Supplementary Information

1. Questionnaires
Quiz 1 was given during the workshop, and quiz 2 was given at the poster session.

<div align="center">Quiz 1</div>

★First, please tell us a little about yourself. Please circle (○) the applicable entry.

1. 4th grade   2. 5th grade   3. 6th grade   4. 7th grade   5. 8th grade

6. 9th grade   7. High school   8. University   9. Other (adult)

★Next, please tell us your gender.

1. Male   2. Female

Q1. Did you know that the amount of plastic trash accumulating in oceans is a problem?

1. I know about it very well   2. I have heard about it; however, I do not know the details
3. I did not know

Q2. A goal of the "Osaka Blue Ocean Vision" decided upon at the G20 Osaka Summit (June 2019) is to reduce the amount of plastic flowing into oceans to zero by 2050. What do you think will be the amount of plastic trash accumulating in oceans by 2050 compared to the existing amounts based on this initiative?

Note: Assume that no new initiatives will be taken besides reducing the amount flowing into oceans.
Please circle (○) the applicable entry.

1．It will drop to zero

2．It will decrease; however, it will not drop to zero

3．It will increase

Q3．Please explain the reason for your answer to Q2.

Q4. To reduce the amount of plastic trash accumulating in oceans, it is assumed that we must:

1) Reduce the amount of plastic trash flowing into oceans.

2) Clean up the plastic trash flowing into and accumulating in oceans.

Here, please draw the rest of the lines (1 and 2) in Figure 2, if our goal is to reduce trash, as shown in Figure 1 (do not worry about changing the color).

Figure 1.

Amount of plastic trash accumulating in oceans
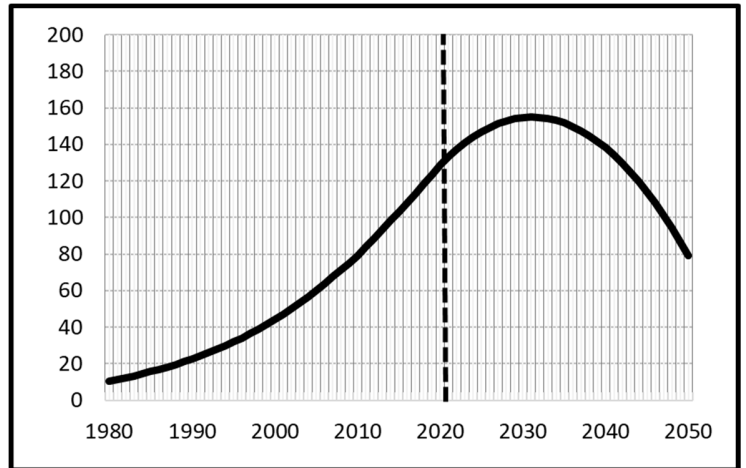
(The scale on the left is in units of millions of tons)

Figure 2.

1) The amount of plastic trash flowing into oceans every year (Blue line)

2) The amount of plastic trash cleaned up from oceans every year (Orange line)

(The scale on the left is in units of 10,000 tons)
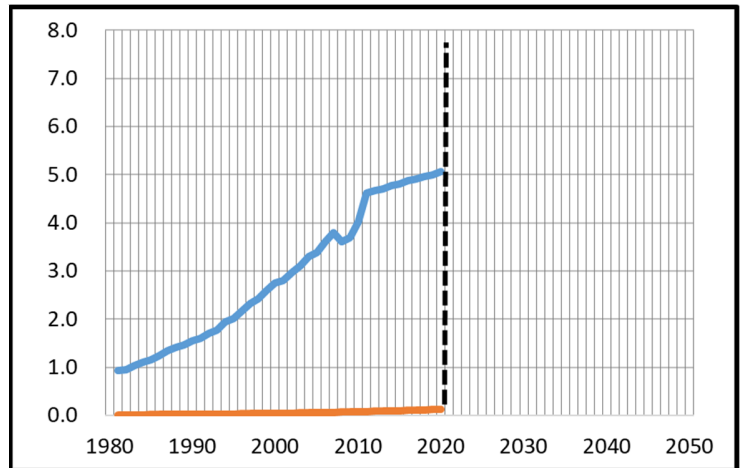
Q5. Please explain the reasons for why you drew your lines in Figure 2.

Quiz 2

★First, please tell us a little about yourself.

