

Sustainable Development in Lithuania: An Emerging Market Case Study

By: Zachary Vlessing

EXECUTIVE SUMMARY

In June 2021, a group of researchers from ESG analytics firm Impact Cubed published research that analyzed country level progress in achieving the United Nations Sustainable Development Goals (SDGs). These goals form the international standard on 21st century development, advancing economic, social, environmental, and democratic values. Utilizing a pathway analysis to track a country's trajectory in achieving the goals, this groundbreaking study found that Lithuania has the strongest pathway towards Sustainable Development in the world.

To understand both what has driven this progress and what can be done to further capitalize on their success, field research was conducted in Lithuania with first-hand accounts from Lithuanian leaders. Representatives from government ministries, impact-oriented businesses, non-governmental organizations, and national publications all contributed to these findings.

DRIVERS OF PROGRESS

8 key drivers are identified as contributing to Lithuania's position as a leader in SDG progress. These insights can be broken down into 3 main categories: Geographical Position, Political Situation, and Progressive Business Ecosystem

Geographical Position

1. **Resource Rich** - Lithuanian large forests and fresh water sources provide climate benefits and minimize the risk of over exploitation
2. **Nordic Influence** - Sweden, Norway, Finland, and Denmark are bringing influence and investment that are shaping Lithuanian practices in their image
3. **Energy Independence from Russia** - New connection to European power grids have made Lithuanian energy more sustainable and affordable

Political Situation

4. **European Union Support** - Green New Deal and Sustainability Reporting from the EU is rapidly affecting how politicians and businesses view the climate crisis
5. **Domestic Political Support** - Policies targeting various SDGs such as plastic waste, alcoholism, and forest coverage have proved to be effective in developing a more progressive society

Progressive Business Ecosystem

6. **Emergence of Corporate Sustainability** - Increased consumer demand for impact-oriented products is shifting companies towards maximizing social impact as well as profit
7. **Growing Entrepreneurial Hub** - Favorable business regulation is causing foreign nationals to return home and attracting top talent to develop new ideas
8. **Rise of Impact Financing** - Success of Green Bonds is raising significant capital for green energy and infrastructure

RECOMMENDATIONS

To capitalize on the promising progress achieved to date, 3 primary recommendations emerge:

1. **Move Sustainable Development to the Prime Minister's Office** - Current ownership of the SDGs within the Ministry of Environment is unable to tackle the full scope of the SDGs, which run across ministries
2. **Revitalize the SDG Expert Network** - Engagement from the Expert Network is crucial to build partnerships and encourage lawmakers to pursue policies that achieve the SDGs
3. **Develop Institute of Sustainable Finance** - Creation of an Institute would make Lithuania a regional leader in facilitating investment into projects related to sustainability and social development

TABLE OF CONTENTS

1. Background on Sustainable Development in Lithuania	4
2. Quantitative Assessment of Lithuania’s Potential	5
3. Qualitative Drivers of Lithuania’s Progress	9
Geographical Position	
1. Resource Rich	
2. Nordic Influence	
3. Energy Independence from Russia	
Political Situation	
4. European Union Support	
5. Domestic Political Support	
Progressive Business Ecosystem	
6. Emergence of Corporate Sustainability	
7. Growing Entrepreneurial Hub	
8. Rise of Impact Financing	
4. Opportunities to Maximize Potential	17
1. Move Sustainable Development to the Prime Minister’s Office	
2. Revitalize the SDG Expert Network	
3. Develop Institute of Sustainable Finance	
5. Acknowledgment	21
6. About the Author	23
7. Work Cited	24

BACKGROUND ON SUSTAINABLE DEVELOPMENT IN LITHUANIA

The context for Lithuanian potential on the Sustainable Development Goals can be traced back to Lithuania's independence movement from the Soviet Union. On March 11, 1990, the Supreme Council of the Republic of Lithuania declared independence from the Soviet Union, making it the first Soviet Republic to break away from the Union and foreshadowing the collapse of the entire nation in late 1991.

After spending the larger part of a century firmly connected to the East, the newly founded Republic of Lithuania looked West for support and economic interconnectedness. It held a referendum to join the European Union in May 2003 and joined the following year in May 2004. As part of Lithuania's inclusion into the EU, they passed their first National Strategy for Sustainable Development, outlining the nation's status and vision on development. The plan was updated in 2009 to align with revised EU standards.

In 2015, the United Nations adopted a 2030 Agenda framework for Sustainable Development with a revised list of 17 Sustainable Development Goals. As part of the new initiative, countries around the world developed their own Voluntary National Reviews. Lithuania's National Review was conducted in 2018, which highlighted its progress and implementation on key metrics related to the SDGs.¹





















After the conclusion of the National Review, Lithuania utilized the language from the National Review as part of its overarching development strategy, covering all development aspects of the country. Lithuania's version of the United Nations 2030 Agenda, aptly called Lithuania 2030, is a key strategic document for the country, replacing the 2003 National Sustainable Development Strategy. This visionary document firmly aligns the SDGs within the national strategy.^{2*}

* General Background on Sustainable Development in Lithuania was largely informed by a conversation with Deividas Cesnas, a representative from the Ministry of Environment who deals directly with Coordination of Sustainable Development within the Ministry.

QUANTITATIVE ASSESSMENT OF LITHUANIA'S POTENTIAL

In June 2021, a group of researchers from ESG analytics firm, Impact Cubed, published “A New View on the ESG Impact of Sovereign Debt.”³* The results the team produced found drastically different outcomes compared to conventional models of tracking sustainable development. For example, the official rankings published by SDGIndex, a global non-profit founded to track country progress on the SDGs, found that Nordic countries take the top 3 spots and that all top 10 countries are located in Europe.

