News Release



Japan Credit Rating Agency, Ltd.

22-D-0643 September 5, 2022

Japan Credit Rating Agency, Ltd. (JCR) announces the following credit rating.

JCR's Rating Review of Two Major Oil Distributors

Issuer	Code	Long-term Issuer Rating		Outlook
Idemitsu Kosan Co., Ltd.	5019	<affirmation> A+</affirmation>		Stable
ENEOS Holdings, Inc.	5020	<affirmation></affirmation>	AA-	Stable

Issuer	Code	СР	
Idemitsu Kosan Co., Ltd.	5019	<affirmation></affirmation>	J-1
ENEOS Holdings, Inc.	5020	<affirmation></affirmation>	J-1+

(See page 3 and beyond for details about ratings on individual bonds, etc.)

Rating Viewpoints

- (1) Having reviewed the ratings for two major oil distributors, Idemitsu Kosan Co., Ltd. ("Idemitsu Kosan") and ENEOS Holdings, Inc. ("ENEOS HD") (collectively, the "Companies"), JCR affirmed the ratings for both companies and retained the Stable outlook.
- (2) The Companies' performance is robust and continues to be supported by stable domestic margins on petroleum products. Not only profits from the oil exploration and production business have increased with a rise in crude oil prices, but also the petroleum business' results are improving thanks to time lag effects for the margins and positive inventory effects. Moreover, growing profits from the metals business and the coal business are contributing to business improvement for ENEOS HD and Idemitsu Kosan, respectively. While the impact of a decline in domestic demand in the long run is feared, the Companies' performance will likely remain steady for the near future. On the financial front, the improvement of the financial structure has been stagnant due to an increase in investments aimed at decarbonization, expansion of returns to shareholders, etc., but JCR assumes that financial soundness can still be maintained at around the current level, by and large.
- (3) The Companies are both implementing various measures to achieve carbon neutrality and are making progress in many areas, including the construction of a hydrogen and ammonia supply chain, development of sustainable aviation fuels, strengthening of the SS network's competitiveness, expansion of the functional materials business and enhancement of the renewable energy business. Although these measures can hardly be expected to grow into earnings sources in a short period of time, the Companies should implement them as an alternative to downsizing the petroleum products business over the long term to expand profits. Looking ahead, JCR will closely watch progress in these measures and status of the new initiatives taken, as well as how far profit growth has been achieved in each business segment.
- (4) The Companies are also steadily reviewing their production and supply systems. Following ENEOS HD's announcement to terminate production at Wakayama Refinery by October 2023, Idemitsu Kosan announced the termination of refinery operations at Seibu Oil Company Co., Ltd.'s Yamaguchi Refinery by March 2024. As such, moves toward decarbonization are gaining momentum, while demand for business travel is expected to decline due to the spread of teleworking and web conferences. Moreover, although demand has not been affected drastically thanks in part to the government's subsidies, soaring crude oil prices suggest that demand may, as one possibility, decline faster going forward. In order to maintain supply-demand balance for petroleum products over the medium and longer term, the Companies must continue their efforts to reduce refining capacities.
- (5) In terms of finances, JCR will monitor whether the Companies can maintain their soundness while achieving balance between investments and shareholder returns. Because oil distributors' performance tends to be affected by fluctuations in crude oil prices, JCR considers it vital for the



Companies to increase equity capital to prepare for future business downturns. The Companies are also expanding their investments aimed at decarbonization, which means that they need to maintain the good financial base to ensure financing capabilities.

Rationale

Issuer: Idemitsu Kosan Co., Ltd.

<Affirmation>

Long-term Issuer Rating: A+
Outlook: Stable
Bonds: A+
CP: J-1

- (1) Idemitsu Kosan has approximately 30% share for domestic fuel oil sales, which is second largest after the ENEOS Group. It has strong business bases for fuel oils and basic chemicals as the core businesses and also for resource development for oil and coal. It also operates, among others, the high-performance materials segment for lubricants, electronic materials, etc. and the power and renewable energy segment for power generation and the provision of solar power generation systems.
- (2) Idemitsu Kosan is faring well on the back of rising resource prices. Equity capital has increased thanks to the high profit level, and the financial structure has also improved. On the other hand, while profitability is improving for Nghi Son Refinery in Vietnam, there still remains some financial burden, and, given, among others, that refinery utilization rate dropped temporarily in the January to March period of 2022, ongoing close attention must be paid to how the situation is developing. Moreover, the power and renewable energy segment remains in deficit, and profit improvement is also slow for the basic chemicals and functional materials segments. Based on the above, JCR affirmed the ratings on Idemitsu Kosan and retained the Stable outlook.
- (3) Ordinary income (excluding inventory valuation effect) for FY2022 is expected to grow 15.0% over the year to 260 billion yen, the third consecutive increase, thanks mainly to profit growth in the resources segment as a result of a rise in coal prices. Even though attention must be paid to trends in resource prices, market prices of overseas products, etc. into FY2023 and beyond, Idemitsu Kosan's performance excluding inventory valuation effect will probably remain firm, underpinned by stable domestic margins on petroleum products.
- (4) Financial structure has improved slightly, as indicated by equity ratio coming to 30.5% as of June 30, 2022 as opposed to 29.1% at the end of FY2020. While interest-bearing debt increased with a rise in purchasing and selling prices, equity capital grew to a greater extent with profit accumulation. Even though constant investments and high returns to shareholders are expected to continue into the future, Idemitsu Kosan will likely manage its finances based on certain discipline and thus maintain the current levels.

Issuer: ENEOS Holdings, Inc.

<Affirmation>

Long-term Issuer Rating: AA-Outlook: Stable Bonds: AA-Bonds (Dated subordinated bonds):

Shelf Registration: Preliminary AA-

CP: J-1+

(1) ENEOS HD is the holding company of the ENEOS Group (the "Group"), which engages primarily in the energy business centering on petroleum refining & marketing and petrochemicals and also in the oil and natural gas exploration and production business and the metals business covering all areas from copper mine development to smelting/refining, manufacturing of cutting-edge products and recycling. It has approximately 50% share for domestic fuel oil sales in the core petroleum refining and marketing business. As it is responsible for the formulation of management policies, allocation of management resources, business management, etc. for the Group, thus having strong unity with the Group, JCR reflects the Group's creditworthiness in ENEOS HD's ratings.

