ESG rating – a new criterion for responsible investments: the case of the Chuvash Republic

Hector Alvarez Rating Associate Rating-Agentur Expert RA GmbH Walter-Kolb-Straße 9-11, 60594 Frankfurt am Main alvarez@raexpert.eu

Agenda

- Introduction to ESG
 - Our ESG rating
 - The ESG rating process
 - O Why an ESG rating?
- ESG assessment of the Chuvash Republic
 - Snapshot of the ESG rating and factors
 - Sample report

Introduction to ESG

Our ESG rating

ESG?

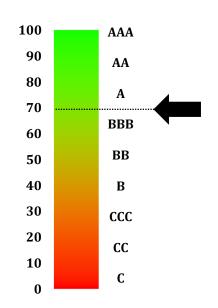






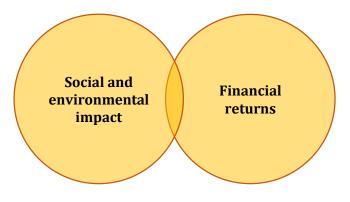
What is an ESG rating?

A measure of how well an entity manages its exposure to environmental, social and governance risks and opportunities.

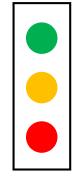


What are the benefits?





For the rated entity



Signal for investors and consumers

Data Input Data Analysis Preliminary Score Calculation Final Score Calculation

Sources of information:

- Rated entity
- Government
- Media
- Other public sources

Data Input Data Analysis **Current and potential exposures** Policies in place and level of reporting Performance shown by empirical evidence

Final Score Calculation

Preliminary Score Calculation

Data Input

Data Analysis

Preliminary Score Calculation

Final Score Calculation

E

Current and potential exposures

Outstanding carbon emissions.

Policies in place and level of reporting

The entity has solid environmental protection regulations/laws in place and CO2 emission levels are periodically reported.

Performance shown by empirical evidence

The entity has reduced carbon intenstity by 4%.

Data Input

Data Analysis

Preliminary Score Calculation

Final Score Calculation

E

Current and potential exposures

Labour security.

Policies in place and level of reporting

The entity has internal policies which guarantee the health and safety in the work environment and internally report any accidents in a periodical manner.

Performance shown by empirical evidence

There is no evidence of accidents in the workplace.

Data Input

Data Analysis

Preliminary Score Calculation

Final Score Calculation

E

Current and potential exposures

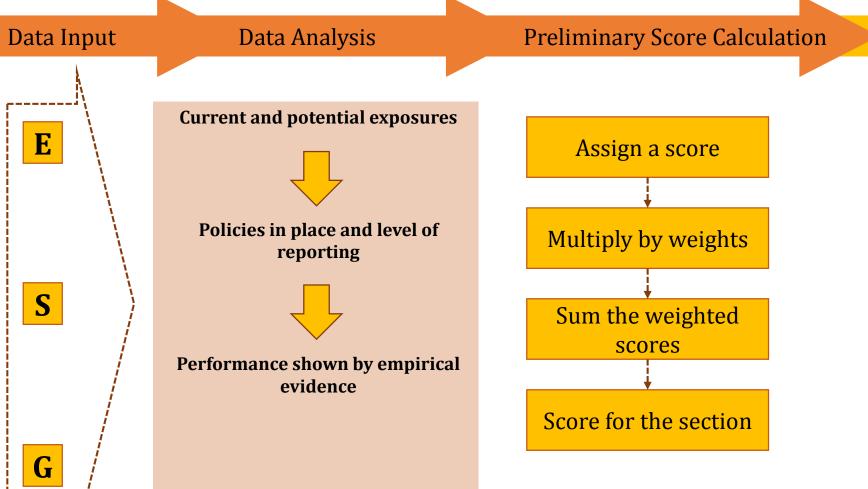
Corruption.