FIGURE 1. SDG Overall Performance Country Rating

Rank	Country	Score	Performance by SDG
1	 Finland	85.90	
2	 Sweden	85.61	
3	 Denmark	84.86	
4	 Germany	82.48	
5	 Belgium	82.19	
6	 Austria	82.08	
7	 Norway	81.98	
8	 France	81.67	
9	 Slovenia	81.60	
10	 Estonia	81.58	

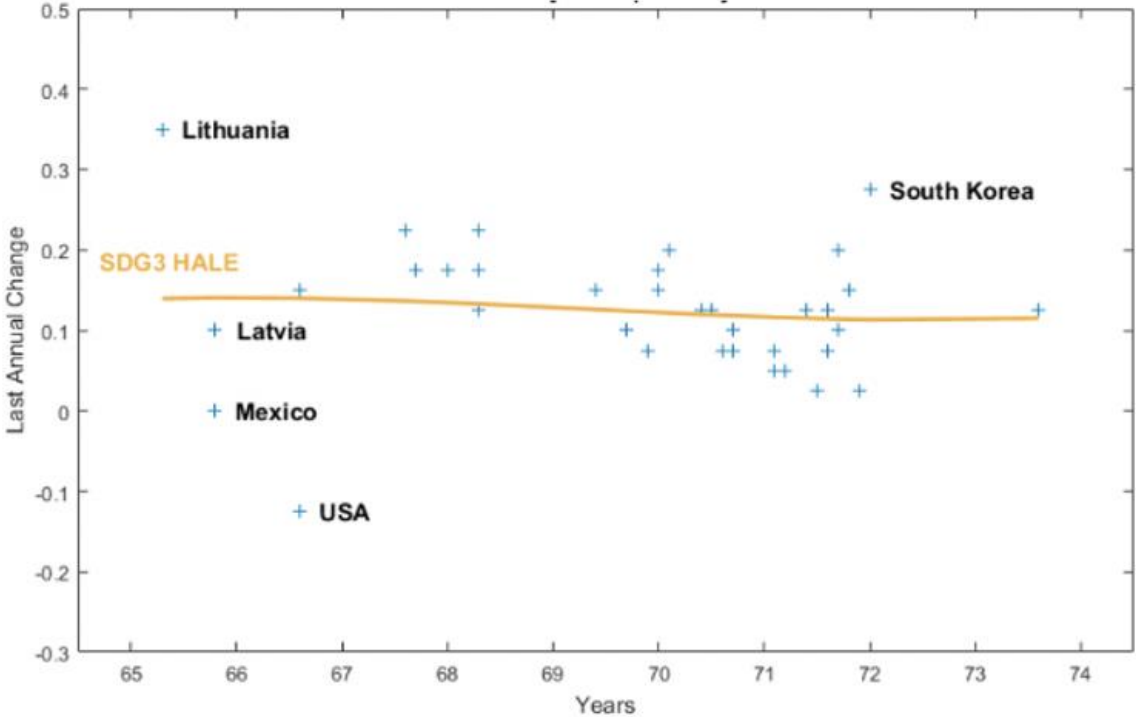
*Co-authored research paper “A New View on the ESG Impact of Sovereign Debt” in collaboration with the Impact Cubed team. Insights on the methodology and approach were gained through leading the data synthesis for the white paper and participating in executive meetings.

This data supports a very basic understanding of Sustainable Development, answering the question: **Which countries are the most Sustainably Developed today?** This question, although accurate and important to measure, doesn't give a lot of insight into the development aspect of the SDGs. As the gold standard for international development, it is essential to know which countries, no matter how big or small, are advancing and improving their country according to the Sustainable Development Goals.

Therefore, a more informative ranking would answer the question: **Which countries are developing the fastest across the 17 Sustainable Development Goals?**

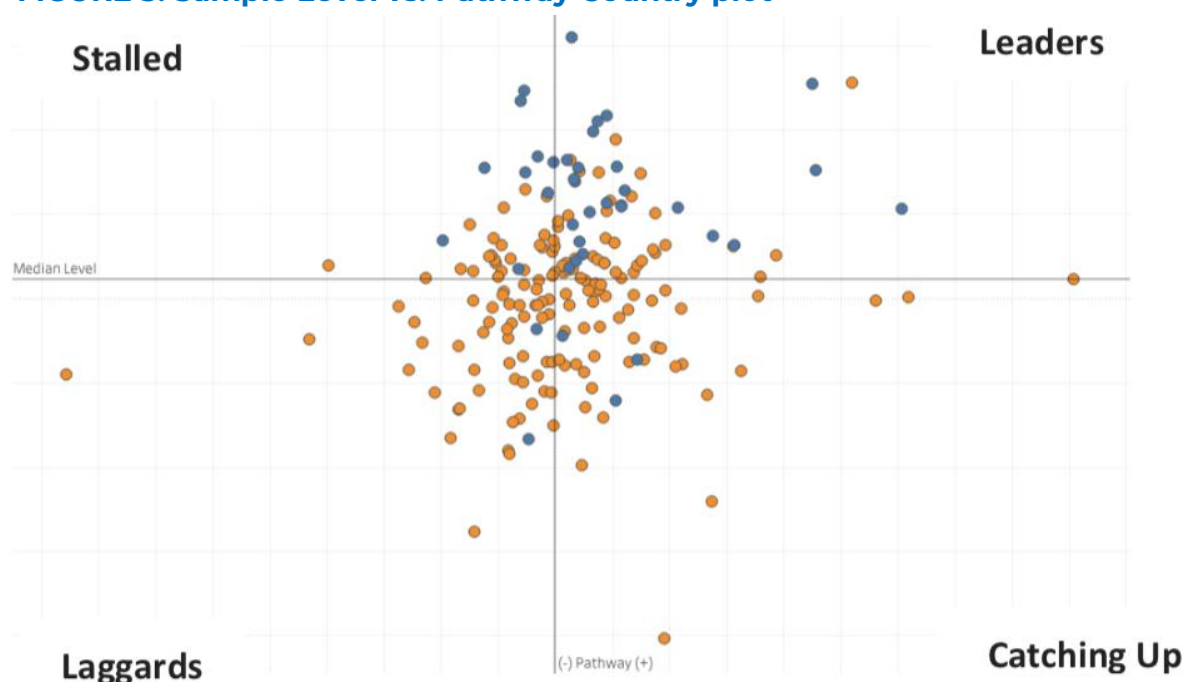
To quantify a country's speed in development, Impact Cubed developed a pathway for each data point to help identify which countries had positive trajectories compared to the expected rate of progress. Countries with the fastest trajectories fall above the pathway line, while those who are moving slower than the average fall below the pathway line. For example, Health Adjusted Life Expectancy (HALE) is a crucial indicator for SDG 3: Good Health and Well-Being. The graph below shows the pathway and latest change in HALE for OECD countries (pre-COVID).