Α

(2) As Japan's largest oil distributor, ENEOS HD has a solid business base and high cash flow generation capacity. While profits from petroleum products support its performance, those from the oil and natural gas exploration and production business and the metals business are growing in recent years with a



rise in crude oil and copper prices. In the metals business, the advanced materials and smelting/recycling businesses are robust. However, the petrochemicals and electric power businesses remain in deficit and require attention, albeit limited impact at this point. On the financial front, ENEOS HD intends to make investments while observing financial discipline, and JCR thus assumes that financial soundness will be maintained. Based on the above, JCR affirmed the ratings on ENEOS HD and retained the Stable outlook.

- (3) Operating income (excluding inventory valuation effect) for FY2022 is expected to drop 18.2% over the year to 340 billion yen, the first fall in three years, primarily in the absence of positive time lag effects for the margins on petroleum products and gains related to the sale of an oil exploration and production business in the U.K., which helped push up FY2021's performance. Even though attention must be paid to trends in resource prices, market prices of overseas products, etc. into FY2023 and beyond, ENEOS HD's performance excluding inventory valuation effect will probably remain firm, underpinned by stable domestic margins on petroleum products, a rise in demand for advanced materials and so forth.
- (4) Financial structure has improved slightly, as indicated by the ratio of equity attributable to owners of the parent (after evaluation of equity content of subordinated bonds) standing at 29.8% as of June 30, 2022 as opposed to 28.9% at the end of FY2020. Given that aggressive investments in growth businesses, etc. and high returns to shareholders are expected to continue into the future, the financial structure is hardly likely to improve drastically. Yet, it will likely be kept at around the current level as ENEOS HD conducts financial management by observing some discipline through the subordinated bond financing, an increase in asset sales, etc.

Hiroyuki Chikusa, Masayoshi Mizukawa

R	a	ti	in	a
, ,	u	u	,,	м

Issuer: Idemitsu Kosan Co., Ltd.

	cc.					
<a< td=""><td>ĦΙ</td><td>rn</td><td>റമ</td><td>ŤΙ</td><td>a</td><td>n></td></a<>	ĦΙ	rn	റമ	ŤΙ	a	n>

Long-term Issuer Rating: A+	Outlook: Stabl	е			
Issue	Amount (bn)	Issue Date	Due Date	Coupon	Rating
Bonds no. 5	JPY 10	Dec. 5, 2017	Dec. 5, 2022	0.200%	A+
Bonds no. 6	JPY 10	Sept. 19, 2018	Sept. 19, 2025	0.270%	A+
Bonds no. 7	JPY 10	Sept. 19, 2018	Sept. 19, 2028	0.414%	A+
CP: J-1					

Maximum: JPY 750 billion

Issuer: ENEOS Holdings, Inc.

<affi< td=""><td>rma</td><td>tion</td><td>•</td></affi<>	rma	tion	•
7 1111	11114		

Saue	Long-term Issuer Rating: AA-	Outlook: Stab	ole			
Bonds no. 2 JPY 10 July 16, 2020 July 16, 2030 0.370% AA-Bonds no. 3 (green bonds) JPY 15 Dec. 1, 2020 Dec. 1, 2023 0.020% AA-Bonds no. 4 (transition-linked bonds) JPY 85 June 15, 2022 June 15, 2032 0.834% AA-Bonds no. 5 (transition-linked bonds) JPY 15 June 15, 2022 June 13, 2042 1.336% AA-Bonds no. 2* JPY 10 Aug. 3, 2017 Aug. 3, 2027 0.405% AA-Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA-Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA-Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA-Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA-Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA-Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Issue	Amount (bn)	Issue Date	Due Date	Coupon	Rating
Bonds no. 3 (green bonds) JPY 15 Dec. 1, 2020 Dec. 1, 2023 0.020% AA-Bonds no. 4 (transition-linked bonds) JPY 85 June 15, 2022 June 15, 2032 0.834% AA-Bonds no. 5 (transition-linked bonds) JPY 15 June 15, 2022 June 13, 2042 1.336% AA-Bonds no. 2* JPY 10 Aug. 3, 2017 Aug. 3, 2027 0.405% AA-Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA-Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA-Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA-Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA-Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA-Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 1	JPY 10	July 16, 2020	July 16, 2025	0.180%	AA-
Bonds no. 4 (transition-linked bonds) JPY 85 June 15, 2022 June 15, 2032 0.834% AA- Bonds no. 5 (transition-linked bonds) JPY 15 June 15, 2022 June 13, 2042 1.336% AA- Bonds no. 2* JPY 10 Aug. 3, 2017 Aug. 3, 2027 0.405% AA- Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA- Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA- Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA- Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA- Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA- Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA- Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA- Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 2	JPY 10	July 16, 2020	July 16, 2030	0.370%	AA-
JPY 85	Bonds no. 3 (green bonds)	JPY 15	Dec. 1, 2020	Dec. 1, 2023	0.020%	AA-
Bonds no. 5 (transition-linked bonds) JPY 15 June 15, 2022 June 13, 2042 1.336% AA- Bonds no. 2* JPY 10 Aug. 3, 2017 Aug. 3, 2027 0.405% AA- Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA- Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA- Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA- Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA- Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA- Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA- Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA- Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 4 (transition-linked	bonds)				
JPY 15		JPY 85	June 15, 2022	June 15, 2032	0.834%	AA-
Bonds no. 2* JPY 10 Aug. 3, 2017 Aug. 3, 2027 0.405% AA-Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA-Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA-Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA-Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA-Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA-Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 5 (transition-linked	bonds)				
Bonds no. 4** JPY 30 Dec. 14, 2012 Dec. 14, 2022 1.145% AA-Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA-Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA-Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA-Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA-Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds		JPY 15	June 15, 2022	June 13, 2042	1.336%	AA-
Bonds no. 6** JPY 15 July 19, 2013 July 19, 2023 1.119% AA-Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA-Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA-Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA-Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 2*	JPY 10	Aug. 3, 2017	Aug. 3, 2027	0.405%	AA-
Bonds no. 9** JPY 15 June 4, 2014 June 4, 2024 0.820% AA- Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA- Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA- Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA- Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA- Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds June 15, 2081 (Note 2) A	Bonds no. 4**	JPY 30	Dec. 14, 2012	Dec. 14, 2022	1.145%	AA-
Bonds no. 11** JPY 15 Dec. 9, 2014 Dec. 9, 2024 0.715% AA- Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA- Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA- Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA- Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds June 15, 2081 (Note 2) A	Bonds no. 6**	JPY 15	July 19, 2013	July 19, 2023	1.119%	AA-
Bonds no. 13** JPY 10 July 28, 2016 July 28, 2026 0.300% AA- Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA- Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA- Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds A A	Bonds no. 9**	JPY 15	June 4, 2014	June 4, 2024	0.820%	AA-
Bonds no. 14** JPY 10 July 28, 2016 July 28, 2036 0.830% AA-Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 11**	JPY 15	Dec. 9, 2014	Dec. 9, 2024	0.715%	AA-
Bonds no. 3*** JPY 10 Dec. 5, 2012 Dec. 5, 2022 1.222% AA-Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA-1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 13**	JPY 10	July 28, 2016	July 28, 2026	0.300%	AA-
Bonds no. 7*** JPY 10 Oct. 23, 2014 Oct. 23, 2024 0.925% AA- 1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 14**	JPY 10	July 28, 2016	July 28, 2036	0.830%	AA-
1st Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 3***	JPY 10	Dec. 5, 2012	Dec. 5, 2022	1.222%	AA-
JPY100 June 15, 2021 June 15, 2081 (Note 1) A 2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	Bonds no. 7***	JPY 10	Oct. 23, 2014	Oct. 23, 2024	0.925%	AA-
2nd Series Deferrable Interest and Callable Unsecured Subordinated Bonds JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	1st Series Deferrable Interest	and Callable Uns	secured Subordinate	ed Bonds		
JPY100 June 15, 2021 June 15, 2081 (Note 2) A 3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds		JPY100	June 15, 2021	June 15, 2081	(Note 1)	Α
3rd Series Deferrable Interest and Callable Unsecured Subordinated Bonds	2nd Series Deferrable Interest	and Callable Un	secured Subordinat	ted Bonds		
		JPY100	June 15, 2021	June 15, 2081	(Note 2)	Α
JPY100 June 15, 2021 June 15, 2081 (Note 3) A	3rd Series Deferrable Interest	and Callable Uns	secured Subordinate	ed Bonds		
		JPY100	June 15, 2021	June 15, 2081	(Note 3)	Α



