November 2023

Sustainability ranking

Emerging countries

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I. Emerging Countries Universe

1. A pioneer in sustainability analysis for emerging economies

Emerging economies are generally considered to have high potential, notably due to their young and growing population. Although most are not always seen as being sustainable or having a democratic process, integrating sustainability criteria into the management of a portfolio investing in these countries can be of real added value.

Contrary to popular belief, **integrating sustainable factors** to the analysis of emerging market issuers is **compatible** with, and **adds value** to a sovereign debt portfolio. Indeed, this helps to provide a holistic view by focusing on the long-term perspectives for key institutions that are vital for the functioning and development of markets. The analysis is complementary to credit ratings by mapping the risk situation in terms of sustainability and by providing valuable additional insights to sustainability-oriented investors.

The world population currently stands just below 8.1 billion. According to United Nations statistics, this number is projected to grow to 9.5 billion by 2050. This increase will be **particularly prevalent in emerging economies**, which are currently confronted with overpopulation and a lack of natural resources. The demographic challenge is not only related to energy and ecology challenges, but it also entails **a challenge for the entire economy**.

The uprisings in the Middle East and large migratory movements have and continue to highlight the importance of the democracy process, the guarantee of civil rights and freedoms. **Inequalities** within a population where high unemployment exists, in particular among the youth, create an insecure and unstable climate, which may ultimately lead to population rebellion.

Therefore, analysis of the viability of an emerging economy should include the sustainability of the country in terms of transparency and democratic values, as well as the economy, environment, demographics, health care, wealth distribution and education.

The experience DPAM has gained in the sustainability analysis of OECD states has led to a sustainability model designed for emerging countries incorporating their specific characteristics.

2. Sustainability ranking
November 2023

The starting universe is composed of 85 countries, mainly defined by **the existence of a local or hard currency sovereign debt market**. The sustainability ranking enables the identification of the countries which have fully integrated global challenges into the development of their medium-term objectives.

This complements the information gathered from credit ratings, which is traditionally used to assess the short-term valuation of sovereign debt. Integrating long-term perspectives allows to highlight those countries that are expected to outperform others and therefore to be solvent. These perspectives have no direct impact on the current valuation of an investment but will influence medium and long-term performance.

3. A wellbeing model for countries

The consensus agrees that this decade is key for accelerating the transition and will determine the impact for the next decades.

Today, the economy is not serving citizens and planet and is showing its limits in terms of growth.

As Sandrine Dixson-Declève, Co-President of the Club of Rome, mentioned during her keynote speech at the Impact Finance Day in Belgium: we need to shift **from a GDP-based economy to an economy based on values for citizens and planet, for a wellbeing model**.

Instead of looking at growth through the lens of GDP, she suggested to look whether the economy finances education or good quality health for all. This is exactly what our model does since 2007!

Today we face 2 scenarios: **either business as usual or acceleration of the transition**.

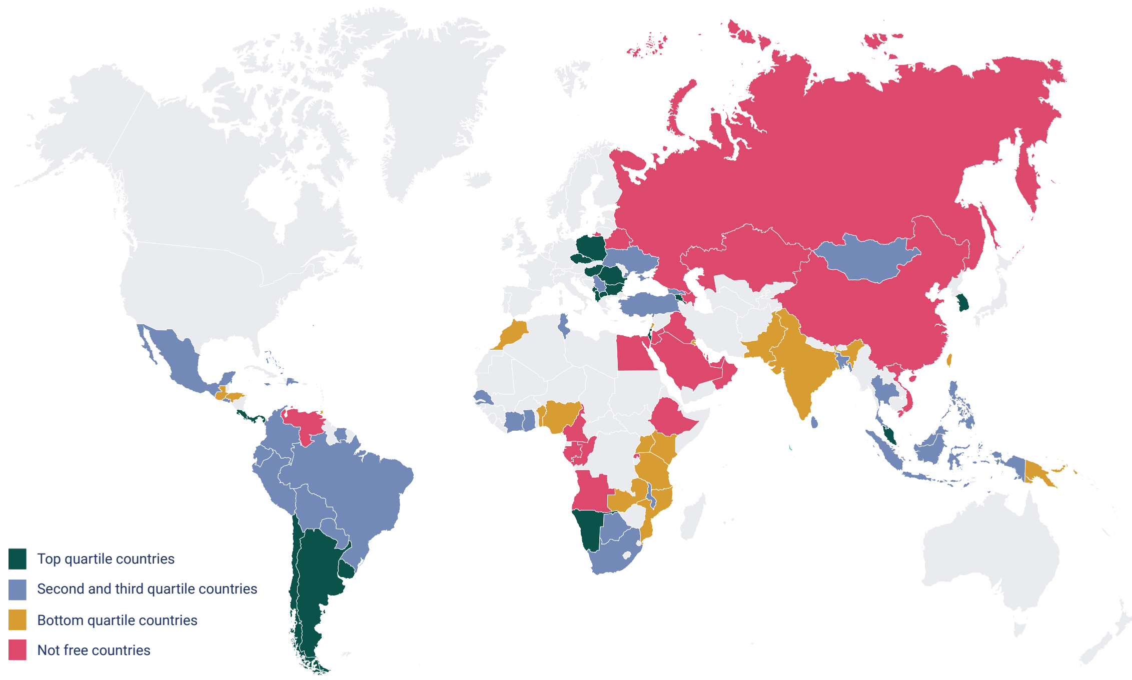
Scientific evidence is clear on the first option: the slower the action, the worse the impact, the higher the cost, the more challenging the transition will be with severe consequences as well in terms of poverty and inequality.

We see today in our Western countries how our current economic system is increasing social tensions and inequality and decreasing the wellbeing.

Therefore, at DPAM we are more than ever convinced about how **meaningful** our model (developed in 2007) is. The importance is reflected in the articulation around challenges such as environment, governance and democratic requirements, wellbeing/health, and education/innovation.

Quantitative metrics and the complex challenges of modelling, both present boundaries. For this, we constantly review our model, to ensure that it captures **the most relevant challenges on an accurate basis**.

Figure 1. Emerging countries



Source: DPAM, November 2023

Figure 2. Sustainable country ranking of Emerging countries

#	Top Quartile	H2 2023	H2 2022
1	Czech Republic	75	68
2	South Korea	73	66
3	Uruguay	72	65
4	Chile	72	68
5	Costa Rica	71	63
6	Poland	71	65
7	Singapore	70	65
8	Israel	69	62
9	Hungary	68	66
10	Romania	67	62
11	Albania	66	61
12	Namibia*	64	55
13	Bulgaria	64	60
14	Montenegro*	64	57
15	Argentina	63	55
16	Panama	63	58
17	Macedonia	62	56
18	Armenia	62	54
19	Malaysia	62	57

#	2nd & 3rd Quartile	H2 2023	H2 2022
20	Brazil	61	61
21	Ecuador	61	56
22	Dominican Republic	61	51
23	Georgia	61	56
24	Ghana	60	54
25	Peru	60	57
26	Thailand	59	55
27	Colombia	58	59
28	Bahamas	58	55
29	Sri Lanka	58	56
30	Jamaica	58	49
31	Serbia	58	56
32	Tunisia	57	55
33	South Africa	57	51
34	Mexico	57	56

#	2nd & 3rd Quartile	H2 2023	H2 2022
35	Ukraine	57	55
36	Malawi	57	52
37	Mongolia	56	50
38	Suriname	56	56
39	Bolivia	56	54
40	Turkey	56	54
41	Botswana	55	58
42	Philippines	55	51
43	Indonesia	55	51
44	El Salvador	54	53
45	Senegal	54	50
46	Paraguay	54	51
47	Côte d'Ivoire	53	47
48	Bangladesh	53	52

#	Bottom Quartile	H2 2023	H2 2022
49	Guatemala	52	50
50	Morocco	52	50
51	Kuwait	52	51
52	Kenya	51	48
53	Trinidad and Tobago	51	43
54	Tanzania	50	49
55	India	49	46
56	Benin	48	46
57	Zambia	46	50
58	Mozambique	46	44
59	Lebanon	45	46
60	Honduras	44	50
61	Uganda	42	45
62	Papua New Guinea	41	40
63	Pakistan	40	40
64	Nigeria	39	41
65	Taiwan	-99	-99

#	Excluded	H2 2023
1	Qatar	62
2	United Arab Emirates	59
3	China	55
4	Bahrain	54
5	Saudi Arabia	54
6	Kazakhstan	53
7	Oman	53
8	Belarus	53
9	Jordan	53
10	Vietnam	53
11	Rwanda	52
12	Russia	52
13	Gabon	52
14	Egypt	50
15	Azerbaijan	48
16	Ethiopia	43
17	Cameroon	41
18	Angola	40
19	Venezuela	39
20	Iraq	38

* Total outstanding amount of bonds below EUR 2 billion

Source: DPAM, November 2023

II. Principles to analyse Emerging Countries

1. Democracy as starting point

The core of the model is the democratic values. Upholding these is a moral obligation to DPAM, which is intrinsically linked to the stance of a sustainable investor. Indeed, academic research has demonstrated the clear correlation between the quality of the institutional framework of a country and its default risk.