FIGURE 2. Health Adjusted Life Expectancy (HALE)



At first glance, Lithuania trails the other OECD countries with a HALE of around 65 years. However, when utilizing a pathway analysis, a second level emerges as to how Lithuania is progressing, not just where they are today. Although Lithuania's current level ranks poorly compared to its counterparts, its trajectory is the fastest, which means it will soon overtake countries like Latvia and Mexico who are trending in the opposite direction. When scaling this second level insight to all indicators across the 17 SDGs, the data can determine both the current level of a country and how they are trending, either positively or negatively. Putting those two insights together yields a 2x2 matrix for each of the 17 SDGs.

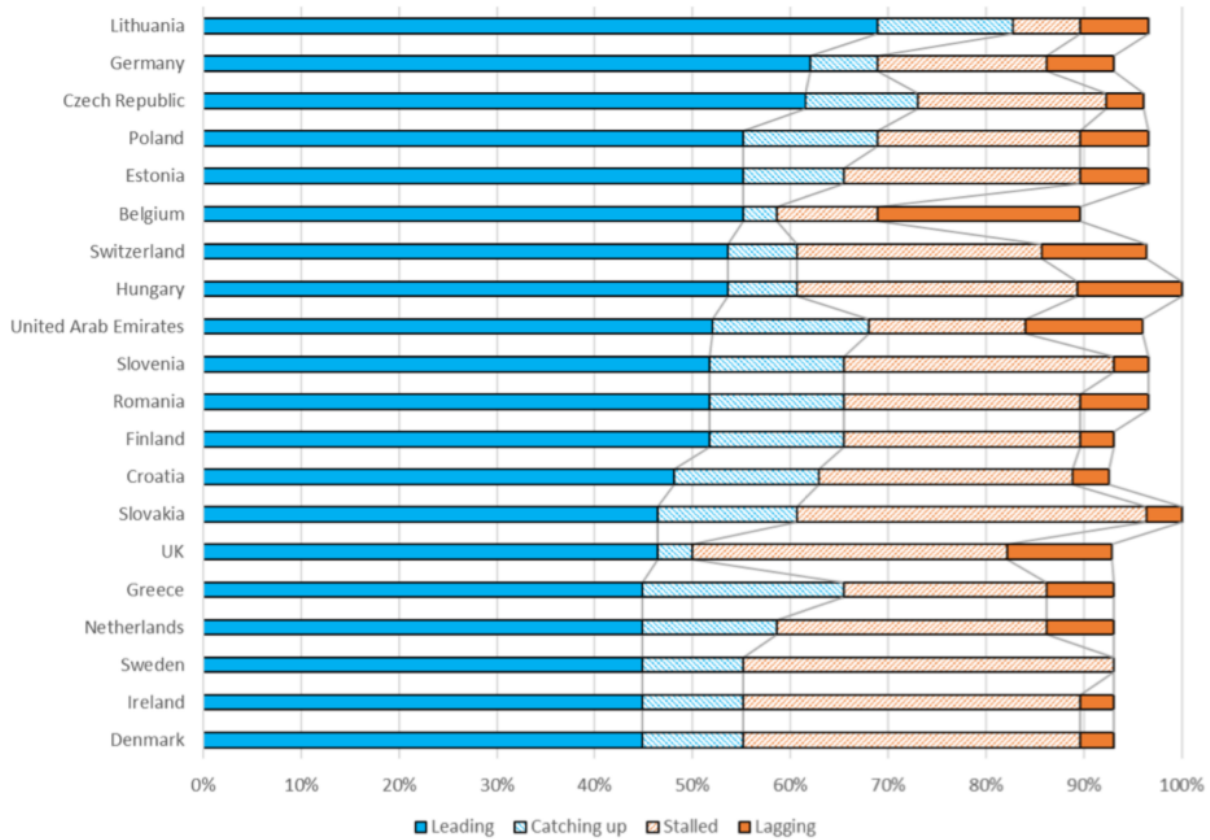
FIGURE 3. Sample Level vs. Pathway Country plot



- Countries in the top-right quadrant are **Leaders**; they have an above-average level and a positive pathway
- Countries in the top-left quadrant are **Stalled**; they have an above-average level but a negative pathway
- Countries in the lower left are **Laggards**; they have a below-average level and a negative pathway
- Countries in the lower right are **Catching Up**; they have a below-average level but are moving ahead faster than expected

After placing every country into a quadrant for each SDG, the final rankings found the top countries that are Leading on Impact. Unlike SDGIndex, 7 of the Top 10 countries are in Emerging Markets, with Lithuania taking the top spot, leading on 68% of all SDGs.

FIGURE 4. Top Leading Countries on the SDGs



What makes Lithuania’s data so impressive is not only that it is leading on the highest percentage of SDGs, but that it is catching up on the majority of SDGs where its current level is still below average.

When considering the goals in which Lithuania trends positively, Lithuania is doing well on over 80% of factors, significantly more than the next best country. The data is clear: When considering a country's pathway towards development, Lithuania is a leader on Sustainable Development.

QUALITATIVE DRIVERS OF LITHUANIA'S PROGRESS

After concluding that Lithuania has the strongest potential as a leader across the 17 Sustainable Development Goals, the second portion of this paper gathers field research in Lithuania on the key dimensions of their progress. Through in-person interviews, key stakeholders across the business, political, journalism, and non-profit realms shared their perspectives on the strengths, weaknesses, and opportunities for Lithuania within Sustainable Development. This section will delve into the 3 main categories of how Lithuania was able to achieve so much: its geographical position, favorable political situation, and progressive business ecosystem.