- * Bonds of former JXTG Holdings, Inc.
- ** Bonds of former JX Holdings, Inc.
- *** Bonds of former TonenGeneral Sekiyu K.K.

Notes:

- 1. 0.70% on interest payment dates from June 16, 2021 to and including June 15, 2026. 6M Euro Yen LIBOR + 0.70% on interest payment dates from June 16, 2026 to and including June 15, 2031. 6M Euro Yen LIBOR + 0.95% on interest payment dates from June 16, 2031 to and including June 15, 2046. 6M Euro Yen LIBOR + 1.70% for interest payment dates after that date.
- 2. 0.97% on interest payment dates from June 16, 2021 to and including June 15, 2031. 6M Euro Yen LIBOR + 1.10% on interest payment dates from June 16, 2031 to and including June 15, 2051. 6M Euro Yen LIBOR + 1.85% on interest payment dates after that date.
- 3. 1.31% on interest payment dates from June 16, 2021 to and including June 15, 2036. 6M Euro Yen LIBOR + 1.30% on interest payment dates from June 16, 2036 to and including June 15, 2056. 6M Euro Yen LIBOR + 2.05% on interest payment dates after that date.

Shelf Registration: Preliminary AA-

Maximum: JPY 500 billion

Valid: two years effective from May 20, 2021

CP: J-1+

Maximum: JPY 1,150 billion

Rating Assignment Date: August 31, 2022

The assumptions for the credit ratings and the definitions of the rating symbols are published as "Types of Credit Ratings and Definitions of Rating Symbols" (January 6, 2014) in Information about JCR Ratings on JCR's website (https://www.jcr.co.jp/en/).

Outline of the rating methodology is shown as "JCR's Rating Methodology" (November 7, 2014), "Petroleum" (May 29, 2020), "Nonferrous Metals" (July 13, 2011), "Rating Methodology for a Holding Company" (January 26, 2015), "Rating Viewpoints on Pure Holding Companies (Domestic Industrial Corporations)" (July 1, 2003) and "Ratings of Hybrid Securities" (September 10, 2012) in Information about JCR Ratings on JCR's website (https://www.jcr.co.jp/en/).

A preliminary rating is a credit rating assigned as a preliminary evaluation while material terms for issue to be rated are not yet finalized. When the issuing terms are finalized, JCR will confirm them and will assign a credit rating anew. The rating level of the final rating may be different from that of the preliminary rating, depending on the final content of the terms, etc.

Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan Tel. +81 3 3544 7013, Fax. +81 3 3544 7026

Information herein has been obtained by JCR from the issuers and other sources believed to be accurate and reliable. However, because of the possibility of human or mechanical error as well as other factors, JCR makes no representation or warranty, express or implied, as to accuracy, results, adequacy, timeliness, completeness or merchantability, or fitness for any particular purpose, with respect to any such information, and is not responsible for any special, indirect, incidental or consequential damages of any kind caused by the use of any such information, including but not limited to, lost opportunity or lost money, whether in contract, tort, strict liability or otherwise, and whether such damages are foresceable or unforesceable. JCR's ratings and credit assessments are statements of JCR's current and comprehensive opinion regarding redemption possibility, etc. of financial products, and not statements of opinion regarding any risk other than credit risk, such as market liquidity risk or price fluctuation risk. JCR's ratings and credit assessments are statements of opinion, and not statements of fact as to credit risk decisions or recommendations regarding decisions to purchase, sell or hold any securities such as individual bonds or commercial paper. The ratings and credit assessments may be changed, suspended or withdrawn as a result of changes in or unavailability of information as well as other factors. JCR receives a rating fee paid by issuers for conducting rating services in principle. JCR retains all rights pertaining to this document, including JCR's rating data, is prohibited, whether or not wholly or partly, without prior consent of JCR.

