

DOWA

Fiscal 2013

First Half Business Result

November 12, 2013

Dowa Holdings Co., Ltd.

* Forward-looking statements made in this document, such as business forecasts, are based on the information available at this time and on certain premises that the Company assumes to be reasonable. Actual performance may differ materially from such forecasts due to a variety of factors.

Operating Results

Fiscal 2013 First Half Settlement

Summary of Fiscal 2013 First Half

Billion yen

	FY2012		FY2013		Change			
	H1 Results	Full Year Results	H1 Results	Full Year Forecasts	H1		Full Year	
Net Sales	193.2	419.3	211.8	426.0	18.6	10%	6.7	2%
Operating Income	11.3	24.5	16.3	30.5	5.0	44%	6.0	24%
Ordinary Income	12.3	27.2	17.8	33.0	5.5	45%	5.8	21%
Net Income	5.8	15.2	11.7	19.0	5.9	101%	3.8	25%

- Both sales and income rose year on year, with operating income up 44%, to 16.3 billion yen, ordinary income up 45%, to 17.8 billion yen, and net income up 101%, to 11.7 billion yen.
- Also on a full-year basis, both sales and income are expected to rise.

■ Market situation

- Environmental Management & Recycling-related market:
Domestic waste volume remained at the same level, but the Asia market continued to expand.
- Automotive-related market:
Domestic: Production gradually recovered from the slump experienced in the second half of the previous fiscal year.
Overseas: Growth in emerging markets in Asia slowed, but production in North America was strong.
- Electronic Materials and Semiconductor-related market:
Demand in the computers and mobile phones sector continued to weaken. Demand for multifunctional portable devices was driven by general market growth despite inventory adjustments in some areas.
- Construction Equipment and Machine Tool-related market:
Overseas, conditions remained lackluster, but domestic demand is on a path toward recovery, driven mainly by public works and housing.

■ Metal prices and foreign exchange rates

- Metal prices: Copper and zinc prices stayed the same without any major fluctuation, while precious metal prices fell mainly due to outflows of investment funds.
- Foreign exchange rates: The correction of the excessively strong yen became firmly established, with the yen about 20 yen weaker than a year earlier.

Major Products:

Production/Sales/Treatment Volume Results

		FY2012				FY2013	
		1Q	2Q	3Q	4Q	1Q	2Q
Environmental Management & Recycling	Intermediate waste processing volume in Japan	100	106	110	109	115	110
	Recycling materials collection volume at Kosaka	100	117	130	101	110	112
	Waste processing amount in South East Asia	100	94	100	127	109	125
Nonferrous Metals	Silver production at Kosaka	100	96	117	119	125	120
	Zinc production at Akita	100	75	104	99	108	75
Electronic Materials	Compound semiconductor	100	83	78	59	86	94
	LED	100	111	106	100	130	114
	Silver powder	100	59	52	69	93	83
Metal Processing	Copper strip products	100	98	87	87	98	97
Heat Treatment	Heat treatment	100	94	94	99	100	103

Indexes (100 for Q1 of FY2012) 4

Income Statements (Consolidated Results)