Policies in place and level of reporting

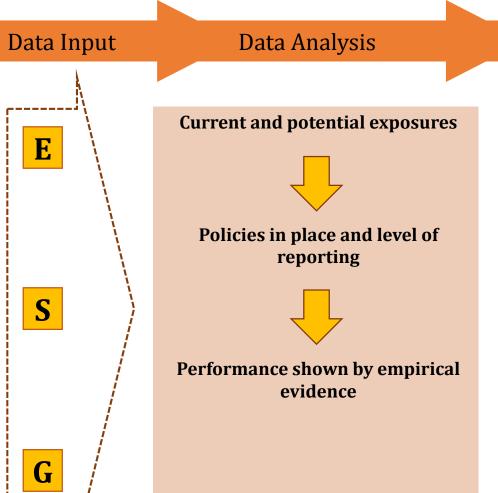
The entity has a strong anti-corruption and compliance policies.

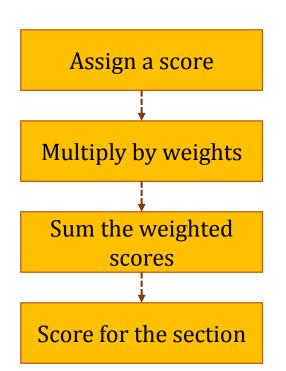
Performance shown by empirical evidence

The entity is not under investigation for corruption, bribery or any other type of fraud.



Final Score Calculation

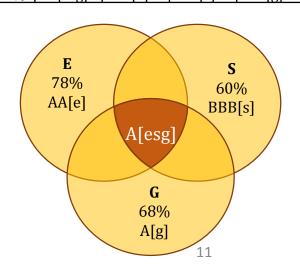




Preliminary Score Calculation

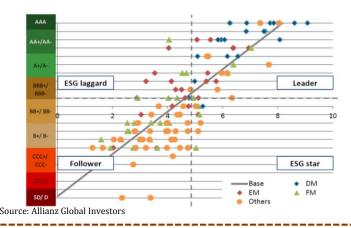
	•			
Score	ESG	E	S	G
89 - 100%	AAA[esg]	AAA[e]	AAA[s]	AAA[g]
78 - 89%	AA[esg]	AA[e]	AA[s]	AA[g]
67 - 78%	A[esg]	A[e]	A[s]	A[g]
56 - 67%	BBB[esg]	BBB[e]	BBB[s]	BBB[g]
44 - 56%	BB[esg]	BB[e]	BB[s]	BB[g]
33 - 44%	B[esg]	B[e]	B[s]	B[g]
22 - 33%	CCC[esg]	CCC[e]	CCC[s]	CCC[g]
11 - 22%	CC[esg]	CC[e]	CC[s]	CC[g]
0 - 11%	C[esg]	C[e]	C[s]	C[g]

Final Score Calculation

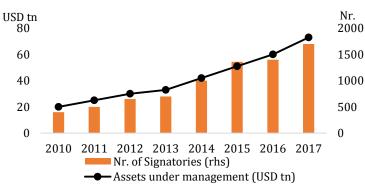


Why an ESG rating?

ESG and Credit ratings not correlated



UNPRI Signatories

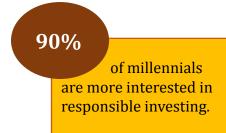


Positive overall performance

- Corporate financial performance
- Better returns on bonds
- Lower cost of capital
- Better operational performance
- Less volatile

Source: Deutsche Bank, Morgan Stanley Institute for Responsible Investing, University of Oxford