DPAM uses the research of the international NGO Freedom House to assess the democratic development of a country. Based on an annual survey containing 25 questions on political rights and civil liberties, a country is attributed the status of 'free', 'partially free' or 'not free'. This information is complemented by the Democracy Index published by The Economist Intelligence Unit, which is also based on approximately twenty questions to assess the democratic level of a country. The latter is attributed the status of "democracy", "flawed democracy", "hybrid regime" or "authoritarian regime".

Several countries within the emerging universe do not fulfil the minimum requirements in terms of democracy and investment leeway. In total, the investment strategy linked to this sustainability ranking refrains from investing in countries which have been categorised by reputable international sources as 'not free' and confirmed as "authoritarian regimes". These include the United Arab Emirates, Belarus, Oman, China, Kazakhstan, Azerbaijan, Qatar, Vietnam, Rwanda, Saudi Arabia, Russia, Egypt, Bahrain, Gabon, Angola, Venezuela, Cameroon, Congo and Ethiopia.

Studies indicate **a clear link between the democratic level of a country and its sustainability**. It should therefore not come as a surprise that the majority of those countries deemed 'not free' are at the bottom of the sustainability ranking.

2. Sustainability: A real added value

The analysis provides important information regarding sustainability levels of the studied countries. It enables comparison with several countries which have a similar level of economic development, but differ with regard to social, ecological and corporate governance development. **Making a clear and full analysis of the sustainability of a country adds real value as part of the construction of an investment portfolio**, in addition to the ideological values that may be presented. In essence, the model puts the opportunities and risks linked to a country into context.

The objective is not to exclude countries which have low sustainability scorings, as several countries in the universe have just started to improve their democratic process. Many years of dictatorship weigh on the sustainable development of a country. The transition to fully respect civil liberties and political rights, freedom of press and gender equality is a long-term process, in particular if these rights have been violated for many years. Therefore, **the progress made by countries should be closely monitored**.

3. Global coverage

The extra-financial research performed by DPAM covers those countries into which investors may want to invest (38 OECD countries and 85 emerging countries). This forms an integral part of DPAM's conviction management, which is based on seeking risk-adjusted performance. Investors having a clear and full view of the risks and opportunities of a specific country have a comprehensive source of information to assess whether the companies active in that particular country may be successful. The quality of a financial investment is judged, among other things, by the characteristics of the markets the company operates in, and of the specificities of those countries.

II. Country sustainability

1. What is sustainability?

Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

Sustainability at country level differs from that of a corporation. A **sustainable country is committed to fully ensuring the freedom of its citizens and invests in their personal development and welfare**. It is respectful towards the environment and is reliable in terms of international responsibilities and commitments. It ensures its future and invests in next generations (education & innovation).

2. How to measure the sustainability of a country?

There are three main approaches to measure the sustainability of a country:

01

The legal approach, with the emphasis on treaties and offenses related to government actions. It should be noted however that agreement on treaties is not always fully binding and there is often no penalty where violations occur.

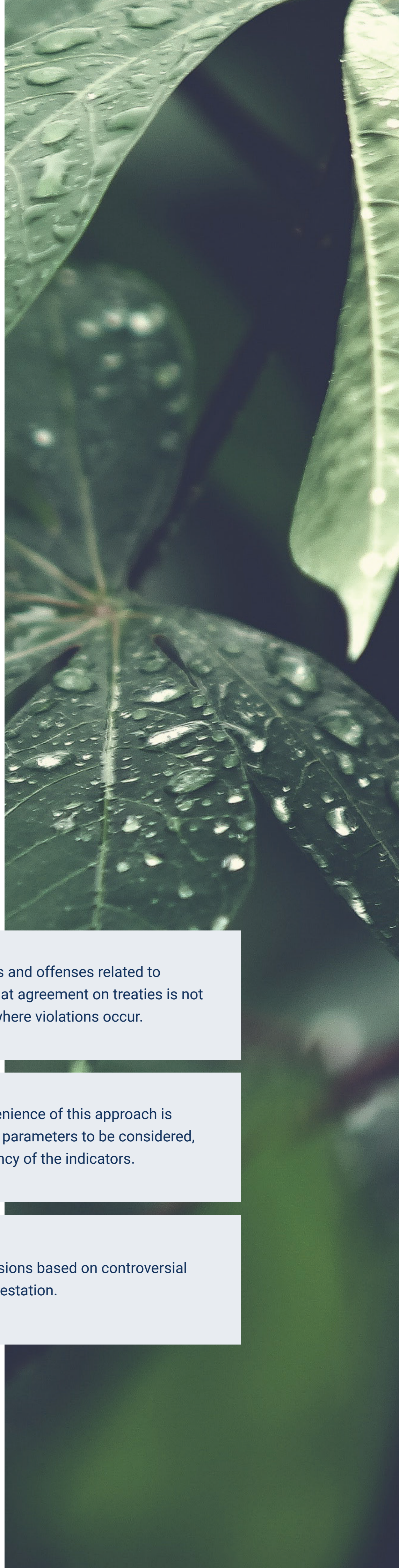
02

The extreme stakeholder approach. The inconvenience of this approach is the importance of the number of stakeholders and parameters to be considered, giving rise to the possibility of dilution and irrelevancy of the indicators.

03

The exclusion approach, which consists of exclusions based on controversial activities, examples being whale hunting and deforestation.

These approaches raise the issue of the moral threshold level, and subjectivity is likely to make it questionable.



III. DPAM Country Sustainability model

1. Key principles

The lack of information and an associated model encouraged DPAM to develop an **in-house research model in 2007**. Given the subjective character of the issue, key principles were defined from the beginning:

1. Existence of **an advisory board**, consisting of majority external specialists providing input to the model.
2. Assessment of **the commitment** of the country to its sustainable development: variables on which the country can have influence through decisions.
3. **Comparability and objectivity**: criteria are numeric data, available from reliable sources and comparable for all countries.

2. FISAB (Fixed Income Sustainability Advisory Board)

The role of the FISAB is:

01 To select the sustainable criteria which fulfil the preliminary requirements, and are the most relevant in the framework of sustainability assessment of the OECD universe.

02 To determine the weights attributed to each indicator.

03 To critically and accurately review the model and the ranking to ensure continuous improvement.

04 To validate the ranking of the developed economies.

The FISAB consists of seven voting members with a majority of external experts. The complementary background of the members guarantees a high level of expertise and knowledge of the issue in constructing the most relevant model. The objective of the board is to raise awareness on ESG issues among the portfolio management teams.

External members

Aleksandar Rankovic
Researcher at IDDRI (Institute for Sustainable Development and International Relations)

François Gemenne
Professor at Sciences Po (Paris) & ULB (Brussels)

Jan Schaerlaekens
Deputy at Brussels Parliament

Thomas Bauler
Assistant Professor at ULB-IGEAT (Brussels)

Internal members

Ophélie Mortier
Chief Sustainable Investment Officer DPAM

Ives Hup
Global Key Accounts Coordinator DPAM

Celine Boulenger
Economist Degroof Petercam

3. Selective and objective criteria

The sustainable overlay is characterised by the criteria which governments can utilise to influence their policies (government, authorities, law). Thus, it avoids data linked to the geography or population density of the country. The model is quantitative and tracks the current performance of a country, with comparable data. Only a limited number of treaties are considered as they do not guarantee genuine commitment.