JCR is registered as a "Nationally Recognized Statistical Rating Organization" with the U.S. Securities and Exchange Commission with respect to the following four classes. (1) Financial institutions, brokers and dealers, (2) Insurance Companies, (3) Corporate Issuers, (4) Issuers of government securities, municipal securities and foreign government securities.

JCR publishes its press releases regarding the rating actions both in Japanese and in English on the same day. In case that it takes time to translate rating rationale, JCR may publicize the summary version, which will be replaced by the full translated version within three business days. (Regarding Structured Finance products, JCR only publicize the summary version in English.)



INFORMATION DISCLOSURE FORM

Japan Credit Rating Agency, Ltd.

Disclosure Required by Paragraph (a)(1)(ii) of Rule 17g-7

Issuer:	Idemitsu Kosan Co., Ltd.
Rating Publication Date:	September 5, 2022

- The Symbol, Number, or Score in the Rating Scale used to Denote Credit Rating Categories and Notches and, the Identity of the Obligor or the Identity and a Description of the Security or Money Market Instrument as Required by Paragraph (a)(1)(ii)(A) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The version of the procedure or methodology used to determine the credit rating; as Required by Paragraph (a)(1)(ii)(B) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The Main Assumptions and Principles used in Constructing the Procedures and Methodologies used to Determine the Credit Rating as Required by Paragraph (a)(1)(ii)(C) of Rule 17g-7
 - The credit rating methodology assumes, in principle, to be applied to assess the likelihood of a given debt payment in light of its issuer's condition and business environment, etc. in the relevant future. There is certain limitation, however, in the time horizon that the rating foresees.
 - The credit rating methodology assumes, in principle, that the factors posted in the below are particularly important for such likelihood to be determined, and that the rating determination is made by evaluating each of them not only quantitatively but also employing qualitative analyses.

A) Business Bases

The likelihood of a given debt payment is highly conditional to its issuer's business bases - how they can be maintained/ expanded into the future and thereby secure earnings and cash flows in adequacy and in a sustainable way.

B) Financial Grounds and Asset Quality

The likelihood of debt payment is highly dependent on the degree of the issuer's indebtedness and loss absorption capacity in terms of equity capital. Also notable is that a financial institution might see a significant loss of financial grounds as a result of changes in value of the assets under its possession.

C) Liquidity Positions

The likelihood of debt payment is highly dependent on the adequacy of the issuer's cash and other sources of repayment (liquidity positions).



- D) Related Parties' Status and Stance of Support/ Assistance for the Issuer

 The likelihood of debt payment is affected one way or the other by the issuer's related parties such as parent company, subsidiary, guarantor, and the government of the issuer's business domicile, etc. by their own conditions and/ or position of support/ assistance for the issuer.
- E) Order of Seniority in Debt Payment

 The likelihood of debt payment can be different between given debts of the same issuer. The likelihood
 of debt payment for an individual debt is dependent on the issuer's discretion, and/ or its rank relative
 to other debts of the same issuer in the order of seniority in principal/ interest payment which is
 determined by design as financial product or by laws, etc.
- 4 The Potential Limitations of the Credit Rating as Required by Paragraph (a)(1)(ii)(D) of Rule 17g-7
 - The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
 - The objective of the credit rating herewith presented does not include any concerns other than the likelihood of debt payment, such as risks of price changes, market liquidity, etc.
 - The credit rating herewith presented is necessary to be reviewed along with possible changes of the issuer of rated objects in its business performance and/ or circumstances which include regulatory environment, and hence subject to possible alteration.
- 5 Information on the Uncertainty of the Credit Rating as Required by Paragraph (a)(1)(ii)(E) of Rule 17g-7
 - The information used for the determination of credit rating as herewith presented is obtained by JCR from the issuer of rated objects and other sources that JCR trusts in terms of accuracy and reliability but possibly contains errors due to human, non-human or other causes. Consequently, the credit rating determined on the grounds of such information does not constitute, explicitly or implicitly, any representation or warrant of JCR on the information itself or any consequences of its use in terms of accuracy, relevance, timeliness, wholeness, market value, or usefulness for any specific purposes.
- 6 Use of Due Diligence Services of a Third Party in Taking the Rating Action as Required by Paragraph (a)(1)(ii)(F) of Rule 17g-7
 - There is no use of any third-party due diligence service in the determination of the credit rating herewith presented.
- Use of Servicer or Remittance Reports to Conduct Surveillance of the Credit Rating Required by Paragraph (a)(1)(ii)(G) of Rule 17g-7
 - There is no use of any servicer or remittance report to conduct surveillance of the credit rating herewith presented.
- The Types of Data Relied Upon for the Purpose of Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(H) of Rule17g-7



- The information posted in the below, which includes data, is used for the determination of the credit rating herewith presented.
 - A) Audited financial statements presented by the rating stakeholders
 - B) Explanations of business performance, management plans, etc. presented by the rating stakeholders

9

Overall assessment of the Quality of Information Available and Considered in Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(l) of Rule 17g-7

- JCR holds its basic policies for securing the quality of information as a base of due diligence for the determination of credit ratings. The information used as a base for the determination of credit rating herewith presented satisfies such policies, which include the audit by an independent auditor, the publication by the issuer or some independent media or, otherwise, JCR analyst's scrutiny, etc.
- JCR sees no particular weakness in the quality of information used for the determination of the credit rating herewith presented as compared to the information used in other cases of the credit rating for comparable issuers or ratable objects.
- If the credit rating is an Indication, please see the report for Indication.