Demand



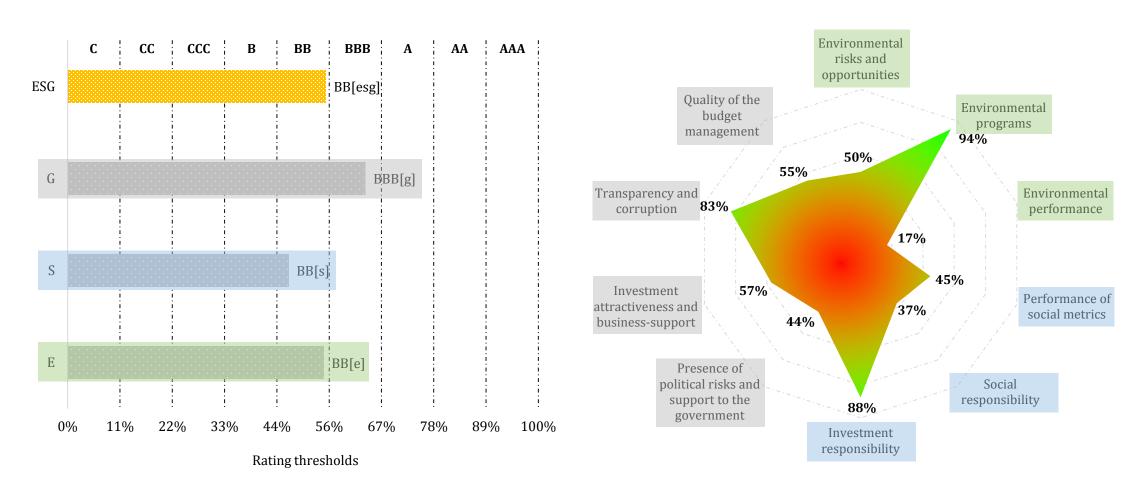
of assets under management could be influenced by some sort of ESG motivated policy or regulation.

60%

12

ESG assessment of the Chuvash Republic

Snapshot of the ESG rating and factors



\Box \simeq

Sample Report

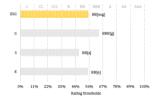


Rating-Agentur Expert RA GmbH assigned BB[esg] ESG rating to the Chuvash Republic, which means that the management of ESG related risks and opportunities is of sufficient level. The ratings of each section are as follows: BB[e] environmental rating, $BB[s] \ social \ rating \ and \ BBB[g] \ governance \ rating. \ The \ region \ has \ a \ strong \ environmental \ policy \ which \ is \ based \ on \ the \ presence$ of a comprehensive long-term environmental program as well as the existence of a public body responsible for this policy. At the same time, the environmental risks assessment was restrained by a moderately low level of environmental protection programs financing. The assessment of social risks was positively supported by the presence of different social programs and socially oriented PPP-projects, while poor security metrics have an adverse effect on this section. The assessment of the regional governance was positively supported by sufficient level of transparency, presence of anti-corruption procedures and satisfactory level of the self-declarations disclosure, while moderately low quality of the fiscal budget planning, related to the systematic risks of the Russian budget system in 2016, affected the assessment negatively.

ESG scorecard

Section	Sub-section	Weight	Score
	Environmental risks and opportunities	11,1%	50%
Environment	Environmental programmes	11,1%	9496
	Environmental performance	11,1%	17%
	Performance of social metrics	19,0%	45%
Social	Social responsibility	9,5%	37%
	Investment responsibility	4,8%	88%
	Presence of political risks and support to the government	5,6%	44%
Governance	Investment attractiveness and business-support	5,6%	57%
	Transparency and corruption	11,1%	83%
	Quality of the budget management	11,1%	55%

ESG score and rating per section



The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or indirectly voilated to the conclusions and applications contained in the Agency's Research Reports.

This Report represents the opinion of Rading-Agentur Deport 124 Gindler and not a recommendation to buy, hold or sell any securities or assets, or to make

RA DE EXPERT RA

Page 2

Sub-factor	Score
Environmental risks	78%
Environmental opportunities	3196
Environmental policy implementation and transparency	94%
Budget expenditure and efficiency	17%

Presence of a detailed and comprehensive long-term environmental policy program and a public body responsible for the policy

Chuvash government has a well-defined environmental policy program, called "Development of the natural resources potential and environmental safety for 2014-2020" that covers all key environmental risks of the region: environmental safety; protection and reproduction of objects of fauna; development of water management complex; forestry and handling of waste. This program includes detailed measures, efficiency metrics, responsible bodies and sources of financing. In addition, the regional government has a body responsible for the environmental policy - the Ministry of Natural Resources and Ecology of the Chuvash Republic, which can be considered as a very transparent structure.