4. Best-in-class combined with best approach

Existing for over 15 years, the FISAB organized several strategic sessions on **the proprietary model**. The model was reviewed through the ESG angle: Environment, Social & Governance.

If climate has been occupying a major place in the global political agenda and in the sustainability analysis, DPAM remains convinced about the equal importance of the three interconnected dimensions.

Environment

The environmental dimension.

Social

Regrouping the dimension of "population, health & wealth distribution" and the dimension of future generation "education and innovation."

Governance

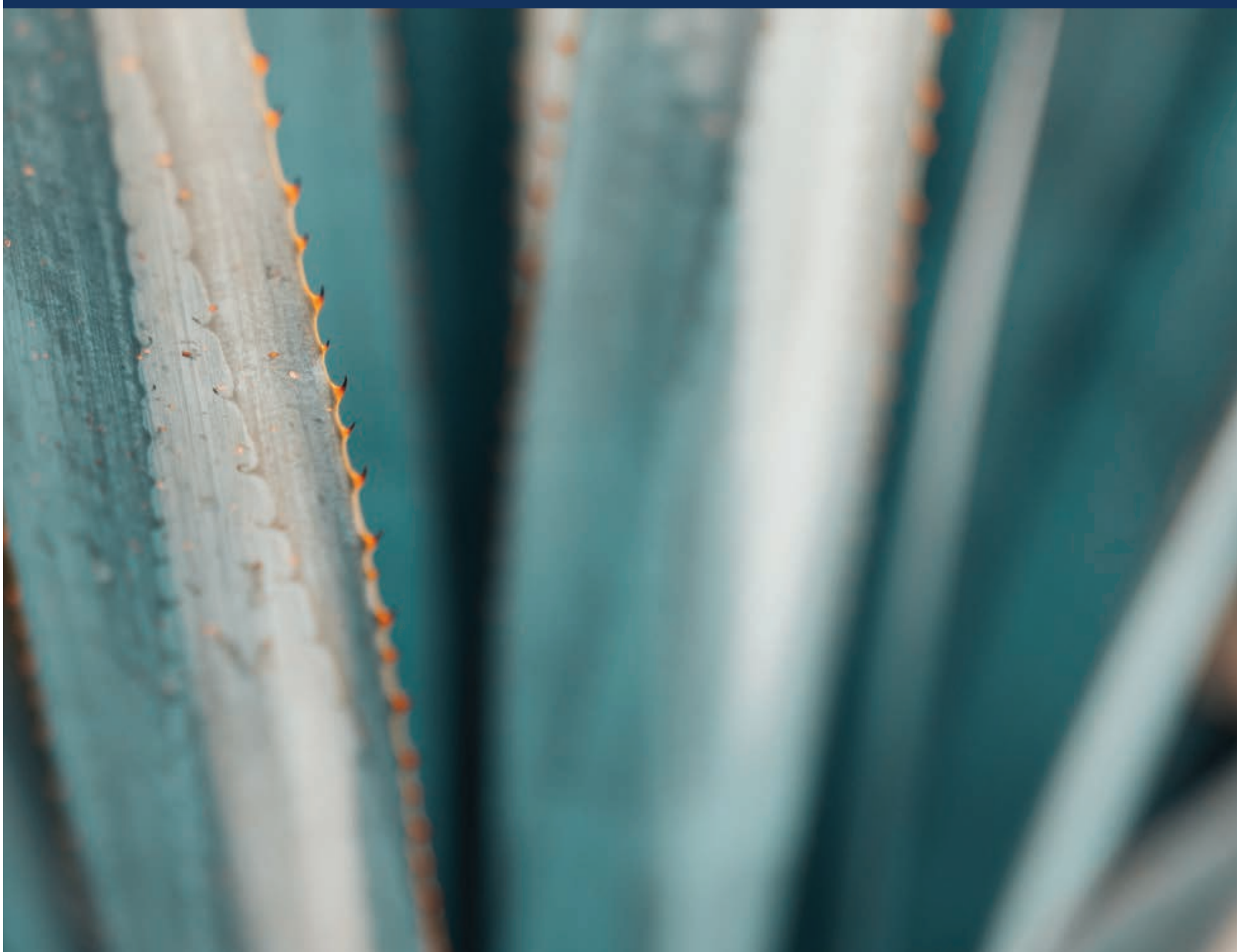
The dimension of "Transparency & democratic values."

E 33%	S 17% / 17%	G 33%
Environment Ecological footprint, Ecological performance index, etc.	**Education** Literacy rate, School participation, Expenditure per student, etc. **Population, healthcare and wealth distribution** GINI-index, Unemployment, Infant mortality, Water indicators, Sanitation indicators, Health prevention, etc.	**Transparency and Democratic Values** Corruption, Press freedom, Civil liberties, Governance sub indexes, ICC, etc.

Trend criteria 50%

Source: DPAM

The approach is dynamic as the selected criteria are reviewed twice per year with the intention of selecting the most appropriate and relevant criteria for each domain. An indicator may be replaced and adapted, or omitted. New indicators can enter the model and the allocation of the weightings may also vary.

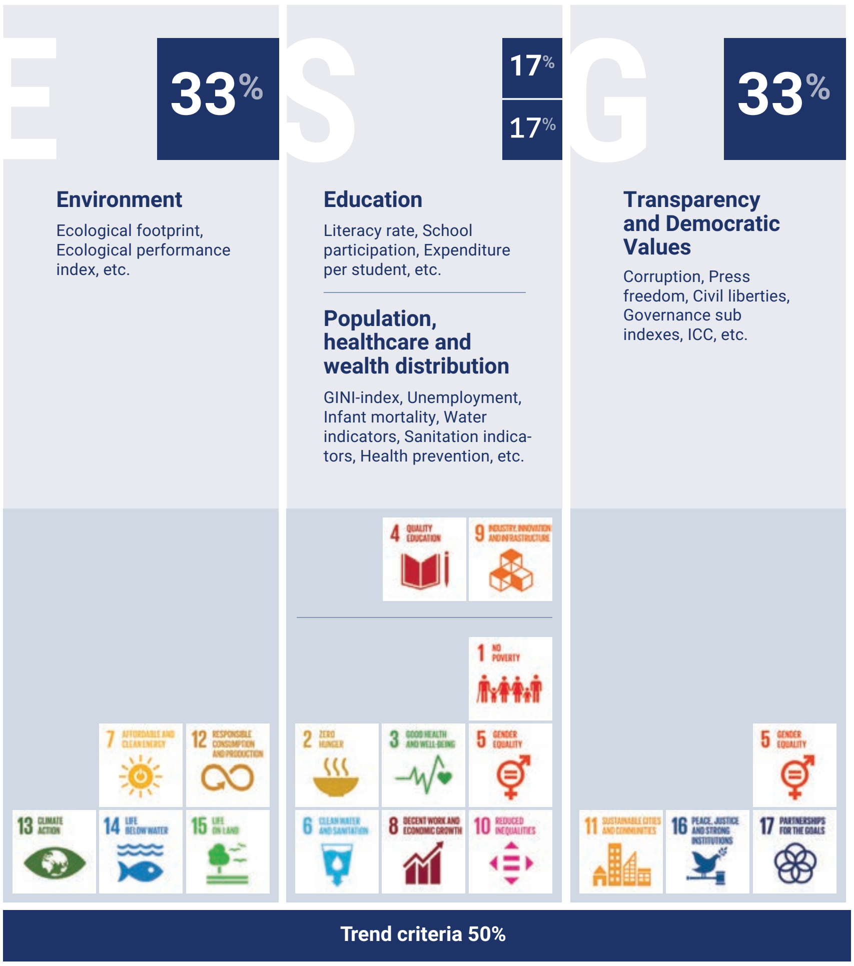


5. The model predates the Sustainable Development Goals

The 17 Sustainable Development Goals (SDG's), in the wake of the Millennium Development Goals, which were launched by the United Nations between 2000 and 2015, aim to **advocate sustainable development** on the economic, social and environmental domain. They reaffirm the human rights and the willingness to eradicate poverty, hunger and inequality by the end 2030.