Million yen

	FY2012 H1			FY2013 H1			Change		
	Q1	Q2	H1	Q1	Q2	H1	Q1	Q2	H1
Net Sales	98,397	94,845	193,242	108,658	103,227	211,885	10,260	8,381	18,642
Cost of Sales	82,866	84,785	167,652	92,071	88,627	180,698	9,204	3,841	13,045
Gross Profit	15,531	10,059	25,590	16,587	14,600	31,187	1,056	4,540	5,596
Selling, General, and Administrative Expenses, R&D Expenses	7,315	6,956	14,272	7,434	7,396	14,831	118	440	558
Operating Income	8,215	3,103	11,318	9,152	7,203	16,356	937	4,100	5,037
Other Income	1,508	1,325	2,833	2,305	616	2,922	797	(708)	89
Interest and dividend income	291	35	326	327	39	366	35	4	39
Equity in earnings of affiliates	487	702	1,189	810	119	930	323	(582)	(258)
Other income	729	587	1,316	1,167	457	1,625	438	(130)	308
Other Expenses	1,027	785	1,812	683	742	1,425	(343)	(43)	(387)
Interest expenses paid	441	424	866	395	366	761	(46)	(57)	(104)
Equity in losses of affiliates	0	0	0	0	0	0	0	0	0
Other expenses	585	361	946	287	375	663	(297)	14	(283)
Ordinary Income	8,695	3,642	12,338	10,775	7,078	17,853	2,079	3,435	5,514
Extraordinary Profits	47	365	412	65	129	195	18	(235)	(216)
Gain on sale of property, plant and equipment	46	41	88	22	6	29	(23)	(34)	(58)
Gain on sale of investment securities	0	0	0	11	44	55	11	44	55
Subsidy	0	0	0	21	(3)	18	21	(3)	18
Other profits	0	323	324	9	82	92	9	(241)	(231)
Extraordinary Losses	387	2,770	3,157	48	408	457	(339)	(2,361)	(2,700)
Loss on disposal of property, plant and equipment	52	174	226	42	99	142	(9)	(75)	(84)
Loss on valuation of investment securities	253	2,298	2,552	0	0	0	(253)	(2,298)	(2,552)
Impairment loss	0	58	58	0	48	48	0	(9)	(9)
Loss on disaster	62	84	147	1	245	246	(61)	160	98
Other	18	153	172	4	14	19	(13)	(138)	(152)
Income Before Income Taxes and Minority Interests	8,355	1,237	9,592	10,792	6,799	17,592	2,437	5,561	7,999
Income Taxes	2,620	1,029	3,649	3,101	2,587	5,688	481	1,557	2,039
Minority Interests in Income	138	(27)	111	143	26	169	4	53	57
Net Income	5,596	235	5,831	7,548	4,185	11,733	1,951	3,950	5,902

Consolidated Results :

Year-on-Year Comparison (by Segment for 1st Half)

Billion yen

	FY2012 H1			FY2013 H2			Change			Breakdown of Sales and Operating Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	47.0	2.5	2.4	48.1	4.6	4.5	1.1	2.1	2.1	The waste treatment business posted gains in sales and profits, reflecting cost reductions, in addition to an increase in treatment volumes mainly due to expansion of operations in Chiba. The recycling business achieved increases in both sales and profits due to expansion in collections of recycling materials from overseas as well as a solid performance in the processing of shredder dust. Business expansion in Southeast Asia also went well.
Nonferrous Metals	91.5	1.2	2.6	102.8	4.5	5.8	11.3	3.3	3.2	Smelting plant operations for both copper and zinc went well, and the recovery of new metals was also stable. In terms of demand, sales of zinc were strong on demand in the automotive and other industries. Also, given the depreciation of the yen against other major currencies, the non-ferrous metals segment posted substantial growth in profit despite falling metal prices.
Electronic Materials	35.3	3.8	4.0	41.0	3.2	3.8	5.6	(0.5)	(0.1)	The semiconductor business generated an increase in income through its focus on products for smartphone and nitride semiconductors (HEMT), offsetting the continued downward trend in demand from computer manufacturers. The electronic materials business reported higher income owing to a rise in sales volume of silver powder for solar batteries. In functional materials, sales and income decreased due to inventory adjustments among users and decline in overseas demand.

Consolidated Results :

Year-on-Year Comparison (by Segment for 1st Half)

Billion yen

	FY2012 H1			FY2013 H2			Change			Breakdown of Sales and Operating Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Metal Processing	37.1	2.4	2.6	39.8	2.6	2.7	2.7	0.1	0.1	The rolled copper products business generated income comparable with the high income posted in the first half a year ago, as demand from the automotive industry recovered from the slump experienced in the second half of the previous fiscal year. The plating business also reported income on a par with the year-ago level, reflecting firm demand from the automotive industry. The circuit substrates business posted gains in sales and profits due to growing demand for products used in industrial machinery and trains coinciding with recovery in capital investment.
Heat Treatment	11.6	0.8	0.7	11.6	0.9	0.8	(0.0)	0.0	0.1	The industrial furnace business posted declines in sales and income, mainly due to the absence of the large overseas contracts recorded in the previous fiscal year. Meanwhile, the heat treatment business achieved gains in sales and income, reflecting efforts to increase productivity at domestic plants in addition to firm orders for auto parts.
Other/ Elimination	(29.4)	0.3	(0.1)	(31.6)	0.3	(0.0)	(2.1)	(0.0)	0.0	
Total	193.2	11.3	12.3	211.8	16.3	17.8	18.6	5.0	5.5	