Exposure to several natural and human related ecological risks, which are partly mitigated by the authorities' actions The Chuvash Republic is exposed to various natural ecological risks (soil degradation, fires and floods) as well as risks originated from human activity (deforestation, pesticides and fertilizers pollution, vehicular air pollution and others). However, most of these risks are partially mitigated by different actions implemented by the regional authorities, such as strengthening the control and building of new facilities (flooding protection constructions, new national parks and wastewater treatment

Moderate level of involvement in environmental opportunities The region uses a limited number of environmental opportunities, such as hydroelectricity, energy efficient street lighting and more ecological fuel for public transport, while other environmental opportunities such as wind power or biofuels are also available.

Moderately low level of environmental protection programs

According to the 2016 results, only 0,11% of the total consolidated budget expenditures were attributed to the "Environmental protection" section, as compared to 0,22% on average for all Russian regions. Moreover, the risks of insufficient financing were recognized as key risks for the successful implementation of the environmental policy program, while only 15% of the program costs were planned to be financed by the Republican budget. In addition, the region has limited involvement in internationally recognized ecological programs.

List of major controversies

Controversy	Type of factor	
No controversies were found	Environmental	

Document
The Agency disclains all liability in connection with any consequence, interpretations, conclusions, recommendations and other actions directly or indirectly related to the conclusions and against contained in the Agency's Research Reports.
This Report represents the opinion of Reading—Agents Deport Rolled and in one economicalision to buy, hold or sell any securities or assets, or to make

\Box \simeq

Sample Report



Page 4

Sub-factor	Score
Stability of the government	50%
Support to the government	38%
Investment attractiveness / business-climate	50%
Industrial parks and free economic zones	67%
Transparency of the regional government in the Internet	7396
Regulatory Impact Assessment (RIA) practices OR Similar practices	96%
Anti-corruption commission / department in the regional administration	71%
Characteristics of self-declarations of the employees of administration bodies	87%
Quality of the fiscal budget planning	29%
Quality of the fiscal budget execution	50%
Quality of the debt management	72%
Tax deductions and credits	100%

Sufficient level of regional government transparency and well developed regulatory impact assessment procedures

The regional government discloses the key information about the government decisions, meetings and vacancies on time on its websites. However, the region has a significant room for improvement in terms of structure of its websites (currently the structure is decentralized). language options (currently only Russian and Chuvash) as well as deepness of information disclosure. In addition, the region has acting system of regulatory impact assessment (RIA) with the special web-site including function of comments and official public body responsible for this process. However, the procedure can be improved which is evidenced by the 24th position in the 2016 rating of RIA development in Russian regions, prepared by the Ministry of economic development of the Russian

Presence of anti-corruption procedures and satisfactory level of the self-declarations disclosure

Commission for the coordination of anti-corruption activities in the Chuvash Republic has been in place since 2015, conducting meetings at least every quarter and disclosing the minutes in the internet. Also, all public bodies of the government have up to date self-declarations disclosed online and containing the actual information about the income and property of employees and their families. However, the efficiency of the anti-corruption policy can be improved due to the presence of corruption scandals in the region (mostly on the local level).

Various tax reliefs for investors complemented by the assessment of their efficiency

The Chuvash government provides reliefs for corporate tax (reduced tax rate), property tax (reduction of the amount of tax payables and reduced tax rate), transport tax and the special taxes for individual entrepreneurs. In addition, the government has yearly publically available report on efficiency on provided tax reliefs in the region

Moderate level of political stability and political support

The current governor of the region was appointed in June 2010, and then elected with more than 65% of votes at the election in September 2015. At the same time, this factor was affected by the moderate position of the head of the region in the independent political science ranking.

Medium level of investment attractiveness

According to the Rating of investment attractiveness from RAEX-Analytics for 2016, the Chuvash Republic was attributed to the group 3B1 (reduced potential - moderate risk), same as most of Russian regions. In addition, investment attractiveness of the region is limited by the presence of only one acting industrial park and absence of acting special federal economic zones. However, in the short-run the assessment can be positively affected by the building of new industrial parks (currently in the capital of the region there are two industrial parks under construction), as well as creation the new "territory of advanced social and economic development" in one of the towns of the region.

The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or indirectly related to the conclusions and opinions contained in the Agency's Research Reports.