10

Information Relating to Conflicts of Interest as Required by Paragraph (a)(1)(ii)(J) of Rule 17g-7

- JCR receives payment of compensation for the determination of the credit rating herewith presented from either one of those parties who are issuer, underwriter, depositor or sponsor.
- JCR did not receive in the last fiscal year in the past payment of compensation from the same party for any kind of JCR's service other than the determination of credit rating, such as one in the ancillary business.

11

Explanation or Measure of the Potential Volatility of the Credit Rating as Required by Paragraph (a)(1)(ii)(K) of Rule 17g-7

A) Business Bases

The credit rating is subject to alteration if there is improvement or deterioration of the issuer's business bases, since its revenue, etc. may improve or deteriorate by the change in its business management policies, clients' preferences, competitive situation, or a technological innovation. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change in the business bases is large.

B) Financial Grounds and Asset Quality

The credit rating is subject to alteration if the issuer increases/ decreases its debt/ capital or vice versa and thereby makes its individual debt payment liability less or more bearable and its loss absorption capacity into the future decreased or increased. Also, the changes in the quality of asset under the issuer's holding may affect the credit rating, since such changes could raise or lower the likelihood of future loss of the issuer's financial grounds. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change in the financial grounds and/ or asset quality is large.

C) Liquidity Positions

The credit rating is subject to alteration if there is a change in the issuer's financial management policy or in the relations with fund procurement sources and the change thereby makes its liquidity positions improve or deteriorate. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.



D) Related Parties' Status and Stance of Support/ Assistance for the Issuer

The credit rating is subject to alteration if there is a change in the issuer's parent company or subsidiary, guarantor or other provider of credit enhancement, or the government of the issuer's business domicile, or other related parties' own conditions and/ or position of support/ assistance for the issuer, and the change thereby makes its business bases, financial grounds and/ or liquidity positions improve or deteriorate, and/ or making the effectiveness of guarantee and other credit enhancement improve or deteriorate. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large.

E) Order of Seniority in Debt Payment and Non-Payment Forgiven by Contract

The credit rating is subject to alteration if there is a change in the rated debt's status in the order of seniority relative to other debts caused by the improvement/ deterioration of the issuer's financial condition. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large. Also, in case of the financial products for which non-payment of interest/ principal is contractually permissible, the credit rating is subject to alteration if and when the likelihood of such non-payment is projected to increase or decrease. The resultant alteration of the credit rating could be by a notch but often as much as a few notches.

F) Rise and Fall in General Economy and Markets

The credit rating is subject to alteration if there is a rise/ fall in the general economy and/ or the markets inducing the issuer's revenues/ expenses to increase/ decrease and vice versa, etc. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is exceptionally large.

G) Various Events

The credit rating is subject to alteration on occurrence of various events, such as change in the issuer's major shareholders, M&A and other organizational change, accident, violation of the law, litigation, legal/ regulatory change, natural disaster, etc., which are unforeseeable at the time when the credit rating is determined, causing a significant change on the issuer's business bases, financial grounds, etc. The resultant alteration of the credit rating could be by a notch but more often than not as much as a few notches.

12

Information on the Content of the Credit Rating, Including the Historical Performance of the Credit Rating and the Expected Probability of Default and the Expected Loss in the Event of Default as Required by Paragraph (a)(1)(ii)(L) of Rule 17g-7

- · Historical records of the credit rating herewith presented are posted in the end of this paper.
- The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
- Facts of the probability of default are posted as Form NRSRO Exhibit 1 on the JCR website under the URL:

https://www.jcr.co.jp/en/service/company/regu/nrsro/

13

Information on the Sensitivity of the Credit Rating to Assumptions Made as Required by Paragraph (a)(1)(ii)(M) of Rule 17g-7

A) Business Bases

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's business bases and powers of earning or cash flow generation, etc. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's business bases on some drastic change in the operational environments, etc.

B) Financial Grounds and Asset Quality

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's financial grounds and asset quality. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but



possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's financial grounds and/ or asset quality on some drastic change in its business bases.

C) Liquidity Risks

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's liquidity positions. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's liquidity positions on some drastic change in its financial management policy or relations with fund procurement sources, etc.

- D) Order of Seniority in Debt Payment and Non-Payment Forgiven by Contract
 - The credit rating is subject to alteration if there is a change in the rated debt's status in the order of seniority relative to other debts caused by the improvement/ deterioration of the issuer's financial condition. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large. Also, in case of the financial products for which non-payment of interest/ principal is contractually permissible, the credit rating is subject to alteration if and when the likelihood of such non-payment is projected to increase or decrease. The resultant alteration of the credit rating could be by a notch but often as much as a few notches.
- E) Rise and Fall in General Economy and Markets

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the prospects of general economy and markets. JCR expects the change should be most likely by a notch but could be as much as a few notches, should the economy or the markets change so greatly.

 14^{\parallel} Information on the Representations, Warranties, and Enforcement Mechanisms of an Asset-backed Security as Required by Paragraph (a)(1)(ii)(N) of rule 17g-7

• The credit rating herewith presented is not for an ABS product, and hence no relevant issue.

Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026



Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	June 5, 2007	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 27, 2008	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 28, 2009	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	September 9, 2010	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	December 12, 2011	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	September 11, 2012	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	October 10, 2013	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	October 15, 2014	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	November 25, 2015	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	November 30, 2016	A-	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 28, 2017	A-	Positive
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 27, 2018	A	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	December 18, 2018	A	Positive
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 22, 2019	A+	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 26, 2020	A+	Stable
Idemitsu Kosan Co., Ltd.	Issuer(Long-term)	August 27, 2021	A+	Stable
Idemitsu Kosan Co., Ltd.	CP CP	June 5, 2007	J-1	2 1110 2 2
Idemitsu Kosan Co., Ltd.	CP	August 27, 2008	J-1	
Idemitsu Kosan Co., Ltd.	CP	August 28, 2009	J-1	
Idemitsu Kosan Co., Ltd.	СР	September 9, 2010	J-1	
Idemitsu Kosan Co., Ltd.	CP	December 12, 2011	J-1	
Idemitsu Kosan Co., Ltd.	CP	September 11, 2012	J-1	
Idemitsu Kosan Co., Ltd.	CP	October 10, 2013	J-1	
Idemitsu Kosan Co., Ltd.	CP	October 15, 2014	J-1	
Idemitsu Kosan Co., Ltd.	CP	November 25, 2015	J-1	
Idemitsu Kosan Co., Ltd.	CP	November 30, 2016	J-1	
Idemitsu Kosan Co., Ltd.	CP	August 28, 2017	J-1	
Idemitsu Kosan Co., Ltd.	CP	August 27, 2018	J-1	
Idemitsu Kosan Co., Ltd.	СР	December 18, 2018	J-1	
Idemitsu Kosan Co., Ltd.	СР	August 5, 2019	J-1	
Idemitsu Kosan Co., Ltd.	СР	August 22, 2019	J-1	
Idemitsu Kosan Co., Ltd.	CP	August 26, 2020	J-1	
Idemitsu Kosan Co., Ltd.	СР	August 27, 2021	J-1	
Idemitsu Kosan Co., Ltd.	Bonds no.5	November 29, 2017	A-	
Idemitsu Kosan Co., Ltd.	Bonds no.5	August 27, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.5	December 18, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.5	August 22, 2019	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.5	August 26, 2020	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.5	August 27, 2021	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.6	September 12, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.6	December 18, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.6	August 22, 2019	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.6	August 26, 2020	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.6	August 27, 2021	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.7	September 12, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.7	December 18, 2018	A	
Idemitsu Kosan Co., Ltd.	Bonds no.7	August 22, 2019	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.7	August 26, 2020	A+	
Idemitsu Kosan Co., Ltd.	Bonds no.7	August 27, 2021	A+	
	-1	٠٠٠٠, ٢٠-٠		1

Attestation Required by Paragraph (a)(1)(iii) of Rule 17g-7

- I, Shigenobu Tonomura, have responsibility to this Rating Action and to the best of my knowledge:
- A) No part of the credit rating was influenced by any other business activities.
- B) The credit rating was based solely upon the merits of the obligor, security, or money market instrument being rated.
- C) The credit rating was an independent evaluation of the credit risk of the obligor, security, or money market instrument.

殿村成信

Shigenobu Tonomura

General Manager of Corporate Rating Department II



INFORMATION DISCLOSURE FORM

Japan Credit Rating Agency, Ltd.

Disclosure Required by Paragraph (a)(1)(ii) of Rule 17g-7

Issuer:	ENEOS Holdings, Inc.
Rating Publication Date:	September 5, 2022

- The Symbol, Number, or Score in the Rating Scale used to Denote Credit Rating Categories and Notches and, the Identity of the Obligor or the Identity and a Description of the Security or Money Market Instrument as Required by Paragraph (a)(1)(ii)(A) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The version of the procedure or methodology used to determine the credit rating; as Required by Paragraph (a)(1)(ii)(B) of Rule 17g-7
 - Please see the news release. If the credit rating is a private rating, please see the report for private rating.
- The Main Assumptions and Principles used in Constructing the Procedures and Methodologies used to Determine the Credit Rating as Required by Paragraph (a)(1)(ii)(C) of Rule 17g-7
 - The credit rating methodology assumes, in principle, to be applied to assess the likelihood of a given debt payment in light of its issuer's condition and business environment, etc. in the relevant future. There is certain limitation, however, in the time horizon that the rating foresees.
 - The credit rating methodology assumes, in principle, that the factors posted in the below are particularly important for such likelihood to be determined, and that the rating determination is made by evaluating each of them not only quantitatively but also employing qualitative analyses.

A) Business Bases

The likelihood of a given debt payment is highly conditional to its issuer's business bases - how they can be maintained/ expanded into the future and thereby secure earnings and cash flows in adequacy and in a sustainable way.

B) Financial Grounds and Asset Quality

The likelihood of debt payment is highly dependent on the degree of the issuer's indebtedness and loss absorption capacity in terms of equity capital. Also notable is that a financial institution might see a significant loss of financial grounds as a result of changes in value of the assets under its possession.

C) Liquidity Positions

The likelihood of debt payment is highly dependent on the adequacy of the issuer's cash and other sources of repayment (liquidity positions).



- D) Related Parties' Status and Stance of Support/ Assistance for the Issuer

 The likelihood of debt payment is affected one way or the other by the issuer's related parties such as parent company, subsidiary, guarantor, and the government of the issuer's business domicile, etc. by their own conditions and/ or position of support/ assistance for the issuer.
- E) Order of Seniority in Debt Payment

 The likelihood of debt payment can be different between given debts of the same issuer. The
 likelihood of debt payment for an individual debt is dependent on the issuer's discretion, and/ or its
 rank relative to other debts of the same issuer in the order of seniority in principal/ interest payment
 which is determined by design as financial product or by laws, etc.
- The Potential Limitations of the Credit Rating as Required by Paragraph (a)(1)(ii)(D) of Rule 17g-7
 - The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
 - The objective of the credit rating herewith presented does not include any concerns other than the likelihood of debt payment, such as risks of price changes, market liquidity, etc.
 - The credit rating herewith presented is necessary to be reviewed along with possible changes of the issuer of rated objects in its business performance and/ or circumstances which include regulatory environment, and hence subject to possible alteration.
- Information on the Uncertainty of the Credit Rating as Required by Paragraph (a)(1)(ii)(E) of Rule $_{17g-7}$
 - The information used for the determination of credit rating as herewith presented is obtained by JCR from the issuer of rated objects and other sources that JCR trusts in terms of accuracy and reliability but possibly contains errors due to human, non-human or other causes. Consequently, the credit rating determined on the grounds of such information does not constitute, explicitly or implicitly, any representation or warrant of JCR on the information itself or any consequences of its use in terms of accuracy, relevance, timeliness, wholeness, market value, or usefulness for any specific purposes.
- 6 Use of Due Diligence Services of a Third Party in Taking the Rating Action as Required by Paragraph (a)(1)(ii)(F) of Rule 17g-7
 - There is no use of any third-party due diligence service in the determination of the credit rating herewith presented.
- Use of Servicer or Remittance Reports to Conduct Surveillance of the Credit Rating Required by Paragraph (a)(1)(ii)(G) of Rule 17g-7
 - There is no use of any servicer or remittance report to conduct surveillance of the credit rating herewith presented.
- 8 The Types of Data Relied Upon for the Purpose of Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(H) of Rule17g-7