The 17 social, environmental and economic objectives have been adopted by nearly 200 countries. It is a unique opportunity to channel more investments towards major environmental and social challenges.

DPAM is proud of **its pioneer sustainability model that predates the SDG's**. SDG's are so much more than a mere different framework to communicate on our ESG and sustainable investment philosophy. We review the country model taking into account the SDG's to increase its relevancy and to better integrate these objectives in our investment decisions.



Source: DPAM

IV. Holistic view and Engagement

1. Sources are internationally recognized

The model aims for the highest possible level of **objectivity**. Accordingly, statistical data to support the analysis of the country's sustainability are mainly collected from government databases and international governmental agencies such as the International Energy Agency, World Bank, International Monetary Fund, United Nations Development Programme and US Central Intelligence Agency. Data are complemented by information drawn from leading non-governmental organisations such as Freedom House, Transparency International and World Economic Forum.

2. Keeping a holistic view

Our sustainability country model relies on the three key sustainability dimensions namely Environment, Social & Governance. Each dimension is equally important, but their individual analysis does not hide the **interconnectivity** between the three correlated dimensions.

Over the last years, we witnessed several disruptions and even contradictions regarding governance, social concern or environmental issues. Therefore, **sustainability analysis at country level has been essential in an integrated model**.

In terms of **governance**, the strength of the governing institutions is a key indicator to ensure the reliability and stability of the adopted policies and programs. These enable countries in facing internal and/or external challenges and obstacles.

The lack of credible and meaningful policies could impact the **social** stability of a country. Sound corporate governance is indisputable. At the same time, social instability weighs on long-term growth potential and economic development of a country.

The examples of citizens, through NGO's, suing the States for lack of responsibility in their environmental ambition and emissions targets – is testament to the strong relationship between governance and environment.

3. Engaging with countries as sovereign bond holders

As a sustainable partner and deeply focused in making an impact, we started to engage with countries to explain our role as **a key intermediary in the value chain**. This role can be a mean towards a sustainable agenda for different sovereigns' representatives.

Engaging with countries has always been considered challenging, if not impossible to achieve. Therefore, investors have rarely got involved. However, DPAM is convinced of its importance by **approaching sovereign issuers and explaining the sustainable methodology** we have developed for over 15 years.

The sovereign bond portfolio construction relies on in-depth research of a country's fundamentals implying several investors' trip to meet with supervisory authorities, central banks, government officials, or employers' associations and supranational entities such as the IMF, the World Bank or the OECD. This is a unique opportunity to increase awareness regarding the sustainability approach in government bonds investments from an investor point of view, and to discuss and brainstorm the future ESG challenges. Our country model is at the forefront of the dialogue between investors and sovereigns to highlight the national relative strengths and weaknesses.

The aim of these meetings is not to elaborate on the country sustainable model, but rather explain how the output of DPAM works and dialogue with the different countries in order to:

- **Explain our approach** and how it may **impact** our investment decision process.
- **Raise awareness** about the outcome of our models and to ultimately pass on a clear message to policy makers that country sustainability can be a key driver for investor appetite.
- **Be receptive** to any constructive feedback to enhance our models.

As democratic countries are governed by a voting electorate, and not by voting shareholders, there is clearly a different link between government bond holders and governments, compared to the relation between companies and shareholders, or even creditors. Nonetheless, **our aim is to favor funding countries that are managed in a sustainable way**, and we see it as our responsibility to inform countries about our investment process, and to some extent our country model. Hence the need for a country engagement framework.

The engagement with sovereigns is a unique opportunity to inform national treasury, debt management office or equivalent about **the use-of-proceeds bonds such as green, social or sustainability government bonds** (1) to encourage increase in issuance of such impact bonds and (2) to raise awareness and importance on the alignment of current and future issuance frameworks with best practices.

V. Country Focus: Hungary

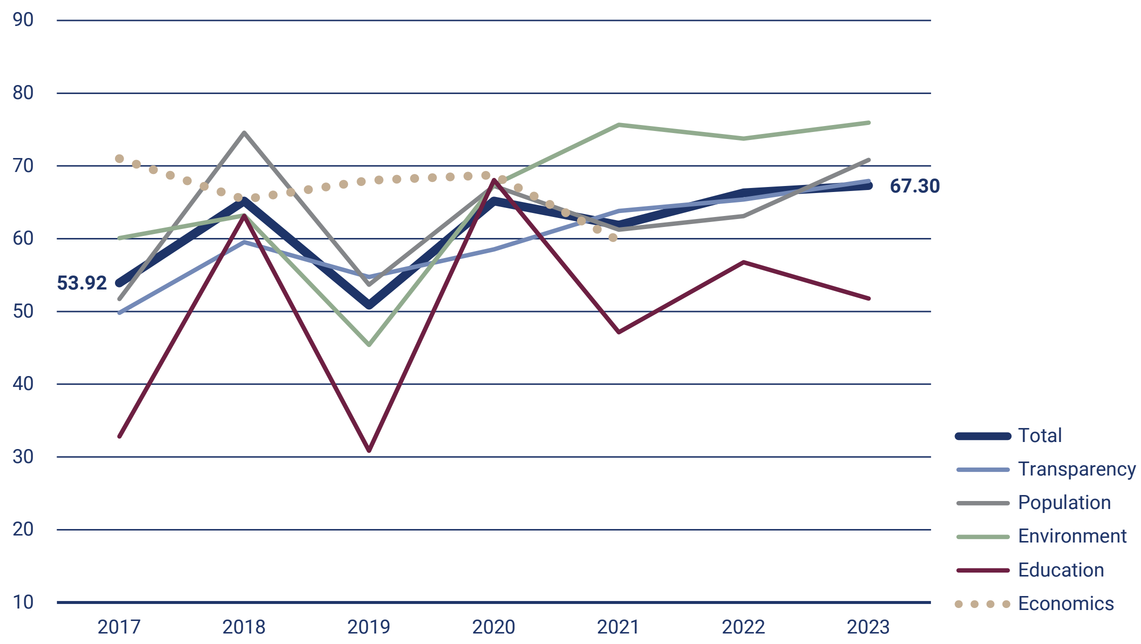
1. Positioning and Evolution

The positioning of the country in the first quartile of the emerging economies ranking has raised questions since inception.

Although we factually observe the deterioration of the political and democratic context of the country, we can conclude that the countries of Central and Eastern Europe, compared to the variety of the sample the Asian and African continents, show a certain degree of more advanced development and often correlate with better sustainability indicators. This was the first observation when the model was introduced in 2013, with a fairly marked geographical bias in the ranking and a significant correlation between development level and sustainability level.

Notwithstanding the methodological improvements made to the model, we can observe the **evolution of the country's sustainability score and its different environmental, social and governance components**.

Hungary – sustainability scores evolution – 2017-2023



Source: DPAM
(scores were rebased according to the weight of each dimension in the model)

In its 2019 report published in 2020, the NGO Freedom House downgraded the country's democratic status from free to partly free. As our sustainability model goes beyond the mere official status of the country, we can see this democratic deterioration all over the year 2019 (bi yearly ranking), where the score of transparency and democratic values decreases and impacts the overall score of the country.