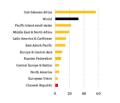
This Report represents the opinion of Rating-Agentha Expert R Gindle I and not a recommendation to buy, hold or sell any securities or assets, or to make



Page 3

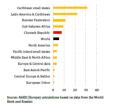
Sub-factor	Score
Social benefits and social security functions	75%
Education	40%
Health care system	63%
Security	0%
Socially responsible industry	23%
Socially responsible programmes	58%
PPP Investment	88%

Graph 1: Infant mortality rate



Source: RAIX (Burope) calculations based on data from the World

Graph 2: No. of murders per 100 th people



Very low level of infant mortality rate

Chuvash Republic has a very low level of infant mortality rate as compared to national and international levels: 3.2 pro mille in the Republic in 2015 as compared to 6 pro mille on average in Russia and 31,7 pro mille in the World (see graph 1).

 Variety of social programs and social oriented PPP-projects The majority of the government-financed programs are socially oriented.

In addition, the government is involved in several PPP-projects in the area of local utilities, such as water and heating supply facilities.

Elevated levels of public spending on social support per capita and poverty levels in national terms

The share of population with a net personal income below the national minimum in the Chuvash Republic was above 18% as of the end 2016, as compared to 14% country average. At the same time, the level of spending on social policy was equal to RUB 11.2 th in 2016 (adjusted for the cost of life), which is slightly above the median level for Russian regions.

Moderate level of education metrics

The region is characterized by a moderate share of employed people with higher education as compared to the national peers (29,3% against 33,5% for country average), as well as an acceptable amount of spending on education per capita (RUB 14,1 th as compared to RUB 17,6 th country average).

Significant room for improvement of investment policy in terms of attracting social responsible industries

Despite the fact that significant part of investment projects in the region are socially oriented, and the major part of measures from investment strategy of the region are also socially related, the region has a significant room for improvement of investment policy positioning in order to attract internationally recognized socially responsible industries. In particular, the industry priorities of the investment strategy can be supplemented by more social responsible industries, as well as tax reliefs for the social responsible investors can be highlighted as key investment advantages of

Poor security metrics

The Chuvash Republic has an elevated number of murders per 100 th people, which stood at 7,9 in 2015 as compared to a 5,3 World average (see graph 2). In addition, the region occupied only the 69th place by total amount of spending on national security per capita in 2016: RUB 0,3 th as compared to a RUB 0,8 th average for all Russian regions.

Moderately low level of spending on health care system

The region occupied the 79th place by total amount of spending on the health care system per capita in 2016; RUB 2,7 th as compared to a RUB 8,9 th average for all Russian regions.

List of major controversies

Controversy	Type of factor	
No controversies were found	Social	

The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or

indirectly related to the conclusions and opinions contained in the Agency's Research Reports.

This Report represents the opinion of Rating-Agentur Expert R4 GmbH and is not a recommendation to buy, hold or sell any securities or assets, or to make

Sample Report



Page | 5

Satisfactory quality of fiscal budget execution and debt management. The quality of fiscal budget execution and debt management in the Chuvash Republic was supported by the absence of overdue accounts payable and debt over the last years, low share of short-term debt and presence of internal audit for the budget executors. However, the assessment was restrained by the moderately high deviation of the amount of budget spending in the 4Q 2016 from the average amount during 1-3Q of the year, as well as lack of experience in bond issuance during the last 3 years (the latest issuance of bonds was performed in 2013).

Moderately low quality of fiscal budget planning, related to the systematic risks of the federal government's policy in 2016
The quality of the fiscal budget planning in the region was limited by the systematic risks of the Russian budget policy in 2016, expressed in the poor planning by the federal government in regard of distribution of transfers to the regions within the year. This was reflected for the Chuvash Republic in the moderately high difference between planned and executed fiscal budget metrics in 2016; the total amount of revenues and expenditures exceeded the initially planned figures by 28,89% and 15,5% respectively. In addition, the fiscal budget plan was revised four times

during the last year. Both factors were consequences of the poorly planned schedule of federal transfers' distribution in 2016. At the same time, the region had on-time approved fiscal plan for 2016 and no liquidity gaps during the year, which gave some support to the end-assessment of this factor.