Geographical Position

Resource Rich

Part of Lithuania's success can be attributed to its favorable resources and positioning within Europe. It is resource rich, with particularly rich forests that cover a third of the country and a plethora of natural water resources including thousands of lakes, rivers, and aquifers.⁴ The forests provide both environmental and economic benefits to the country. In addition to the environmental benefits of forests in sequestering carbon dioxide from the atmosphere, there is a robust forestry industry that provides 60,000 jobs to Lithuanians, representing 6% of total employment.⁵ Importantly, the forestry industry is heavily regulated, with an essential rule that "the general volume of all annual forest cuttings cannot exceed the gross annual tree increment." Replenishing forests represents a crucial element of Lithuania's strength in sustainable consumption (SDG 12) as well as protecting life above land (SDG 15).

Nordic Influence

FIGURE 5. Map of Northern Europe



Lithuania is uniquely situated in Northern Europe, southeast of the wealthy Nordic countries of Norway, Sweden, Denmark, and Finland. As Lithuania entered the European Union and became integrated into the rest of Europe, it increasingly received foreign direct investment from its wealthy neighbors. Sweden, Norway, and Finland all land in the Top 10 countries in FDI, with Sweden taking the top spot at nearly 20% of total FDI.⁶ This plays an important role not only in spurring economic development but also in exporting their world leading environmental and social values into Lithuania.

One example of Nordic values being exported into Lithuania is Swedbank's impact-accelerator, ROCKIT. As one of Sweden's largest banks, Swedbank has an extremely strong presence in Lithuania's financial industry. According to the Bank of Lithuania, Swedbank is one of Lithuania's top 3 banks.⁷ In 2019, Swedbank partnered with Fintech and Sustainability Hub, ROCKIT. Located in Lithuania's capital, Vilnius, Rockit incubates approximately 30 companies that promote one or more of the Sustainable Development Goals. Swedbank's strategic partnership with ROCKIT not only actively promotes the SDGs within Lithuania but is also a core part of its partnerships with start-ups.*

* Information from Swedbank provided by Jekaterina Bitus, Head of Start-Up Partnerships at Swedbank. Swedbank actively invests and partners with companies utilizing their partnership with ROCKIT Hub. This partnership means most of Jekaterina time is spent in ROCKIT Hub sourcing opportunities for Swedbank.

Energy Independence from Russia

While Lithuania has actively sought to tighten links with the rest of Europe, its historical reliance on Russian energy resources proved to be a catalyst for a major adoption of renewable energy. In its quest for energy independence from Russia as well as safety concerns, it shut down its two Soviet era nuclear power plants in 2004 and 2009.⁸ The two closures drastically changed its energy landscape, removing 40% of its energy production and shifting the country from an energy exporter to an energy importer. In response, the government looked towards its domestic energy opportunities and found biomass, which uses the lowest quality wood waste from the forestry industry, to create energy. Within the space of 5 years, Lithuania transitioned its district heating, representing 40% of Lithuania's energy consumption, to 70% biomass energy.⁹ Making this transition at a rapid pace pushed Lithuania to one of the top renewable energy consumers in Europe, with 34% of all energy consumption coming from renewables.*,¹⁰

Political Situation

European Union Support

The inclusion into the European Union has undoubtedly transformed Lithuania's Economic and Social Development. When Lithuania joined the EU in 2004, the average wealth per capita was 42% compared to the EU average. Now, wealth per capita is 81% compared to the EU average, a transformative change in only 15 years.^{11,12}

The EU has been at the forefront of the global shift towards Sustainable Development. The EU Green Deal, adopted in December 2019, allocated €2.22 billion in total to Lithuania.¹³ Its scope is immense, covering everything from renewable energy adoption to agricultural reforms and preserving biodiversity. It is well documented that these goals are aligned with the broader SDGs, freeing up capital that can go directly into innovating economic and social welfare of the European continent.

* Interviews with Rytis Kévelaitis, Former Vice Minister of Renewable Energy and Energy Efficiency, and Remigijus Lapinskas, Former President of the World Biomass Association, provided considerable details into Lithuania's impressive switch to biomass. Both leaders provided first-hand accounts of the unique situation Lithuania was placed in and were directly involved in Lithuania's successful transition.

Sustainability Standards, commonly referred to as the Non-Financial Reporting Directive (NFRD), have consistently ramped up regulatory frameworks regarding the social and environmental impact of corporations.¹⁴ In June 2017, the EU published its guidelines on requiring large public entities with over 500 employees to disclose non-financial information related to their environmental and social impact. In June 2019, they revised the climate specific goals that place further scrutiny and specificity to reporting standards. Most recently, in April 2021, the Commission adopted a revised Corporate Sustainability Reporting Directive extending the scope to all companies listed on regulated markets and requiring companies to undergo an external audit of the reported information.

These additional measures, meant to broaden the scope and enforcement of sustainability reporting, have transformed the entire European market into one of the most environmentally and socially conscious in the world.

Domestic Political Support

At the national level, progress on many of the indicators can be traced back to intentional policymaking. In meetings with representatives of the Ministry of Environment, they point to major reforms in emission regulation, forest conservation, and waste management as all part of their broader sustainability strategy. One major example is the plastic recycling deposit scheme introduced in 2016. Regulation required that all large stores selling recyclable materials, primarily grocery stores, must house “reverse vending machines” for plastic waste.¹⁵ With the high penetration rate of vending machines and incentive established for receiving €0.10 for each deposit, Lithuanians quickly switched to recycling their plastics. In 2018, just two years later, EU stat found that Lithuania jumped to the highest recycling rate of plastic packaging in the EU, recycling 69.3%.¹⁶

Forest conservation efforts, led by the Ministry of Agriculture under the Lithuanian Rural Development Program, have led to new programs that cause several thousand hectares of new forests to be planted each year.¹⁷ Current forest coverage is at 34.01%, an increase of 4% since 1991, with the average yearly increase of around 0.1%. These regulations run parallel to the forestry industry, constraining the scope of woodcutting to the amount of trees replanted from these afforestation programs.