Hungary – sustainability scorecard 2023

	Score	Rank	Strength/Weakness
	68.3	9	

	Score	Rank	Strength/Weakness
TRANSPARENCY AND DEMOCRATIC VALUES	**67.2%**	**17**	
Emigration	80.5%	2	
Equality	72.6%	14	
Institutions	57.5%	14	
International relationships	87.5%	1	
Rights & liberties	62.0%	27	
Security	94.0%	3	

	Score	Rank	Strength/Weakness
POPULATION, HEALTHCARE AND WEALTH DISTRIBUTION	**72.2%**	**7**	
Basic human needs	90.4%	2	
Demography	61.2%	17	
Health & wellness	80.0%	10	
Inequality	60.5%	10	
Labour rights	66.7%	3	

	Score	Rank	Strength/Weakness
ENVIRONMENT	**75.2%**	**6**	
Air quality & emissions	82.6%	11	
Biodiversity	73.3%	10	
Climate change	58.7%	12	
Energy efficiency	92.3%	31	

	Score	Rank	Strength/Weakness
EDUCATION / INNOVATION	**52.8%**	**26**	
Equality	52.4%	28	
Innovation	30.1%	26	
Participation	53.7%	30	
Quality	59.8%	12	

Quartile 1	Quartile 2	Quartile 3	Quartile 4
1-19	20-36	37-48	49-65

Source: DPAM

Looking at the details, and in particular the country's scorecard at the end of 2023, **the "rights & liberties" theme clearly appears to be the weak point of the governance pillar** (civil liberties, freedom of press notably). On the other hand, we can wonder about the first place on the international relations issue, which can be explained by the component of this theme. Indeed, this is the only theme where the model is based on countries' political commitments - i.e. treaties etc. - and Hungary's first place in the governance pillar is thanks to the fact that the country has ratified the main observed treaties. Hungary's 1st place is not exceptional: several countries in the observed universe can also claim to be committed to major international treaties such as the Ottawa Treaty, the International Court of Justice or the nuclear non-proliferation treaty, and score 87,5% as Hungary. In other words, the first position is shared by several countries; Hungary does not have the monopoly.

The 5 year-evolution also shows some **volatility in the education pillar**, which is mainly explained by the progressive adaptations made to the model on a pillar that is difficult to measure. Indeed, statistics have improved significantly in recent years, but measuring the quality of education remains a difficult exercise in a universe as varied as the 90 countries analysed in the so-called emerging universe. Please, refer to the focus on each dimension further in this analysis.

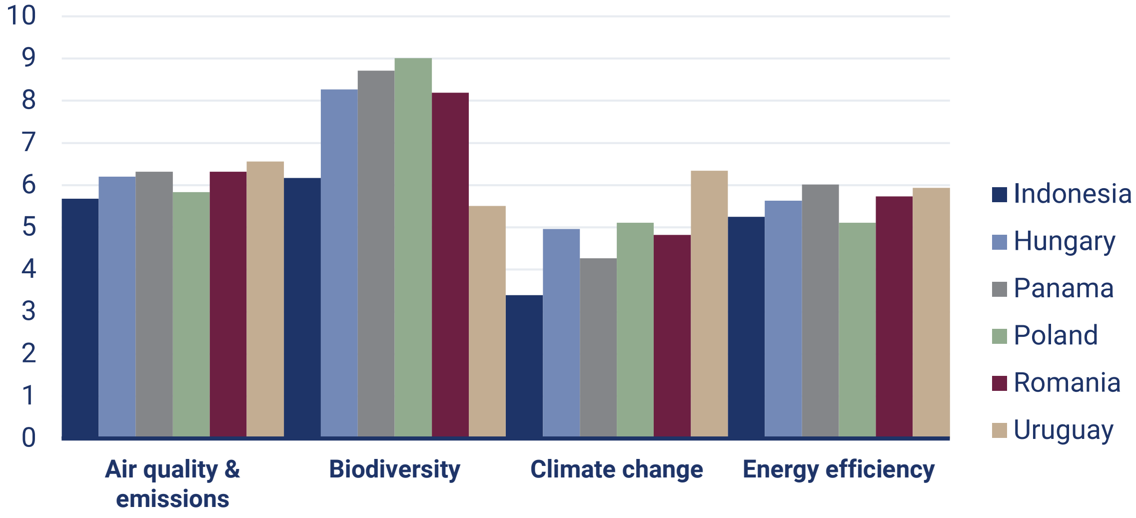
On the **social issue of the population, access to quality health care and distribution of wealth, the country has also improved on several points**, notably on the issue of health (e.g., the fall in the infant mortality rate, which is already at a low level) and on the issue of wealth distribution. On the other hand, the demographic situation, and in particular the reconsideration of the so-called initial economic indicators such as the different levels of unemployment and the old age dependency ratio, remains a point to be monitored - also in conjunction with economic development, ageing of the population, declining fertility, increasing youth unemployment and a rising old age dependency ratio.

Finally, in terms of **the environment, the country is experiencing an upward trend**, a general trend observed in this pillar. The question of **energy efficiency** and related **air quality** remains an **important issue** for the country.

2. Comparison with its peers

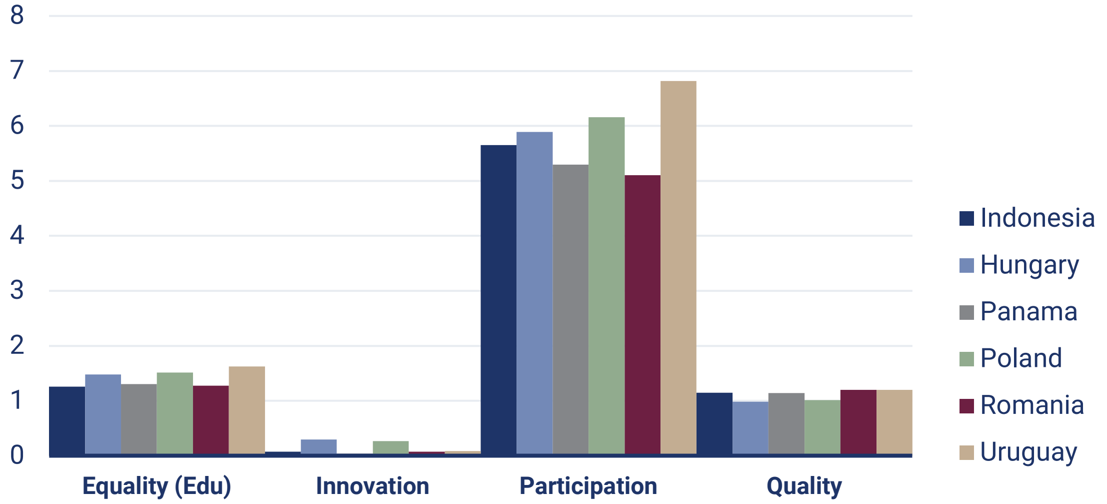
Hungary's situation can obviously be compared to its neighbour **Poland**, but it has the same characteristics of a Central and Eastern European country. Therefore, we also compare it to other similar countries on other continents such as **Indonesia, Panama, Romania, and Uruguay** on all 4 dimensions (latest ranking – November 2023.)