Analysis of Factors in Growth and Decline in Ordinary Income

(Year-on-Year Comparison by Segment for 1st Half)

Billion yen

FY2013 H1 Results - FY2012 H1 Results	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Other	Total	
Effect of various measures, increase/ decrease in sales, etc.	2.2	1.0	(0.4)	0.2	0.2	(0.0)	3.1	
Of the above, free metal income difference (volume difference)	-	0.0	-	-	-	-	-	
Free metal income difference (price difference)	-	1.5	-	-	-	-	1.5	
Conditions of raw material (changes in exchange rate and base conditions)	-	0.4	-	-	-	-	0.4	
Difference between market value and book value on payments, and difference in market value at end of period	-	0.3	-	-	-	-	0.3	
Other special factors	-	(0.2)	-	-	-	-	(0.2)	
Depreciation	(0.0)	0.4	(0.1)	0.1	(0.0)	(0.0)	0.3	
Other fixed costs	(0.1)	(0.3)	(0.1)	(0.1)	(0.1)	(0.1)	(0.5)	
Change in operating income	2.1	3.3	(0.5)	0.1	(0.0)	-	5.0	
Effects of non-operating income and expenses	Equity method income or loss	(0.1)	(0.2)	(0.0)	0.1	-	(0.1)	(0.2)
	Other	0.1	0.1	0.4	(0.1)	(0.0)	0.2	0.7
Change in ordinary income	2.1	3.2	(0.1)	0.1	0.1	(0.0)	5.5	

Balance Sheets (Consolidated Results)

Million yen

Accounts	March 31, 2013	September 30, 2013	Change	Accounts	March 31, 2013	September 30, 2013	Change
Assets				Liabilities			
Current Assets	171,287	171,890	603	Current Liabilities	133,125	131,606	(1,519)
Cash and time deposits	6,163	5,575	(588)	Notes and accounts payable	42,403	35,945	(6,457)
Notes and accounts receivable	71,829	65,920	(5,908)	Short-term borrowings	52,514	58,878	6,363
Inventories	80,282	88,071	7,789	Corporate bonds due within one year	—	—	—
Deferred tax assets	3,287	3,108	(179)	Commercial paper	—	10,000	10,000
Other current assets	9,783	9,270	(512)	Accrued income taxes, etc.	5,353	4,607	(745)
Allowance for doubtful accounts	(59)	(56)	2	Ingot leasing liabilities	9,519	4,802	(4,716)
				Other current liabilities	23,335	17,373	(5,961)
				Long-Term Liabilities	74,260	67,480	(6,780)
Fixed Assets	178,500	182,327	3,827	Corporate bonds	10,000	10,000	
Tangible fixed assets	103,647	103,630	(16)	Long-term debt	44,623	36,427	(8,195)
				Reserve for employees' retirement benefits	10,990	11,348	358
Intangible fixed assets	11,217	11,401	184	Deferred tax liabilities	2,969	3,984	1,014
Investments in securities	56,187	60,707	4,519	Other long-term liabilities	5,676	5,719	42
Deferred tax assets	3,976	3,031	(944)	Total Liabilities	207,386	199,086	(8,299)
Other investments	3,638	3,722	83	Net Assets			
Allowance for doubtful accounts	(165)	(164)	1	Shareholders' Equity	125,291	133,338	8,047
				Common stock	36,437	36,437	—
				Additional paid-in capital	26,362	26,362	—
				Retained earnings	68,180	76,230	8,050
				Treasury stock, at cost	(5,688)	(5,692)	(3)
				Currency Translation and Others	8,302	12,869	4,567
				Unrealized gains on available-for-sale securities	8,990	11,256	2,266
				Net deferred hedge income	89	408	319
				Foreign currency translation adjustments	(777)	1,204	1,981
				Minority Interests	8,807	8,923	115
				Total Net Assets	142,400	155,131	12,730
Total Assets	349,787	354,218	4,430	Total Liabilities and Net Assets	349,787	354,218	4,430
				Interests-bearing debt	107,138	115,305	8,167
				Cash and time deposits	6,163	5,575	(588)
				Actual balance	100,975	109,730	8,755
				Equity ratio	38.2%	41.3%	3.1%
				ROA	8.1%	10.1%	2.0%

