIRU within the most appropriate existing structure. This is particularly important given the growing number of regulatory obligations under frameworks such as NIS2 and DORA, where coherence and coordination are critical to avoid duplication and confusion.

Beyond institutional restructuring, the Chamber strongly emphasises the need to foster a culture of cybersecurity across all levels of society. This includes initiatives to promote basic digital literacy, advanced training for professionals, and greater engagement with SMEs and entities operating critical infrastructure. Support should be extended to help organisations adopt strong cyber governance frameworks, drawing on existing schemes such as CYBER+ALT and the Cyber Assess Scheme. The importance of a collaborative mindset is further illustrated by the recent launch of the Cyber Threat Intelligence (CTI) platform, which highlights the value of open cooperation in addressing complex cyber threats. Incidents such as the one involving university students underscore the need to promote responsible ethical hacking and to embed openness and dialogue within Malta's cyber strategy.

The Chamber also underscores the urgency of addressing the cybersecurity skills gap. Programmes such as the Cybersecurity Skilling Programme and the newly launched MSc in Cybersecurity at the University of Malta are important first steps. However, further effort is required to build an adequately equipped workforce, including through curriculum updates, practical training, internships, certification schemes, and research opportunities. Stronger collaboration between academia, public agencies, and the private sector is vital to ensure that Malta develops the talent and capacity needed to secure its digital future.

Finally, the Chamber believes Malta has an opportunity to lead in emerging cybersecurity technologies, particularly through the early adoption of quantum key distribution and post-quantum cryptography. While some countries, such as the UK, have set a migration target of 2035, Malta—through initiatives like the PRISM project—possesses the infrastructure and expertise to bring this timeline forward to

around 2030. Such a move would position Malta as a regional leader in quantum-secure communications, bolstering the protection of critical infrastructure and enhancing national cybersecurity preparedness in anticipation of future quantum threats.

In sum, cybersecurity should not only be seen as a technical domain but as a strategic enabler of national resilience, trust, and innovation. Malta must act boldly and cohesively to ensure that its cyber capabilities are not only compliant but world-class.

Smart Land and Sea Usage

The Chamber welcomes the inclusion of Smart Land and Sea Usage as a key pillar in Malta's Vision 2050. This framing rightly acknowledges the country's spatial limitations and the need for sustainable management of its land and maritime resources. However, while the high-level aspiration is commendable, the Vision currently lacks a coherent spatial strategy. Without clear definitions and spatial specificity, widely supported principles risk becoming non-actionable. Concepts such as "compact development," "landscape protection," and "marine safeguarding" require greater clarity—where should development be concentrated? Which landscapes are in need of priority protection? What maritime zones warrant conservation or careful planning?

To provide a credible and actionable path forward, the Vision must be grounded in Malta's spatial realities. Concepts such as Urban DMA (Density, Mix, Access)—which describe the relationship between population density, mixed land use, and accessibility—are particularly relevant in the Maltese context. With Malta's high population density and overwhelming reliance on private vehicles, land use planning must be systematic, integrated, and no longer piecemeal. Walkable, mixed-use neighbourhoods with high accessibility are essential. This, however, demands not only infrastructure but a fundamental shift in mindset—creating the conditions for people to experience alternative mobility options so that they become desirable and expected.

While the Vision touches on "visual harmony," the focus appears skewed toward aesthetics, without sufficiently addressing more structural urban design concerns, such as building height thresholds, skyline integrity, and social equity. Redevelopment must be managed not only in terms of architectural ambition but also its social implications—ensuring that growth does not lead to spatial segregation or exclusion.

Effective urban governance must rely on participatory planning, not only top-down design. The Vision, however, falls short in detailing how a multi-level, inclusive approach can be implemented. Coastal and maritime planning is another area where the Vision lacks reference to modern, integrated coastal zone management practices. Given the intense and increasing pressures on the maritime environment—from both land-based and sea-based activities including overtourism and recreational strain on beaches—a more balanced, protection-oriented approach is warranted.