1. Elementary school student (4th to 6th grade)   2. Middle school student (7th to 9th grade)

3. High school student   4. University/professional school student   5. Other (adult)

★Next, please tell us your gender.

1. Male   2. Female

★Did you participate in the "Ocean Plastic Trash" workshop?

1. Yes   2. No
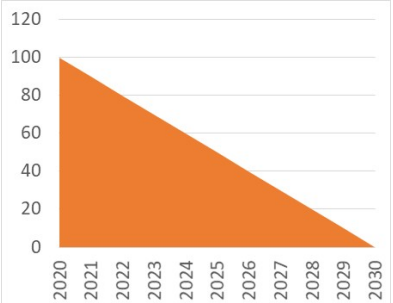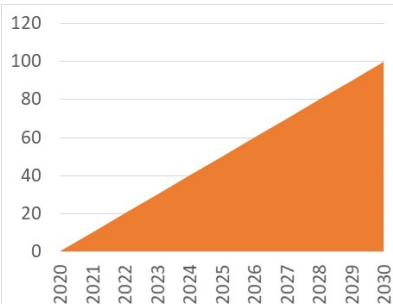
Q1. Did you know that the amount of plastic trash accumulating in oceans is a problem?

1. I know about it very well

2. I have heard about it; however, I do not know the details

3. I did not know

Q2. There are a number of timing issues even when collecting the same amount of trash at the end. Examples include the following:

1) Mostly at the start.

2) Gradually increasing.

Please describe the pros and cons of each.

Collection method	Pros	Cons
1. Mostly at the start		
2. Gradually increasing		

2. Data for figures

2.1 Data for Figure 1.a. and 1.b.

Unit: Million MT

	Stock	Net inflow	Entering	Cleanup
1980	10.43	0.92		
1981	11.38	0.94	0.93	0.01
1982	12.33	0.95	0.94	0.01
1983	13.38	1.05	1.03	0.01
1984	14.50	1.12	1.11	0.01
1985	15.68	1.18	1.16	0.01
1986	16.93	1.26	1.24	0.02
1987	18.29	1.36	1.34	0.02
1988	19.73	1.44	1.42	0.02
1989	21.22	1.49	1.47	0.02
1990	22.79	1.57	1.55	0.02
1991	24.41	1.62	1.60	0.02
1992	26.14	1.73	1.70	0.02
1993	27.93	1.79	1.77	0.03
1994	29.90	1.97	1.95	0.03
1995	31.94	2.04	2.01	0.03
1996	34.14	2.20	2.16	0.03
1997	36.49	2.35	2.32	0.03
1998	38.95	2.46	2.42	0.04
1999	41.59	2.64	2.60	0.04
2000	44.38	2.79	2.74	0.04
2001	47.23	2.85	2.81	0.04
2002	50.25	3.02	2.97	0.05
2003	53.40	3.15	3.10	0.05
2004	56.75	3.35	3.29	0.05
2005	60.19	3.44	3.38	0.06
2006	63.85	3.66	3.60	0.06
2007	67.71	3.86	3.79	0.06
2008	71.38	3.67	3.61	0.07
2009	75.15	3.77	3.69	0.07
2010	79.24	4.09	4.02	0.08
2011	83.94	4.70	4.62	0.08
2012	88.70	4.76	4.68	0.08
2013	93.50	4.80	4.71	0.09
2014	98.36	4.86	4.77	0.09
2015	103.27	4.91	4.81	0.10
2016	108.24	4.97	4.87	0.10
2017	113.26	5.02	4.91	0.11
2018	118.34	5.08	4.97	0.11
2019	123.46	5.12	5.00	0.12