Environment



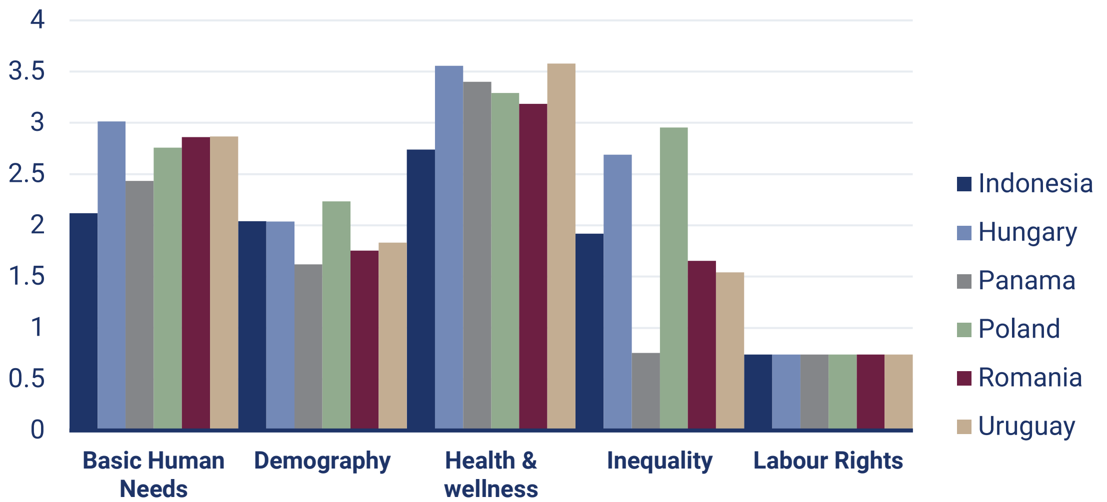
Source: DPAM

Education



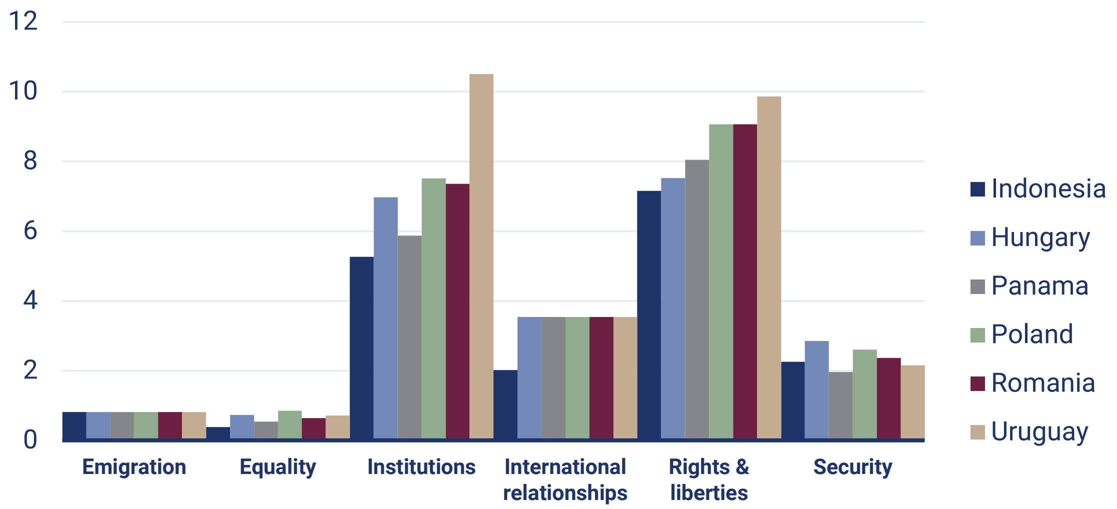
Source: DPAM

Population, healthcare & wealth distribution



Source: DPAM

Transparency & democratic values



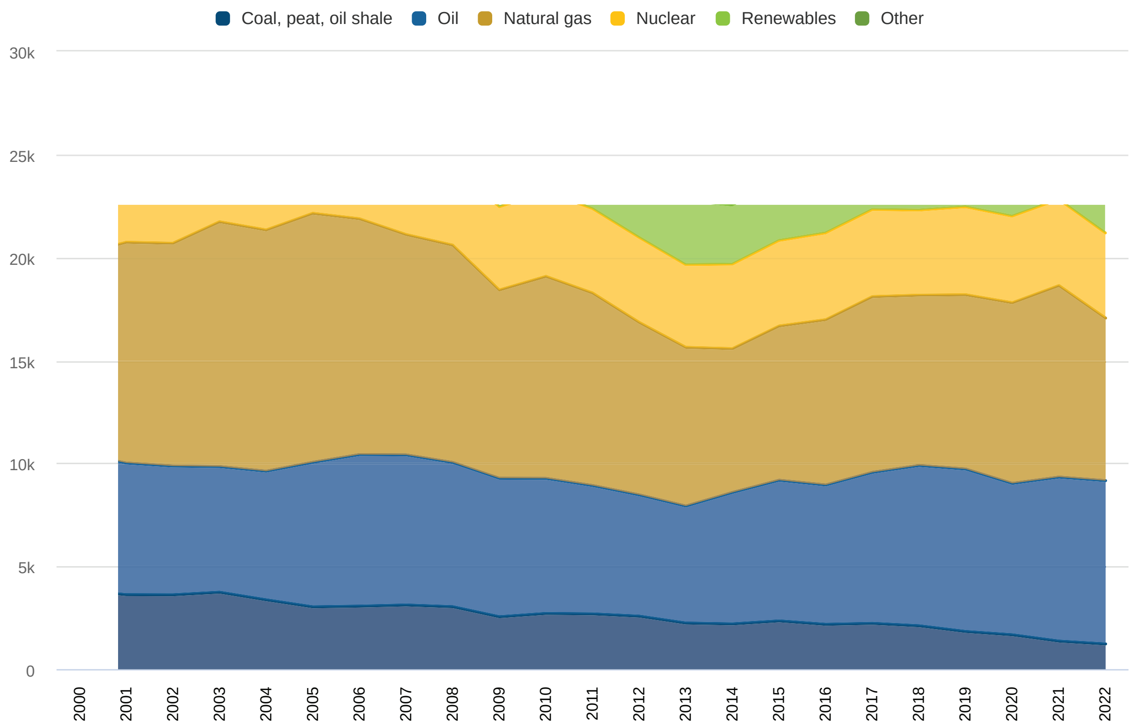
Source: DPAM

3. Focus on the ESG dimensions

3.1 Environment

Hungary's energy sector still relies heavily on Russia for fossil and nuclear fuels.

Hungary - Total energy supply mix



Source: OECD Environment at Glance

Hungary has not yet been able to reduce its **dependency on Russian gas and oil products** as opposed to the majority of EU peers, due to lack of short-term alternatives. Furthermore, Hungary has also **benefited from several exceptions regarding the sanctions** imposed on Russian energy products.

In parallel, the dependency on Russia for the **nuclear energy**, which accounted for 45% of electricity generated in 2021, is also an issue in the context of the Ukraine/Russia conflict.

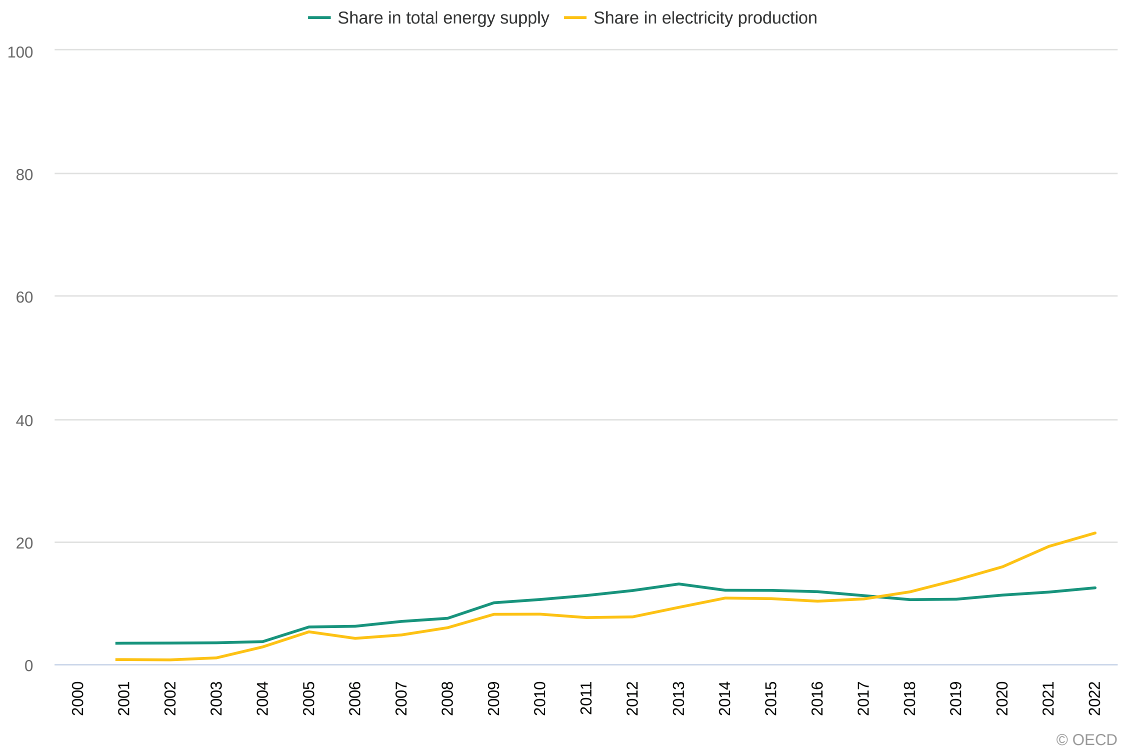
Hungary has limited domestic energy resources and given the relatively cheap fossil fuels-based energy, **the green transition has not been a large priority** and has focused on resource-intensive production such as large battery assembly plants and car manufacturing with notably the electrification of transport.