Consolidated Statements of Cash Flows

Million yen

	FY2012 H1	FY2013 H1	Change
I. Cash Flows from Operating Activities			
Income before income taxes and minority interest	9,592	17,592	7,999
Adjustments (non-cash)			
Depreciation	8,245	7,943	(302)
Equity in (earnings) losses of affiliates	(1,189)	(930)	258
Change of business, impairment loss	—	—	—
(Gain) loss due to sale or disposal of securities, property, plant and equipment	207	161	(45)
Loss on valuation of investment securities	2,552	(55)	(2,607)
Increase in allowance for doubtful accounts	448	330	(118)
Interest income and expenses and dividends	1,403	2,237	834
Income taxes paid	(2,094)	(6,170)	(4,075)
Other, net	318	(223)	(541)
Total for profit/loss items	19,485	20,886	1,400
Increase/decrease in assets/liabilities			
Increase/decrease in trade receivable/payable	(1,133)	(430)	702
Increase/decrease in inventories	4,310	(7,453)	(11,763)
Other, net	(3,056)	(9,706)	(6,649)
Total for balance sheet items	120	(17,590)	(17,710)
Net cash provided by (used in) operating activities	19,606	3,296	(16,309)

Free cash flow 12,624 (3,973) (16,597)

	FY2012 H1	FY2013 H1	Change
II. Cash Flows from Investing Activities			
Acquisition of property, plant and equipment	(6,981)	(7,269)	(288)
Sale and acquisition of securities	(971)	(551)	420
Change in loans	42	(135)	(177)
Proceeds from disposal and sale of property, plant and equipment	611	39	(572)
Other, net	6	50	44
Net cash used in investing activities	(7,292)	(7,866)	(573)
III. Cash Flows from Financing Activities			
Change in borrowings and corporate bonds	(7,753)	7,661	15,415
Purchases of treasury stock and issuance of common stock	43	(3)	(47)
Cash dividends paid	(3,158)	(3,744)	(585)
Other, net	(184)	(249)	(65)
Net cash used in financing activities	(11,053)	3,664	14,717
Effect of Exchange Rate Changes on Cash and Cash Equivalents	4	215	210
Net Decrease in Cash and Cash Equivalents	1,264	(690)	(1,954)
Cash and Cash Equivalents of Newly Consolidated Subsidiaries	446	102	(344)
Cash and Cash Equivalents at Beginning of Term	4,788	6,129	1,341
Cash and Cash Equivalents at End of Term	6,499	5,541	(958)

(For reference)

Balance of interest-bearing debt 110,354 115,305 4,951

Fiscal 2013 Consolidated Earnings Forecasts

Billion yen

	FY2012 Results	FY2013 Forecasts	Change
Net Sales	419.3	426.0	6.7
Operating Income	24.5	30.5	6.0
Ordinary Income	27.2	33.0	5.8
Net Income	15.2	19.0	3.8

■ Market outlook

➤ Environmental Management & Recycling-related market

The domestic market is expected to remain unchanged, while continued growth in demand in Asia is forecast.

➤ Automotive-related market:

Although domestic auto production is likely to remain comparatively firm, the overseas outlook is uncertain due to economic developments in emerging markets.

➤ Electronic Materials and Semiconductor-related market:

The market for smartphone-related products and products for solar batteries is expected to expand steadily. Demand for products used in TVs and computers will trend downward.