2020	128.64	5.18	5.06	0.12
2021	133.57	4.93	5.06	0.13
2022	138.49	4.92	5.06	0.13
2023	143.41	4.92	5.06	0.14
2024	148.32	4.91	5.06	0.14
2025	153.23	4.91	5.06	0.15
2026	158.13	4.90	5.06	0.15
2027	163.03	4.90	5.06	0.16
2028	167.93	4.89	5.06	0.16
2029	172.81	4.89	5.06	0.17
2030	177.70	4.88	5.06	0.17
2031	182.58	4.88	5.06	0.18
2032	187.45	4.87	5.06	0.18
2033	192.32	4.87	5.06	0.19
2034	197.18	4.86	5.06	0.19
2035	202.04	4.86	5.06	0.20
2036	206.90	4.85	5.06	0.20
2037	211.75	4.85	5.06	0.21
2038	216.59	4.84	5.06	0.21
2039	221.43	4.84	5.06	0.22
2040	226.27	4.84	5.06	0.22
2041	231.10	4.83	5.06	0.23
2042	235.92	4.83	5.06	0.23
2043	240.74	4.82	5.06	0.24
2044	245.56	4.82	5.06	0.24
2045	250.37	4.81	5.06	0.25
2046	255.18	4.81	5.06	0.25
2047	259.98	4.80	5.06	0.26
2048	264.77	4.80	5.06	0.26
2049	269.57	4.79	5.06	0.26
2050	274.35	4.79	5.06	0.27

2.2 Data for Figure 2.a. and 2.b.

Unit: Million MT

	Stock	Net inflow	Entering	Cleanup
1980	10.43	0.92		
1981	11.38	0.94	0.93	0.01
1982	12.33	0.95	0.94	0.01
1983	13.38	1.05	1.03	0.01
1984	14.50	1.12	1.11	0.01
1985	15.68	1.18	1.16	0.01
1986	16.93	1.26	1.24	0.02
1987	18.29	1.36	1.34	0.02
1988	19.73	1.44	1.42	0.02

1989	21.22	1.49	1.47	0.02
1990	22.79	1.57	1.55	0.02
1991	24.41	1.62	1.60	0.02
1992	26.14	1.73	1.70	0.02
1993	27.93	1.79	1.77	0.03
1994	29.90	1.97	1.95	0.03
1995	31.94	2.04	2.01	0.03
1996	34.14	2.20	2.16	0.03
1997	36.49	2.35	2.32	0.03
1998	38.95	2.46	2.42	0.04
1999	41.59	2.64	2.60	0.04
2000	44.38	2.79	2.74	0.04
2001	47.23	2.85	2.81	0.04
2002	50.25	3.02	2.97	0.05
2003	53.40	3.15	3.10	0.05
2004	56.75	3.35	3.29	0.05
2005	60.19	3.44	3.38	0.06
2006	63.85	3.66	3.60	0.06
2007	67.71	3.86	3.79	0.06
2008	71.38	3.67	3.61	0.07
2009	75.15	3.77	3.69	0.07
2010	79.24	4.09	4.02	0.08
2011	83.94	4.70	4.62	0.08
2012	88.70	4.76	4.68	0.08
2013	93.50	4.80	4.71	0.09
2014	98.36	4.86	4.77	0.09
2015	103.27	4.91	4.81	0.10
2016	108.24	4.97	4.87	0.10
2017	113.26	5.02	4.91	0.11
2018	118.34	5.08	4.97	0.11
2019	123.46	5.12	5.00	0.12
2020	128.64	5.18	5.06	0.12
2021	133.15	4.51	4.89	0.38
2022	137.23	4.08	4.72	0.64
2023	140.89	3.66	4.55	0.89
2024	144.13	3.24	4.38	1.15
2025	146.94	2.81	4.21	1.40
2026	149.32	2.39	4.05	1.66
2027	151.29	1.96	3.88	1.92
2028	152.82	1.54	3.71	2.17
2029	153.94	1.11	3.54	2.43
2030	154.62	0.69	3.37	2.68
2031	154.89	0.26	3.20	2.94
2032	154.73	-0.16	3.03	3.19
2033	154.14	-0.59	2.87	3.45
2034	153.13	-1.01	2.70	3.71

2035	151.70	-1.43	2.53	3.96
2036	149.84	-1.86	2.36	4.22
2037	147.55	-2.28	2.19	4.47
2038	144.85	-2.71	2.02	4.73
2039	141.71	-3.13	1.85	4.99
2040	138.16	-3.56	1.69	5.24
2041	134.18	-3.98	1.52	5.50
2042	129.77	-4.41	1.35	5.75
2043	124.94	-4.83	1.18	6.01
2044	119.68	-5.25	1.01	6.27
2045	114.00	-5.68	0.84	6.52
2046	107.90	-6.10	0.67	6.78
2047	101.37	-6.53	0.51	7.03
2048	94.42	-6.95	0.34	7.29
2049	87.04	-7.38	0.17	7.55
2050	79.24	-7.80	0.00	7.80