Social progress has been the weakest improvement area, behind the environmental and economic factors. However, key policies have helped push Lithuania in the right direction. For example, alcoholism, which has a profound effect on health, education and poverty, is a major problem in Lithuania. In 2016, the parliament took action and increased excise duties on

alcohol, increased minimum legal drink age, and banned alcohol advertising.¹⁸ These measures, some of the strictest in the EU, saw a 20% reduction in alcohol consumption as a direct result. This policy can be closely linked with positive trajectories in some of the social factors of the SDGs, such as Health Adjusted Life Expectancy in Figure 2.*

Progressive Business Ecosystem

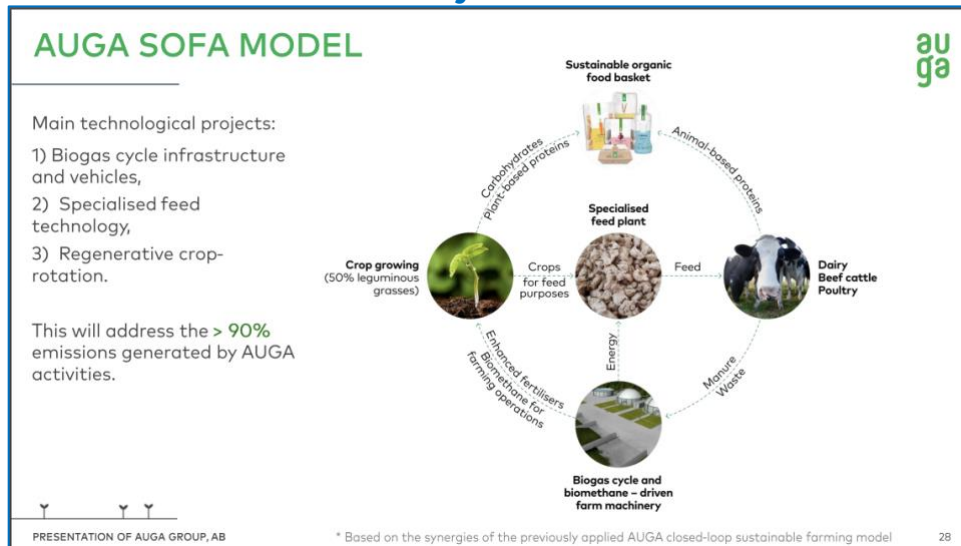
Emergence of Corporate Sustainability

Business leaders around the world are embracing the new demand for sustainability and social consciousness. In Lithuania, these trends are felt even more acutely, as large FDI and financial influence from Nordic and Western Europe have pushed sustainability to the forefront of consumer consciousness. According to the Sustainability Brand Index, Lithuania led the Baltics on sustainability awareness in 2020, with 67% of consumers reporting they discussed sustainability regularly with friends and family.¹⁹

A leading example of the success of sustainability products in Lithuania is Auga, an organic food company based in Vilnius. Founded in just 2015, their organic and sustainable produce is sold in over 37 countries. According to their investor presentation, they are the largest vertically integrated organic food producer in Europe. Their secret: sustainability focused ag tech.²⁰

* Interviews on Domestic Success stories was informed by Deividas Čėsnas from the Ministry of Environment and Osvaldas Šmitas from the Ministry of Economy. The plastic waste initiative was spearheaded by Deividas's colleagues in the Ministry of Environment, while forest conservation were initiatives that his Ministry helped develop with the Ministry of Agriculture. The alcoholism initiative was informed by Mr. Šmitas, who credited this success to the Ministry of Social Affairs.

FIGURE 6. AUGA Sustainability Model



Using manure from cows, major machinery like tractors and packaging facilities use biogas and biomethane for energy. This, combined with specialized feed that intends to lower the carbon output of cows, enables the company to run on carbon reduced cow waste. These unique technologies position Auga as a global leader of agricultural sustainability.

Growing Entrepreneurial Hub

The United Nations has deemed entrepreneurship to be one of the key leading indicators of Sustainable Development.²¹ In Lithuania, the immediate effect of entering the EU in 2004 saw many of its highly skilled professionals leaving the country in search of better economic opportunity. However, recent economic prosperity has led to a wave of Lithuanian nationals returning home.²² 2019 was the first year in 3 decades with positive migration flow from foreign nationals. Their return home has brought economic opportunity with them. Entrepreneurship activities have taken off, with an OECD study finding Lithuania to be one of the best in the EU in the proportion of adults involved in starting a business between 2013-2017 (13.4% in Lithuania compared to 7.3% EU average)²³

* Auga executives credited their success to their start-up mentality in agriculture, allowing them to think bigger than other large corporations. Many of their competitors do not own their farms, posing a major challenge in transitioning to more sustainable processes. They attribute their vertically integrated farming and technology business as to how they have become the largest vertically integrated organic food producer in Europe after founding just 5 years ago.

Incubators related to sustainability have popped up across the country, with Swedbank's partner ROCKIT hub profiled on Page 10. In addition, the Lithuanian Confederation of Industrialists, a leading business association in Lithuania, launched a Smart Energy Digital Innovation Hub (DIH). The organization grants strategic and digital services for small and medium sized businesses looking to produce greener energy. Bringing together university infrastructure, scientific researchers, Lithuanian energy companies, and specialized expert groups, the incubator brings a plethora of resources to the table for young companies looking to innovate in the energy space. The Smart Energy DIH also seeks to bring in both foreign investors and businesses to pilot their breakthrough technologies in Lithuania, leveraging their business connections to help scale technologies as quickly as possible.*

When it comes to ease of doing business, Lithuania is an emerging market leader. The World Bank ranked Lithuania 11th out of 190 countries overall in its 2020 Doing Business index, indicating that the country has become one of the most attractive locations in Europe (after Denmark, the United Kingdom, Norway and Sweden) in terms of the regulatory framework facing the private sector.²⁴ With an entrepreneurial spirit and conducive business regulation, Lithuania has created an incredible ecosystem to nurture Sustainable Development projects within its borders.

Rise of Impact Financing

To meet the growing consumer demand and entrepreneurial push towards sustainability and social impact, investors and financial institutions have taken notice. Homegrown impact investors have taken the classic model of venture capital and embedded SDG considerations into their business model.

* Information on Lithuania's Entrepreneurial hub was informed by Romualdas Petraitis, Founder of Smart Energy Digital Innovation Hub, and Sarune Smalakyte, CEO of ROCKIT Hub. Both business leaders have found their success in the budding entrepreneurial landscape in Vilnius and attest that entrepreneurial activities have exploded over the last few years.