Similarly, the emphasis on the protection of arable land is welcome, but raises the question of what becomes of non-arable areas—are these automatically open to development? Land reclamation, often portrayed as an opportunity, must be framed within a clear governance framework, defining no-go zones, long-term environmental costs, and public benefit considerations.

In relation to emerging technologies such as AI, blockchain, and smart city initiatives, the Chamber expresses concern over the absence of a human-centred perspective. Without careful design, such technologies risk widening inequalities, creating environments with clear winners and losers, and deepening deprivation. The lack of a coordinated property market strategy, for instance, allows speculative dynamics to dominate, further undermining equitable urban development.

Moreover, population growth projections demand a clear spatial vision: where will people live, and under what conditions? Green areas must be considered non-negotiable, and the Vision must identify other zones for rehabilitation or sustainable densification. The Chamber strongly advocates for a defined national spatial strategy with revised planning guidelines, regional-level goals, and designated mobility and infrastructure corridors. This includes promoting polycentric development, where reliance on a few large urban centres is reduced through strategic distribution of growth and services—particularly considering the underrepresentation of Gozo in current national strategies.

Malta's strategic landscape planning must go beyond zoning and include a nuanced understanding of the topography, geomorphology, and built heritage of its towns and villages. These characteristics influence skylines, urban form, and place identity and must be preserved and integrated into future development plans. The cumulative impact of small-scale planning decisions—when considered in isolation—can be devastating to strategic view-lines, skylines, and place-making goals. Development should aim to create places of meaning for both local communities and visitors, supporting coexistence and mutual respect.

Urban design quality must also respond to climate imperatives, embedding resilience into strategic green infrastructure. This requires the creation of large, interconnected green corridors, enabling the country to better cope with extreme climate conditions.

From a social justice perspective, spatial justice—the right to access and enjoy public space equitably—must be a guiding principle. This includes accessible green spaces, affordable housing strategies, and housing targets designed to reduce widening inequalities. Development must be context-sensitive, ensuring that each community retains a fair proportion of urban green space based on its needs and density.

Finally, implementation must be insulated from political cycles. A long-term vision such as Malta 2050 requires mechanisms of governance that ensure continuity and accountability. This includes task forces with stable mandates, not subject to political appointment, and cross-party commitments to strategic

objectives. Only through such durable and depoliticised structures can Malta achieve the spatial coherence, environmental sustainability, and social equity envisaged in Vision 2050.

Conclusion

Taken together, the Chamber's contributions underscore a clear and consistent message: Malta's Vision 2050 must move decisively from intention to implementation, guided by clarity, collaboration, and strategic foresight. A successful national transformation hinges on a unified government approach—one that breaks down silos, aligns ministries, and coordinates efforts across domains such as digital systems procurement, cybersecurity readiness, and technological innovation. Institutional coherence is no longer optional; it is foundational to effective governance in the digital age.

Realising the potential of artificial intelligence, data-driven innovation, and emerging technologies requires urgent investment in quality data infrastructure, open data ecosystems, and an enabling research environment. The Chamber urges that data availability and AI development be treated as national priorities, underpinned by transparent governance and ethical frameworks. Simultaneously, Malta must address its chronic underfunding of academic research and foster the conditions for industrial R&D to take root—offering pathways for local talent to contribute meaningfully to national and global challenges.

Equally important is the cultivation of a values-driven digital society—one that champions civic participation, shared responsibility, and technology that serves the common good. The Chamber calls for policies that support open innovation, ethical awareness, and societal trust, ensuring that digital transformation is inclusive, participatory, and anchored in democratic principles.

To achieve its long-term goals, Malta must act boldly and cohesively—bridging strategy with structure, values with vision, and aspiration with action. Only through sustained commitment, cross-sector collaboration, and transparent governance can the country position itself as a resilient, inclusive, and forward-looking society ready for 2050 and beyond.

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