- The information posted in the below, which includes data, is used for the determination of the credit rating herewith presented.
 - A) Audited financial statements presented by the rating stakeholders
 - B) Explanations of business performance, management plans, etc. presented by the rating stakeholders
- 9 Overall assessment of the Quality of Information Available and Considered in Determining the Credit Rating as Required by Paragraph (a)(1)(ii)(l) of Rule 17g-7
 - JCR holds its basic policies for securing the quality of information as a base of due diligence for the determination of credit ratings. The information used as a base for the determination of credit rating herewith presented satisfies such policies, which include the audit by an independent auditor, the publication by the issuer or some independent media or, otherwise, JCR analyst's scrutiny, etc.
 - JCR sees no particular weakness in the quality of information used for the determination of the credit rating herewith presented as compared to the information used in other cases of the credit rating for comparable issuers or ratable objects.
 - If the credit rating is an Indication, please see the report for Indication.
- 10 Information Relating to Conflicts of Interest as Required by Paragraph (a)(1)(ii)(J) of Rule 17g-7
 - JCR receives payment of compensation for the determination of the credit rating herewith presented from either one of those parties who are issuer, underwriter, depositor or sponsor.
 - JCR did not receive in the last fiscal year in the past payment of compensation from the same party for any kind of JCR's service other than the determination of credit rating, such as one in the ancillary business.
- 11 Explanation or Measure of the Potential Volatility of the Credit Rating as Required by Paragraph (a)(1)(ii)(K) of Rule 17g-7

A) Business Bases

The credit rating is subject to alteration if there is improvement or deterioration of the issuer's business bases, since its revenue, etc. may improve or deteriorate by the change in its business management policies, clients' preferences, competitive situation, or a technological innovation. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change in the business bases is large.

B) Financial Grounds and Asset Quality

The credit rating is subject to alteration if the issuer increases/ decreases its debt/ capital or vice versa and thereby makes its individual debt payment liability less or more bearable and its loss absorption capacity into the future decreased or increased. Also, the changes in the quality of asset under the issuer's holding may affect the credit rating, since such changes could raise or lower the likelihood of future loss of the issuer's financial grounds. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change in the financial grounds and/ or asset quality is large.

C) Liquidity Positions

The credit rating is subject to alteration if there is a change in the issuer's financial management policy or in the relations with fund procurement sources and the change thereby makes its liquidity positions improve or deteriorate. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is large.



D) Related Parties' Status and Stance of Support/ Assistance for the Issuer

The credit rating is subject to alteration if there is a change in the issuer's parent company or subsidiary, guarantor or other provider of credit enhancement, or the government of the issuer's business domicile, or other related parties' own conditions and/ or position of support/ assistance for the issuer, and the change thereby makes its business bases, financial grounds and/ or liquidity positions improve or deteriorate, and/ or making the effectiveness of guarantee and other credit enhancement improve or deteriorate. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large.

E) Order of Seniority in Debt Payment and Non-Payment Forgiven by Contract

The credit rating is subject to alteration if there is a change in the rated debt's status in the order of seniority relative to other debts caused by the improvement/ deterioration of the issuer's financial condition. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large. Also, in case of the financial products for which non-payment of interest/ principal is contractually permissible, the credit rating is subject to alteration if and when the likelihood of such non-payment is projected to increase or decrease. The resultant alteration of the credit rating could be by a notch but often as much as a few notches.

F) Rise and Fall in General Economy and Markets

The credit rating is subject to alteration if there is a rise/ fall in the general economy and/ or the markets inducing the issuer's revenues/ expenses to increase/ decrease and vice versa, etc. The resultant alteration of the credit rating is usually by a notch, with possibility of a few notches if and when the change is exceptionally large.

G) Various Events

The credit rating is subject to alteration on occurrence of various events, such as change in the issuer's major shareholders, M&A and other organizational change, accident, violation of the law, litigation, legal/ regulatory change, natural disaster, etc., which are unforeseeable at the time when the credit rating is determined, causing a significant change on the issuer's business bases, financial grounds, etc. The resultant alteration of the credit rating could be by a notch but more often than not as much as a few notches.

12

Information on the Content of the Credit Rating, Including the Historical Performance of the Credit Rating and the Expected Probability of Default and the Expected Loss in the Event of Default as Required by Paragraph (a)(1)(ii)(L) of Rule 17g-7

- · Historical records of the credit rating herewith presented are posted in the end of this paper.
- The credit rating herewith presented by JCR is its summary opinion with regard to the likelihood of given debt payment and hence not necessarily a perfect representation of such likelihood. The credit rating is not intended to estimate the probability of default or the loss on given default, either.
- Facts of the probability of default are posted as Form NRSRO Exhibit 1 on the JCR website under the URL:

https://www.jcr.co.jp/en/service/company/regu/nrsro/

13

Information on the Sensitivity of the Credit Rating to Assumptions Made as Required by Paragraph (a)(1)(ii)(M) of Rule 17g-7

A) Business Bases

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's business bases and powers of earning or cash flow generation, etc. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's business bases on some drastic change in the operational environments, etc.

B) Financial Grounds and Asset Quality

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's financial grounds and asset



quality. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's financial grounds and/ or asset quality on some drastic change in its business bases.

C) Liquidity Risks

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the issuer's liquidity positions. The resultant change of the credit rating is most likely by a notch, as JCR speculates, but possibly as much as a few notches if the development is rapid in improvement or deterioration of the issuer's liquidity positions on some drastic change in its financial management policy or relations with fund procurement sources, etc.