Second Half of Fiscal 2013

Assumptions and Sensitivities

Exchange rate and metal prices

	FY2012		FY2013			(Reference) Nearest
	H1 average	Full year	Assumption for H1	H1 average	Assumption for H2	October average
Exchange rate: (¥/\$)	79.4	83.1	90.0	98.9	95.0	97.9
Copper: (\$/t)	7,792	7,855	7,000	7,112	7,000	7,189
Zinc: (\$/t)	1,908	1,950	1,900	1,850	1,800	1,883
Indium: (\$/kg)	494	499	550	565	550	674

Second-half assumptions and sensitivities (operating income/half year)

Million yen/Interim period

	Assumptions	Fluctuation	Sensitivity (Volume differences and raw material conditions)
¥/\$	95.0 ¥/\$	±¥1 /\$	170
Copper	7,000 \$/t	±100 \$/t	15
Zinc	1,800 \$/t	±100 \$/t	150
Indium	550 \$/kg	±100 \$/kg	270

* Sensitivity is based on assumptions that the Company assumes to be reasonable at the time of publication. Actual effects may differ materially due to a variety of factors.

Forecasts of Consolidated Results

Comparison with Previous Fiscal Year (by Segment)

Billion yen

	FY2012 Results			FY2013 Forecasts			Change		
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	104.0	6.4	6.7	97.0	8.7	8.9	(7.0)	2.2	2.1
Nonferrous Metals	205.0	4.6	7.2	214.0	7.0	8.9	8.9	2.3	1.6
Electronic Materials	71.3	5.7	6.5	75.0	6.4	7.2	3.6	0.6	0.6
Metal Processing	73.9	4.8	5.1	78.0	5.1	5.5	4.0	0.2	0.3
Heat Treatment	24.5	1.5	1.6	25.5	2.3	2.1	0.9	0.7	0.4
Other/ Elimination	(59.6)	1.1	0.0	(63.5)	1.0	0.4	(3.8)	(0.1)	0.4
Total	419.3	24.5	27.2	426.0	30.5	33.0	6.6	5.9	5.7

Changes in Investment and Depreciation

Billion yen

	FY2011 (results)			FY2012 (results)			FY2013 H1 (results)			FY2013 (forecasts)		
	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total
Environmental Management & Recycling	5.4	0.4	5.8	5.8	0.4	6.2	2.1	0.2	2.3	8.0	0.5	8.5
Nonferrous Metals	5.1	0.7	5.9	2.8	0.6	3.5	1.3	0.5	1.8	2.0	0.8	2.8
Electronic Materials	4.1	2.9	7.0	3.6	2.8	6.5	1.0	1.3	2.4	2.5	2.7	5.2
Metal Processing	1.6	0.3	1.9	1.9	0.4	2.3	1.6	0.2	1.9	5.0	0.4	5.4
Heat Treatment	4.2	0.2	4.4	4.0	0.3	4.3	1.1	0.1	1.2	3.0	0.3	3.3
Companywide, Other	0.7	0.0	0.6	1.7	0.0	1.6	0.5	0.0	0.5	2.0	0.0	2.0
Total	21.3	4.6	25.9	20.1	4.6	24.7	7.8	2.4	10.3	22.5	5.0	27.5