For example, Katalista Ventures is an early-stage investment and business consulting firm whose mission is to achieve a Triple Top Line by working with companies who have a positive impact on People, Planet, and Profit. Blending both venture capital investment with consulting, they have invested in over 15 start-ups who are looking to scale their impact and profitability. As thought leaders in the space, they see a strong financial case for investing in ideas that bring positive impact, “Sustainability will become a benchmark that everyone will need to care about. In the near future, everyone will need a strategy around People, Planet, and Profit.” (Katalista CEO, Greta Monstavičė) Although still a relatively niche area of venture capital, Greta sees larger trends in the more established early-stage investors making an effort to integrate impact or ESG considerations into their investment frameworks.

The Lithuanian bond market has also produced a series of successful fund raises around impact driven finance. Proceeds from Lithuanian state-backed Green Bonds, issued in 2018, raised €34 million for National Housing Renovations which improved the living conditions and energy efficiency of housing across rural parts of the country. State-owned companies are using green bonds as well to lure in impact-conscious capital.²⁵ Starting in 2017, Lithuania’s energy giant, Ignitis Group, has set up a total of €900 million bond issuance that uses proceeds to exclusively develop solar parks and wind farms.²⁶ Another company, Lithuanian Railways, is raising €300 million in green bonds to help modernize transit infrastructure and boost energy efficiency. These projects, once undesirable from private investors, are now getting institutional capital in Lithuania because of their positive environmental and social benefit to society.*

* Information on recent activity in the Lithuanian Sustainable debt market was discussed in interviews with Tomas Kontautas. A more detailed report on the Lithuanian Green Bond Market was sent following our meeting. This report was part of a consulting project presented to the Ministry of Finance in April 2021 regarding Opportunities in Sustainable Finance

OPPORTUNITIES TO MAXIMIZE POTENTIAL

1. Move Sustainable Development to the Prime Minister's Office

Although some progress has been made in embedding the SDGs into government policies and organizational structure, there is still a lot of opportunity to better refine ownership of the goals within the government. In 2018, Lithuania completed its Voluntary National Review on Sustainable Development and developed a National Commission on Sustainable Development (NCSD). The NCSD, chaired by the Prime Minister and coordinated by the Ministry of Environment, convened successfully in 2018 to include targets for the SDGs within the country's development strategy, Lithuania 2030. Their role was to analyze and assess reviews on implementation of its Sustainable Development strategies.

Since this legislation has passed, however, the NCSD and its progress analyses have gone under the radar. In conversations with representatives of the Ministry of Environment, Economy, and Energy, the belief is that Sustainable Development is truly outside their scope. The Ministries are "vertical" in their scope while Sustainable Development cuts across many agencies to produce high-level country results. The Ministry of Environment, the one responsible for coordination, found these issues specifically difficult in seeing the SDGs implemented in Lithuania. They pointed to the lack of enforcement they were granted as coordinators, giving them little influence over how other ministries go about allocating funding to achieve the goals. In addition, since the various ministries only convene on Sustainable Development as a commission, ongoing coordinated policies across ministries do not have an organizational structure to implement their ideas.*

* This discussion of SDG ownership was discussed with all 3 ministries that were interviewed. Many of the representatives felt that the concept of the SDGs is very hard to implement and that the SDGs weren't really discussed heavily among ministries. Both representatives from Economy and Environment also mentioned how many of the social factors aren't being addressed with the same importance as the environmental and economic factors, such as poverty, inequality, health, and education.

The solution discussed with the various ministries is to develop a **Sustainable Development Group** under the Prime Minister's office. This would create numerous benefits that include:

1. Establishing a specialized scope that can cut across ministries to create and monitor policies that are improving the standing of Lithuania on the Sustainable Development Goals.
2. Unlocking organizational gridlock by bringing an informed high-level perspective on where resources are most needed in achieving Lithuania's SDG targets.
3. Resolving the current bias towards environmental and economic SDG initiatives that leave out some of the social indicators where Lithuania is most behind.

The recommended functions include:

1. Developing initiatives and policies that directly target SDG indicators, working with various ministries for implementation
2. Creating yearly progress reports on the SDGs
3. Promoting awareness of the SDGs within the Lithuanian population

2. Revitalize the SDG Expert Network

After the Voluntary National Review in 2018, an SDG Expert Network was created in 2019 to bring key leaders from the public, private, and academic realms together to help monitor and achieve progress on the SDGs. Headed by the Non-Governmental Development Organization (NGDO), the Network actively participated in the creation of Lithuania 2030. The Network convened for an Expert Forum to consolidate their recommendations to Parliament and facilitated discussions with various ministries on how to improve inter-institutional collaboration across the SDGs. These discussions led to two policy recommendation papers on SDG implementation. As a result, SDGWatch Europe acknowledges the Expert Network as “a key stakeholder in the implementation of the SDGs in Lithuania.”²⁷

As a result of Covid-19 and having achieved their short-term mission of embedding SDGs into the Lithuania 2030 Development plan, the Expert Network has been largely dormant since its success in 2019. Although a lot of work went into developing the strategy, the Network has struggled to maintain the attention of its experts and lacks the sense of urgency it had when developing Lithuania 2030. The importance of maintaining this expert network is vitally important to facilitate partnerships and mentoring around the SDGs. Through interviews with various stakeholders, the one common

theme was that the goals are extremely broad and differ significantly between each one. As the leading organization on bringing together experts from all 17 dimensions of the SDGs, it is imperative that the Expert Network continue its efforts to bring stakeholders together to ensure Lithuania implements its Sustainable Development strategy. *

Two specific recommendations related to the Expert Network are:

1. Create yearly Expert Network Forums, convening SDG experts in a conference to track the progress, revise recommendations, and bring updated yearly policy recommendations to Parliament
2. Partner with various member experts to create content relevant to the SDGs, sent through either social media or email newsletters, engaging and recruiting experts to be a part of the SDG Expert Network

3. Develop Institute of Sustainable Finance

In response to the rise of green finance, the Ministry of Finance and the European Bank for Reconstruction and Development (EBRD) sought consultation to develop a Lithuania Strategy and Action Plan on Sustainable and Green Finance. Delivered to the Ministry and EBRD in April 2021, the report provided both technical as well as strategic recommendations on how to promote Sustainable Finance in Lithuania. When speaking with Tomas Kontautas, Managing Director of Sorainen, whose firm led the consulting efforts, he highlighted the creation of a Sustainable Finance Institute as the biggest opportunity for Sustainable Finance in Lithuania.