- D) Related Parties' Status and Stance of Support/ Assistance for the Issuer
 - The credit rating is subject to alteration if there is a change in the issuer's parent company or subsidiary, guarantor or other provider of credit enhancement, or the government of the issuer's business domicile, or other related parties' own conditions and/ or position of support/ assistance for the issuer, and the change thereby makes its business bases, financial grounds and/ or liquidity positions improve or deteriorate, and/ or making the effectiveness of guarantee and other credit enhancement improve or deteriorate. The resultant alteration of the credit rating is usually a notch, with possibility of a few notches if and when the change is large.
- E) Rise and Fall in General Economy and Markets

The credit rating herewith presented could be changed if and when the assumptions made at the time of its determination turn out to be inaccurate with regard to the prospects of general economy and markets. JCR expects the change should be most likely by a notch but could be as much as a few notches, should the economy or the markets change so greatly.

 $14 \left[\begin{array}{c} \text{Information on the Representations, Warranties, and Enforcement Mechanisms of an Assetbacked Security as Required by Paragraph (a)(1)(ii)(N) of rule 17g-7} \right.$

• The credit rating herewith presented is not for an ABS product, and hence no relevant issue.

Japan Credit Rating Agency, Ltd.

Jiji Press Building, 5-15-8 Ginza, Chuo-ku, Tokyo 104-0061, Japan Tel. +81 3 3544 7013, Fax. +81 3 3544 7026



				1
Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
ENEOS Holdings, Inc.	Issuer(Long-term)	April 1, 2010	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	June 6, 2011	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	September 11, 2012	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	September 17, 2013	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 28, 2014	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 27, 2015	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Issuer(Long-term)	December 21, 2016	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	April 3, 2017	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	September 29, 2017	A+	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 27, 2018	A+	Positive
ENEOS Holdings, Inc.	Issuer(Long-term)	August 22, 2019	AA-	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 26, 2020	AA-	Stable
ENEOS Holdings, Inc.	Issuer(Long-term)	August 27, 2021	AA-	Stable
ENEOS Holdings, Inc.	CP	April 1, 2010	J-1	Stable
ENEOS Holdings, Inc.	СР	June 6, 2011	J-1	
<u> </u>	СР		J-1 J-1	
ENEOS Holdings, Inc.	СР	September 11, 2012	J-1 J-1	
ENEOS Holdings, Inc.		September 17, 2013		
ENEOS Holdings, Inc.	CP	August 28, 2014	J-1	
ENEOS Holdings, Inc.	CP	August 27, 2015	J-1	
ENEOS Holdings, Inc.	CP	August 31, 2016	J-1	
ENEOS Holdings, Inc.	CP	April 3, 2017	J-1	
ENEOS Holdings, Inc.	СР	September 29, 2017	J-1	
ENEOS Holdings, Inc.	СР	August 27, 2018	J-1	
ENEOS Holdings, Inc.	СР	August 22, 2019	J-1+	
ENEOS Holdings, Inc.	CP	August 26, 2020	J-1+	
ENEOS Holdings, Inc.	CP	August 27, 2021	J-1+	
ENEOS Holdings, Inc.	Shelf Registration	May 12, 2021	AA-	
ENEOS Holdings, Inc.	Shelf Registration	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	December 7, 2012	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	September 17, 2013	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 28, 2014	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 27, 2015	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	December 21, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.4(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	·		
		July 12, 2013	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	September 17, 2013	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 28, 2014	<u>A</u> +	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 27, 2015	A+	37
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	December 21, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.6(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	May 28, 2014	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 28, 2014	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 27, 2015	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	December 21, 2016	A+	5
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 27, 2019	AA-	
LALOS Holdings, Ilic.	Donus no.5(1A Holumgs)	August 22, 2019	71/1-	1



Y 37	Y	DIE C D	ъ.:	0 1 1/5: ::
Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.9(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	December 3, 2014		
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 27, 2015	A+	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	December 21, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.11(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	July 22, 2016		
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	August 31, 2016		Negative
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	December 21, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.13(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	July 22, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	August 31, 2016	#A+	Negative
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	December 21, 2016	A+	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.14(JX Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.3(TonenGeneral Sekiyu)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	April 3, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	August 22, 2019	AA-	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.7(TonenGeneral Sekiyu)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	July 28, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	August 27, 2018		
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	August 22, 2019		
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	August 26, 2020		
ENEOS Holdings, Inc.	Bonds no.1(JXTG Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	July 28, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	September 29, 2017	A+	
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	August 27, 2018	A+	
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	August 22, 2019		
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.2(JXTG Holdings)	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.1	July 10, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.1	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.1	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.2	July 10, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.2	August 26, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.2	August 27, 2021	AA-	
ENEOS Holdings, Inc.	Bonds no.3	November 25, 2020	AA-	
ENEOS Holdings, Inc.	Bonds no.3	August 27, 2021	AA-	
		0		i



Issuer Name	Issue Name	Publication Date	Rating	Outlook/Direction
ENEOS Holdings, Inc.	Bonds no.1(subordinated)	June 9, 2021	A	
ENEOS Holdings, Inc.	Bonds no.1(subordinated)	August 27, 2021	A	
ENEOS Holdings, Inc.	Bonds no.2(subordinated)	June 9, 2021	A	
ENEOS Holdings, Inc.	Bonds no.2(subordinated)	August 27, 2021	A	
ENEOS Holdings, Inc.	Bonds no.3(subordinated)	June 9, 2021	A	
ENEOS Holdings, Inc.	Bonds no.3(subordinated)	August 27, 2021	A	
ENEOS Holdings, Inc.	Bonds no.4	June 9, 2022	AA-	
ENEOS Holdings, Inc.	Bonds no.5	June 9, 2022	AA-	

Attestation Required by Paragraph (a)(1)(iii) of Rule 17g-7

- I, Shigenobu Tonomura, have responsibility to this Rating Action and to the best of my knowledge:
- A) No part of the credit rating was influenced by any other business activities.
- B) The credit rating was based solely upon the merits of the obligor, security, or money market instrument being rated.
- C) The credit rating was an independent evaluation of the credit risk of the obligor, security, or money market instrument.

殿村成信

Shigenobu Tonomura

General Manager of Corporate Rating Department II