To achieve the green transition, the country must ensure the **training and required education** of its workforce required for the new industries. The lack of competent skills is a hinder in the green transition in the car industry as well as in the real estate.

In terms of renewables, the absolute level is relatively low and the registered progress over the decade is limited. It remains one of the lowest in Europe but compared to an emerging economies universe, the picture might be different. This is measured by the share of renewables in the country's energy consumption mix, which is considerably low considering the EU target of reducing GHG emissions by at least 55% by 2030. In Hungary, **the renewable energy share in the total energy consumption was at 14.76% for 2020**, according to the latest data of the UN's SDG Indicators database.

CCPI experts have reported that the country had designed a solar subsidy scheme, which had significantly increased the installation and use of solar panels. However, the scheme was suspended because of insufficient grid connections. For wind power, the expansion has been blocked by law since 2016. This reduces the opportunities for the country for a green transition.

Hungary – Share of renewables



Source: OECD Environment at Glance

In terms of **productivity**, opposed to the EU countries, resource efficiency to produce a unit of income has **not improved** over the past decade.

Air quality remains an issue as the GHG emissions in the transport sector have increased over the last years. Air quality, measured by the concentration of PM2.5 particles in the air, has fluctuated between 17.5 and 16.5 micrograms per cubic meter over the last decade with a slight downward trend. However, in 2022, the average PM2.5 concentration in Hungary was still 2.5 times higher than the WHO annual air quality guideline. Yet, in relative terms, Hungary still ranks in the first quartile for that specific indicator as many emerging markets countries showcase a worse performance. According to the World Bank, India, Qatar and Nigeria are the countries where the air has the highest concentration of harmful pollutants. For the comparison, India has PM2.5 levels which are 10.7 times higher than the WHO guidelines.

Water management and climate adaptation remain concerns. Hungary's water-supply and sanitation system are still not fully compliant with the Drinking Water and the Urban Wastewater Directives, with specific challenges in access to drinking water for vulnerable groups.

Witnessing the water challenges this summer notably with the low level of rivers on industry and economy, it is key that Hungary increases its **attention to water retention, natural hydrology restoration, land draining systems and agricultural practices**.

3.1.1 The green transition as a top priority of the Recovery and Resilience Plan (RRP) of the country

Indeed, the plan, which represent 3,8% of the country GDP (2021 figures), is for almost the half of it dedicated to **climate and green transition supportive measures**. With the aim of decarbonizing the economy, the reforms are targeting the transport and the energy sectors with a **special focus on water management and circular economy**.

Regarding renewables, the adopted measures should ease the installation of wind turbines including the creation of 'go-to-areas' in the windiest regions and simplified procedures for granting permits for renewable energies. The grid system needs to be part of the reforms as well to ensure security and flexibility of the produced renewable energy. Therefore, the plan foresees adapting the electricity network with installation of storage facilities, financing of solar panels for 35000 households and solar power plants in the most disadvantaged settlements.

The plan is ambitious, but the impact will be closely monitored as due to its late adoption in December 2022, all its implementation has been unfortunately delayed.

3.2 Social

3.2.1 Education

The education pillar is **the weak pillar** on the scorecards **compared to the emerging economies** universe.

Indeed, if some indicators might appear above average compared to emerging economies, Hungary, as OECD member state and member of the EU, is facing **educational issues which endanger its sustainable growth**.

As mentioned above regarding the green transition, there is a real challenge of skilled and adequately skilled workers to ensure green transition and high value-added production in general.

The lack of skills is taken into account through indicators measuring the participation rate in primary and secondary education. All indicators confirm that education, and especially the completion of it, remains **a challenge** for Hungary. Indeed, the country has decent scores for indicators measuring the enrollment in schools, however completion rates are rather low. **The completion rate for primary education is especially low and even showcasing a downward trend**. Furthermore, the country scores **below average for its investments in R&D**. Even though these are slightly increasing over the years, other countries like Israel, South Korea or Singapore invest significantly more.

Besides the challenge of skills, the country is facing an **issue of equal chances and inequity** as well as children with a disadvantaged background, notably the Roma community, encounter issues of inclusion and inequal access to quality education and higher education level. The percentage of students achieving higher education is therefore one of the lowest in the EU. Furthermore, the number of children out of school has not reduced.

As for **climate**, the plan RPR has included **reforms and investments** to improve the quality of education and training, including for disadvantaged students and vulnerable groups. The implementation and the progress need to be monitored.

3.2.2 Health

As for education, the health system of Hungary appears in first insight among **the best quartile of the emerging economies**; the country benefiting of a communist background.

But the perception can be different when keeping in mind a more EU standard. And in that case, indeed, health outcomes, such as **life expectancy at birth and cancer mortality, are among the worst in the EU**.

This is especially true when looking at the basic human rights theme where Hungary ranks second, just behind Singapore, with a score of 90.4%. As a European country, access to safe water, to electricity or to food are less of a challenge for Hungary compared to some African countries like Mozambique, Ethiopia, Angola, or Malawi. It is therefore logical that the country performs better than its pees from the emerging market universe.

Rates of mortality due to preventable and treatable causes are significantly higher than the EU average, reflecting the **high prevalence of health risk factors in the population and issues with the quality of health services**.

The plan (RRP) is expected to improve resilience in the health sector, notably with **a priority of prevention improvement** including modernization of hospital care, improvement of primary care, expansion of the use of digital health tools and strengthening of health information systems.

3.3 Governance

As mentioned, the country has raised several questions regarding its transparency and democratic requirements, particularly since its downgrade from Free to Partially Free by the NGO Freedom House.

The NGO denounces the **deterioration of the electoral process, the pressure on NGOs critical of the government and the judicial independence**.

In the adopted RRP plan – Recovery and Resilience Plan – measures are included to fight against corruption, notably **the setup of an Integrity Authority and Anti-Corruption Task Force**, and **reforms** to improve the transparency and quality of the decision-making process with systematic involvement of the stakeholders.

Regarding the judicial independence, the government has also included in the plan measures to strengthen it including:

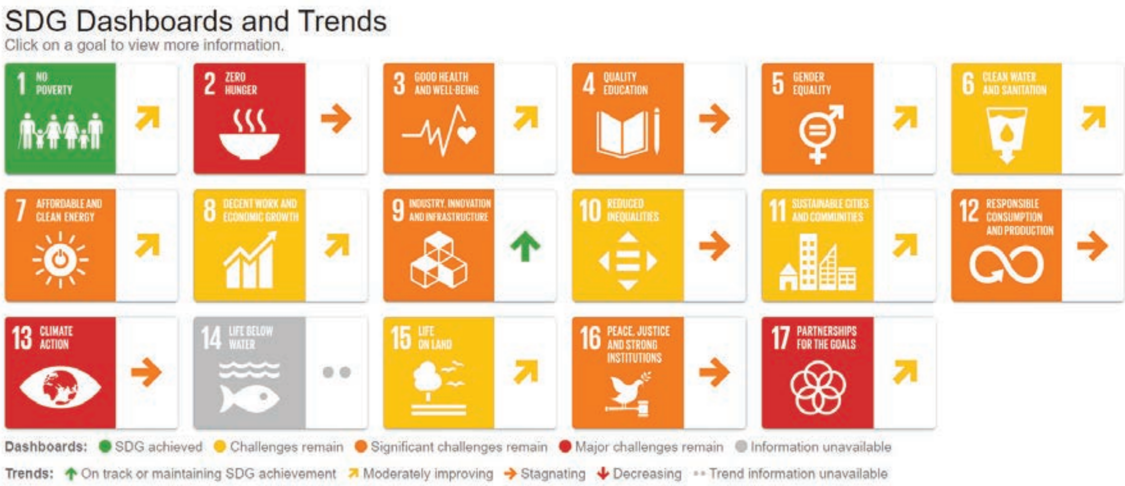
- limitation of arbitrary decisions by **reinforcing** the role and powers of the National Judicial Council,
- **reforms** of the operational mode of the Supreme Court out of any political influence,
- **no interference** of public authorities in reviewing final decisions of the Constitutional Court by udges
- **no obstacles** to preliminary references to the Court of Justice of the European Union

4. Hungary – SDG progress – report 2023

Finally, as we have often mentioned, our model predates the SDGs. These are an important source of information for us, both in terms of the data they contain, but also in terms of thinking about the sustainability challenges countries face (does the model capture all of them) and in terms of the progress countries are making.