List of major controversies

Controversy	Type of factor	ı
No controversies were found	Governance	ı
Source: RAEX (Europe) calculations based on data from the government of the Chuvash Republic, Ministry of finance of the Russian Federation, Ministry of economic development of public sources of information.	f the Russian Federation,	



Page 6

ute's summary:

The rating committee for SEX rating of the Churvan Republic was held on 28 September 2017. The quorum for the rating committee was present. After the responsible sevent presented the factor, which influenced the rating assessment, the members of the committee expressed before opinions and suggestions within the framework of the SEX methodology for regions. The chairman of the rating committee ensured that every member of the committee expressed his/her opinion before proceeding to the voting.

The following methodology was used for the rating assertment. Methodology for Assigning SCG Ratings to regions — Short Public Version (from September 2017) can be found under the following this https://assemptus/lifes/implicology/Publicology/SCG_Recology/Schedology/SCG_Recology/SCG_Recology/SCG_Recology/Schedology/SCG_Recolog

These rating is solicited. The rated entity participated in the rating process.

Main sources of information: The Government of the Chuvash Republic, Ministry of finance of the Russian Federation, Ministry of Recommic development of the Russian Federation, Ministry of Natural Resources and Environment of the Russian Federation, public sources of information.

uits of the Rating

During the rating assignment process. Rating, Agambur Expert RA Corolis (the Agams) used publicly available information that was considered to be reliable, complete and not believed. The responsible expert performs the rating assessment of the region with information considered as the most reliable and up to date in accordance to the overall position of the region and the Agemcy's internal criteria for selecting data providers. The information and data used for this specific assessment can be considered not a stifficient quality.

Regulatory use

ESG ratings are not considered as credit ratings within the framework of Regulation (EC) No $\,1060/2009$.

Conflict of interes

The responsible expert was neither influenced nor biased by third parties during the rating assessment. All employees involved in the rating assessment and revision of the rated entity have reported absence of conflicts of interests before initiation of the rating process.

 $Rating-Agentur\ Expert\ RA\ GmbH\ is\ completely\ independent\ from\ the\ activities\ of\ other\ agencies\ of\ the\ RAEX\ group.$

Risk warning

The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or indirectly related to the conclusions and opinions contained in the Agency's report.

This report represents the opinion of Rating-Agentur Expert RA GmbH and is not a recommendation to buy, hold or sell any securities or assets, or to make investment decisions.

Office responsible for preparing the rating

The office responsible for the preparation and issuance of this rating is the office of Rating-Agentur Expert RA GmbH in Frankfurt am Main, Germany.

Rating-Agentur Expert RA GmbH is a credit rating agency established in Germany and therefore shall comply with all applicable regulations currently in force in the European Union.

The European Securities and Markets Authority (ESMA), the EU s direct supervisor of credit rating agencies (CRAs), has registered Rating-Agentur Expert RA GmbH as a CRA under Regilation (EC) No 1060/2009 of the European Parliament and of the Council of 16 September 2009 on credit rating agencies, with effect from 10 Secuenber 2015.

Rating-Agentur Expert RA GmbH applies the Code of Conduct Fundamentals for credit rating agencies issued by the International Organization of Securities Commissions (IOSCO Code) and includes the basic principles of IOSCO Code in its Code of Conduct.

The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or indirectly related to the conclusions and opinions contained in the Agency's Research Reports.

This Report represents the opinion of Rafing-Agentur Paper 1A8 Chmidt and is not a recommendation to buy, hold or sell any securities or assets, or to make

Disclaimer

The Agency disclaims all liability in connection with any consequences, interpretations, conclusions, recommendations and other actions directly or indirectly volated to the conclusions and opinions contained in the Agency's Research Reports.

This Report represents the opinion of Rating-Agentar Depart As Gmild and not a recommendation to buy, hold or sell any securities or essets, or to make

Thank you for your attention!

Hector Alvarez
Rating Associate
Rating-Agentur Expert RA GmbH
Walter-Kolb-Straße 9-11, 60594 Frankfurt am Main.
Tel. +49 69 3085 4500 ext. 1213
www.raexpert.eu
alvarez@raexpert.eu