The Institute would be the first of its kind in Central & Eastern Europe. Its function would serve as the coordinator of Sustainable Finance in Lithuania. Its activities would include raising funds in international capital markets to lend to home grown sustainability businesses, creating and enforcing national standards and disclosures on sustainability accounting, advising public institutions on procurement and environmental accountability, and creating thought leadership on the opportunity for sustainable finance in the Baltics and Eastern Europe.

* Information on the SDG Expert Network were informed through interviews with the Executive Director of the National Non-Governmental Development Organization (NGDO), Ugnė Kumparskaitė. Her NGO founded the network and is responsible for organizing its forum. During COVID-19, the network faced issues related to purpose and functionality. She plans to host another Expert Network Forum in 2022.

The opportunity to create a Sustainable Finance government organization in Lithuania becomes even more apparent when considering the Impact-Cubed analysis that ranked Lithuania's sovereign debt as #1 on investing with the Sustainable Development Goals in mind. An organization that coordinates and raises capital from the international sustainable finance market is likely to attract major institutions looking to make an impact in an Emerging Market like Lithuania.

By attracting capital from new sources, Lithuania will be even better positioned to invest the necessary resources in achieving their SDG targets.

Two specific recommendations related to the Institute of Sustainable Finance are:

1. The Ministry of Finance should create the Institute of Sustainable Finance, utilizing the Lithuanian Strategy and Action Plan on Sustainable and Green Finance report submitted by Sorainen in April 2021.
2. The Institute should look to expand its activities beyond environmental considerations and take into account social benefits when evaluating a company or financial instruments' "Sustainability Score." *

* Information on the Sustainable Finance Institute was informed by Tomas Kontautas. The meeting went into the various policies the government and private institutions are pushing regarding sustainability. Other topics of discussion included the lack of clarity on sustainability standards and labeling, success of fintech in Lithuania, and the increased interest in sustainability as a business concept.

ACKNOWLEDGEMENTS

This paper was completed as part of the Social Impact Research Experience (SIRE) program sponsored by The Wharton School at the University of Pennsylvania. The program grant made this research paper possible by funding my travel to Lithuania and pairing me with my amazing advisor Dr. Doherty-Sil. I'd like to thank the Impact-Cubed team who provided me with the opportunity to learn about the robust data analysis that goes into putting together an ESG score and for allowing me to utilize their data insights as part of this research. I want to thank Libby Bernick for being an incredible mentor and for encouraging me to pursue my interest in learning why Lithuania was an Emerging Market leader in the SDGs. I'd also like to thank Antti Savilaakso, Diana Marosi-McMahon, and Henry Marshall from the Impact-Cubed data team for helping me organize and portray the data insights integrated in this paper.

I would also like to express a tremendous amount of appreciation to the various individuals in Lithuania who took the time to sit down with me and discuss Sustainable Development in its various contexts. Thank you Ugnė Kumparskaitė, Director of the Non-governmental Development Organization (NGDO), who introduced me to various experts and gave me the opportunity to tie my research to practice. I look forward to our partnership and to connecting this research to make a real difference in Lithuania in the near future!

Thank you to all the individuals below who shared their vast knowledge and expertise with me and who contributed to the insights shared in this paper:

Name	Title
Remigijus Lapinskas	Former President of the World Biomass Association , President of Green Policy Institute
Jekaterina Bitus	Head of Start-up Partnerships at Swedbank
Sarune Smalakyte	CEO of ROCKIT Hub
Gediminas Judzentas	Chief Marketing Officer of Auga
Mindaugas Ambrasas	Chief Financial Officer of Auga

Mantas Zamžickas	Commercial Attaché to the USA at Consulate General of the Republic of Lithuania
Romualdas Petraitis	Founder of Smart Energy Digital Innovation Hub
Greta Monstavice	CEO and Co-Founder of Katalista Ventures
Vaida Pilibaityte	Radio Producer, Feature Producer, Environment Editor at Lithuania National Radio and Television
Tomas Kontautas	Country Managing Partner at Sorainen Lithuania
Rytis Kėvelaitis	Former Vice Minister of Renewable Energy and Energy Efficiency
Osvaldas Šmitas	Ministry of Economy and Innovation - Director of the Economic Development Department in the
Karolis Švaikauskas	Ministry of Energy - Head of Energy Competitiveness Policy Group
Jūratė Pravalackaitė ()	Ministry of Energy - Head of the Climate Change Management Group
Violeta Greiciuviene	Ministry of Energy - Head of the Investment Division
Jurgita Jakeviciute	Ministry of Energy - Head of the International Cooperation Division
Deividas Čėsnas	Ministry of Environment - EU and International Relations Division
Ugnė Kumparskaitė	Executive Director of the National Non-Governmental Development Organization (NGDO)

ABOUT THE AUTHOR



Zachary Vlessing is pursuing a dual degree in Finance from the Wharton School and International Political Science from the College of Arts & Sciences at the University of Pennsylvania. He is passionate about making an environmental and social impact at scale, using his skillset in business and political advocacy to bring people together. He has worked for a wind energy company in New York, an environmental technology company in Vietnam, and most recently as a co-author for an ESG analytics company based in the UK. He was a Yale Young Global Scholar for Sustainable Development and a nationally ranked debater as a high school student. At university, he is a Wharton Research Scholar exploring the role of subjectivity in ESG Investing. He was awarded the Millennium Fellowship, a United Nations Fellowship designed to promote the Sustainable Development Goals and is the Head of Training for the University of Pennsylvania's Model United Nations team. Next summer, he will be working at Boston Consulting Group as a Summer Strategy Consultant.