It is therefore worth looking at the situation in Hungary, which does not show a perfect picture, but which, in comparison with other emerging countries, also shows a certain superior level on several challenges.

Sustainable development report – Hungary overview



Source: Sustainable Development Report

Sustainable development report – Hungary overview

	SDG Index Rank	SDG Index Score
Hungary	21/163	79
Romania	30/163	77.7
Indonesia	82/163	69.2
Uruguay	31/163	77
Panama	105/163	64
Poland	12/163	80.5

Source: Sustainable Development Report

SDG index score: the overall score measures the total progress towards achieving all 17 SDGs. The score can be interpreted as a percentage of SDG achievement. A score of 100 indicates that all SDGs have been achieved.

Again, if we compare Hungary in a more EU framework, it remains **below the EU average in several SDG's despite improvement on environmental sustainability** (SDGs 2, 6, 11, 12 and 13).

As mentioned above, **progress is expected in health and education** (SDG's 3 and 4) but also in terms of **gender equality** (SDG 5).

Reference Sources

Amnesty International

Center for Global Development

Climate Change Performance Index

Energy Institute

Freedom House

Global Forest Watch

Global Hunger Index

Global Safety Net

Internal Macro team

International Criminal Court

International Labour Organization

International Monetary Fund

Notre Dame Global Adaptation Initiative

OECD

OECD Stats

Plasteax

Reporters Without Borders

S&P Global

Social Progress Imperative

The Institute for Economics and Peace

Transparency International

United Nations Development Programme - Human Development Reports

United Nations Food and Agriculture Organization Aquastat

United Nations Food and Agriculture Organization Stat

United Nations High Commissioner for Refugees

United Nations Office for Disarmament Affairs

United Nations Peacekeeping

United Nations SDG Indicators Platform

United Nations Treaty Collection

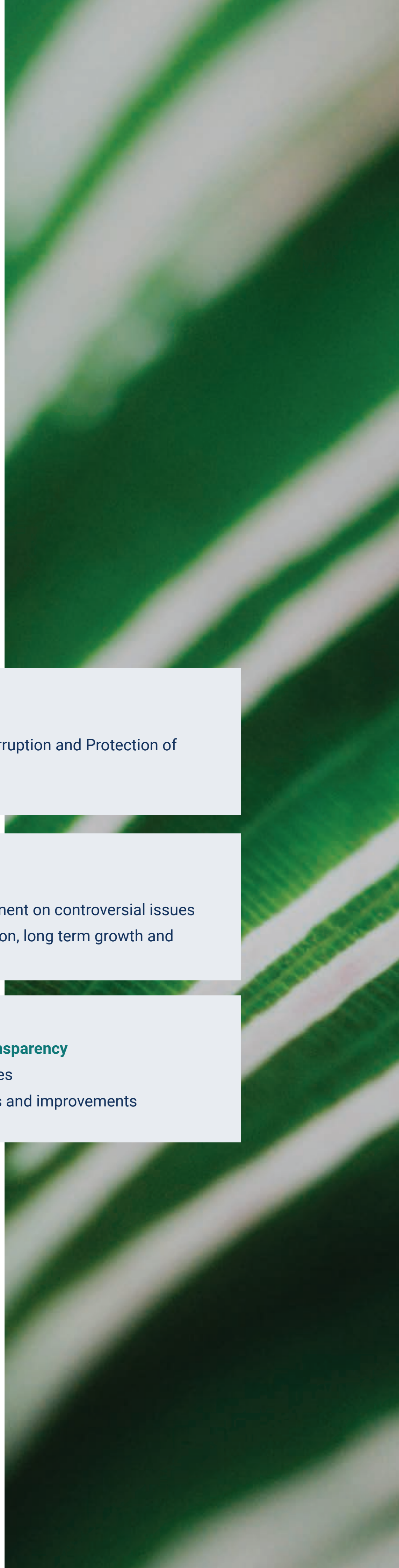
World Bank

World Economic Forum

World Health Organization

World Prison Brief

VI. Commitment to Sustainability



Being a responsible investor goes beyond offering sustainable and responsible products; it is **a global commitment at company level** translated into a coherent approach. ESG factors are environmental, social or governance characteristics that may have a positive or negative impact on the financial performance or solvency of an entity, be it sovereign or individual.

DPAM is committed to act as a sustainable and responsible market participant. Our engagement is threefold:

Defend the basic and fundamental rights
Human Rights, Labour Rights, Fight against Corruption and Protection of Environment

Express an opinion on controversial activities

- No financing of usual suspects
- Clear controversial activity policy & Engagement on controversial issues
- Avoid controversies that may affect reputation, long term growth and investments

Be a responsible stakeholder and promote transparency

- Bring sustainable solutions to ESG challenges
- Engage with issuers, promote best practices and improvements

We are convinced of the risk/return optimisation that comes with ESG integration. We see sustainability challenges as risks and opportunities. We use ESG factors to assess them in our investment decisions. We are committed to the European Commission's 2030-2050 program for **sustainable and inclusive growth**.

The asset management industry is **an impactful gear** in the financial system. We want to take up our responsibility here. As a result, we consider it important to define well **the ESG factors, priorities and targets that are material**.

1. Conviction & commitment

The last decades brought on a lot of challenges. We firmly believe that **sound** corporate governance, a clear **understanding** of current/future environmental challenges and **respect** for social norms are drivers for long-term sustainable performance. This vision is integrated in our mission and value statement.

Our goal is to offer leading expertise and guard our shared values and beliefs. Environmental, Social and Governance (ESG) considerations are integrated into **our value proposition, our fundamental research and our investment processes**.

2. Member & signatory

To prove our commitment to long-term sustainable financial management, we are a signatory to various organisations. These all advocate responsible investments and offer continuous insights into ESG challenges and opportunities.

We are part of two key initiatives on shareholder responsibility and the fight against climate change: PRI (since 2011) and Net Zero Asset Managers initiative (since 2022).

We have been supporters of the **TCFD recommendations** since 2018. In addition, we joined the **Climate Action 100+** in 2019. That same year, we also became a signatory of **FAIRR**, a collaborative engagement initiative which seeks to decrease the environmental impact of the food value chain by encouraging the use of sustainable proteins within food products.

In June 2020, we decided to support the **Investor Alliance for Human Rights**, a collective action platform for responsible investments that is grounded in the respect for people's fundamental rights. Because the environment and biodiversity are such urgent global concerns, we have been supporters of the **Finance for Biodiversity Pledge** since December 2020. This Pledge calls on global leaders to protect and restore biodiversity through their financial activities and investments decisions.

In early 2023, we have engaged in two collaborative initiatives with **Advance** (A stewardship initiative for human rights and social issues launched by the UN-PRI) and **IIGCC** (The Institutional Investors Group on Climate change). Advance initiative primarily seeks change through investors' use of influence with portfolio companies. DPAM's involvement is mainly access to research, to be the lead investor for EDP & Acciona, and be the endorser's initiative for targeting public policy makers. IIGCC is the European membership body for investor collaboration on climate change. Their main objective is shaping sustainable finance and climate policy, supporting market development, and guiding investors in managing climate risks and opportunities aligning portfolios to climate goals, amongst others. DPAM's involvement is linked to the to its commitment to **Net Zero Asset Management initiative**.

3. Facts & Figures

A growing focus on sustainable investing for over 20 years

Pioneer in sustainable sovereign debtover EUR 3.7 bn invested
(as of end of December 2022)

Signatory of UN-PRI since 2011
Top rating for the fifth consecutive year

EUR 19.8 Bn is compliant with SFDR 8+ & 9 funds across various asset classes
(as of end of June 2023)

Exercise our voting rights **across 600+ companies** globally

In 2022 DPAM decided to join **the Net Zero Asset Managers Initiative**

Active via collabo-rative engagements (CA100+, CDP, ADVANCE, etc.)

Active dialogue with **100+ companies**

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