WORK CITED

1. “Voluntary National Review on The Implementation of the UN 2030 Agenda for Sustainable Development in Lithuania” United Nations, United Nations, <https://sustainabledevelopment.un.org/memberstates/lithuania>.
2. *Lithuania’s Progress Strategy “Lithuania 2030” - UNESCO*. <http://www.unesco.org/education/edurights/media/docs/2953897c103c13043bfabea84b716ae2f8c82f47.pdf>.
3. Abele, Larry, et al. “A New View on The ESG Impact of Sovereign Debt.” *Impact Cubed*, https://www.impact-cubed.com/Publication?file=Impact+Cubed_New+View+on+Sovereign+ESG+Impact_23June2021.pdf.
4. Omondi, Sharon. “What Are the Major Natural Resources of Lithuania?” *WorldAtlas*, WorldAtlas, 1 Oct. 2019, <https://www.worldatlas.com/articles/what-are-the-major-natural-resources-of-lithuania.html>.
5. USDA Foreign Agricultural Service. “Forestry and Wood Products in Lithuania.” *Global Agricultural Information Network*, 28 Feb. 2017, https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Forestry%20and%20Wood%20Products%20in%20Lithuania_Warsaw_Lithuania_2-28-2017.pdf
6. “Inward Foreign Direct Investment by Country.” *Inward Foreign Direct Investment by Countries. Outstanding Amounts | Bank of Lithuania*, https://www.lb.lt/en/inward-foreign-direct-investment-by-country-1?ff=1&date_interval%5Bfrom%5D=2021-Q1&relation=310.
7. “Banking Sector Information” *Bank of Lithuania*, <https://www.lb.lt/en/fs-banks>
8. International Energy Agency. *Lithuania 2021 Energy Policy Review*. https://iea.blob.core.windows.net/assets/4d014034-0f94-409d-bb8f-193e17a81d77/Lithuania_2021_Energy_Policy_Review.pdf.
9. Reise, Niels. “Energy Transition: Lithuania Sets Records in Speed and Scope.” *Cision*, 3 May 2021, <https://news.cision.com/communication-works/r/energy-transition--lithuania-sets-records-in-speed-and-scope,c3338146>.
10. International Energy Agency. *Lithuania 2021 Energy Policy Review*. https://iea.blob.core.windows.net/assets/4d014034-0f94-409d-bb8f-193e17a81d77/Lithuania_2021_Energy_Policy_Review.pdf.
11. Kryptis, Dizaino. “Membership: Lithuania - Member of the European Union: Lithuania in the Region and the World: Foreign Policy.” *Lithuania - Member of the European Union | Lithuania in the Region and the World | Foreign Policy | Ministry of Foreign Affairs*, <https://urm.lt/default/en/foreign-policy/lithuania-in-the-region-and-the-world/lithuania-member-of-the-european-union/membership>.
12. Irma Janauskaitė, Aina Mizgirdė “Is Lithuania Catching up with Europe?” *Lrt.lt*, Lrt.lt, 22 Jan. 2020, <https://www.lrt.lt/en/news-in-english/19/1135728/is-lithuania-catching-up-with-europe>.
13. NextGenEU, “NextGenEU: EU Commission Disburses €289m in Pre-Financing to Lithuania.” *IEU MONITORING*, <https://portal.ieu-monitoring.com/editorial/nextgeneu-eu-commission-disburses-e289-million-in-pre-financing-to-lithuania/>.

14. "Corporate Sustainability Reporting." *European Commission* ,
https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.
15. Hazlegreaves, Steph. "Recycling: Lithuania Deposit System Exceeds All Expectations." *Open Access Government*, 24 Apr. 2018,
<https://www.openaccessgovernment.org/recycling-lithuania-deposit-system-exceeds-all-expectations/45003/>.
16. Eurostat, "More than 40% of EU Plastic Packaging Waste Recycled." *More than 40% of EU Plastic Packaging Waste Recycled - Products Eurostat News - Eurostat*, 13 Jan. 2021, <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210113-1>.
17. Juknelienė, Daiva, et al. *THE CHANGE OF FOREST COVERAGE IN LITHUANIA*. Aleksandras Stulginskis University,
https://ilufb.ltu.lv/Raksti/Journal_Baltic_Surveying/2015/Journal_Baltic_SurveyingVol3_2015.pdf.
18. "Reducing Harm Due to Alcohol: Success Stories from 3 Countries." *World Health Organization*, World Health Organization, 15 April 2021,
<https://www.euro.who.int/en/countries/lithuania/news/news/2021/4/reducing-harm-due-to-alcohol-success-stories-from-3-countries>.
19. "Lithuania - Sustainable Brand Index™ 2021." *Katalista Ventures*, Katalista Ventures, 24 May 2021, <https://www.katalistaventures.com/post/lithuania-sustainable-brand-index-2021>.
20. *Presentation of Auga Group AB*. June 2021, http://auga.lt/wp-content/uploads/2021/06/AUGA-group_EN.pdf.
21. "United Nations General Assembly - UNCTAD." *Entrepreneurship for Sustainable Development*, 27 July 2020,
https://unctad.org/system/files/official-document/a75d257_en.pdf.
22. Korsakovait, Aina. "Lithuania Reports Positive Migration for First Year in Three Decades." *Lrt.lt*, Lrt.lt, 2 Jan. 2020, <http://lrt.lt/en/news-in-english/19/1129769/lithuania-reports-positive-migration-for-first-year-in-three-decades>).
23. "Inclusive Entrepreneurship Policies: Country Assessment Notes Lithuania 2018." *OECD & European Commission*, 2018,
<https://www.oecd.org/cfe/smes/LITHUANIA-IE-Country-Note-2018.pdf>.
24. "Comparing Business Regulation in 190 Economies." *Doing Business 2020*, World Bank Group, 1 May 2019,
<https://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf>.
25. "Lithuanian Green Bonds Are Already on the Stock Exchange." *Ministry of Finance of the Republic of Lithuania*, 30 Apr. 2018,
<https://finmin.lrv.lt/en/news/lithuanian-green-bonds-are-already-on-the-stock-exchange>.
26. "Lithuania Takes Steps to Becoming Regional Centre for Green and Sustainable Finance." *Sorainen*, 22 Jan. 2020,
<https://www.sorainen.com/lithuania-takes-steps-to-becoming-regional-centre-for-green-and-sustainable-finance/>.
27. "Lithuania - SDG Watch Europe." *SDG Watch Europe*,
<https://www.sdgwatcheurope.org/lithuania/>.