Depreciation Expenses

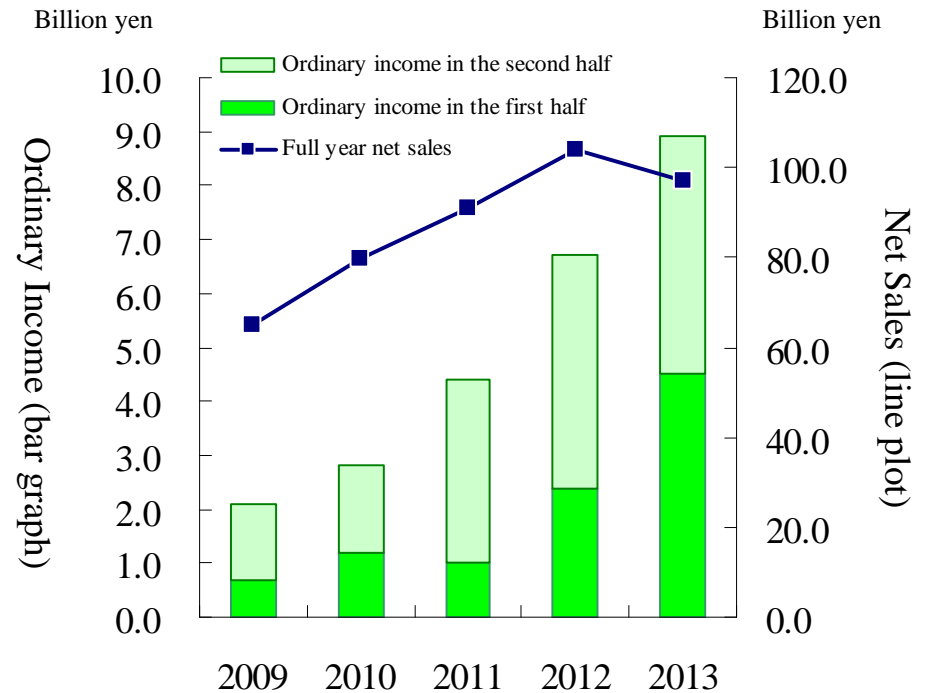
Billion yen

	FY2011	FY2012	FY2013	
			H1 Results	Full year Forecasts
Environmental Management & Recycling	5.0	4.7	2.2	4.7
Nonferrous Metals	6.0	5.0	2.1	4.4
Electronic Materials	2.7	2.7	1.2	2.7
Metal Processing	2.3	2.2	1.0	2.4
Heat Treatment	1.6	1.7	0.8	1.8
Companywide, Other	0.4	0.4	0.1	0.5
Total	18.3	16.9	7.6	16.8

Challenges in Our Business and Focus for the Futures

Situation in FY2013

- The overall domestic waste volume was ample, reflecting strength in the automobile-related and other manufacturing sectors.
- No change in domestic precious metals recycling volumes, due to the sluggish precious metals market and continued weakness in the electronic components and semiconductor sectors.
- Overall manufacturing activities in Thailand and Indonesia maintained dynamism, and waste volumes also showed an upward trend.



* Full year earnings (for fiscal year 2013) are on a pro forma basis.

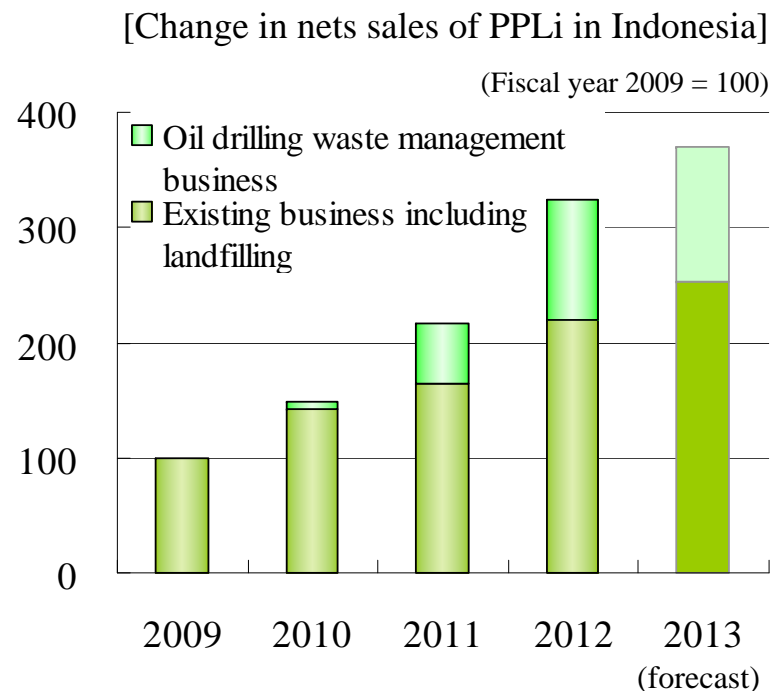
Future actions

- Waste treatment** - Expand and improve the menu for the low concentration PCB waste treatment business: Improve operating efficiency and strengthen sales activities targeting new clients
Pre-treatment facilities mainly for oil removal and decomposition are under construction and are expected to be completed before the end of fiscal year 2013.
- Soil remediation** - Capture the rising demand associated with public investment and the recovery in the real estate market in Japan.
- Recycling** - Strengthen the collection of recycling materials for smelting and refining, mainly overseas.
- Southeast Asia** - Further expand the oil drilling sludge treatment business in Indonesia and other locations.
- Survey and selection of potential sites for establishing new locations.

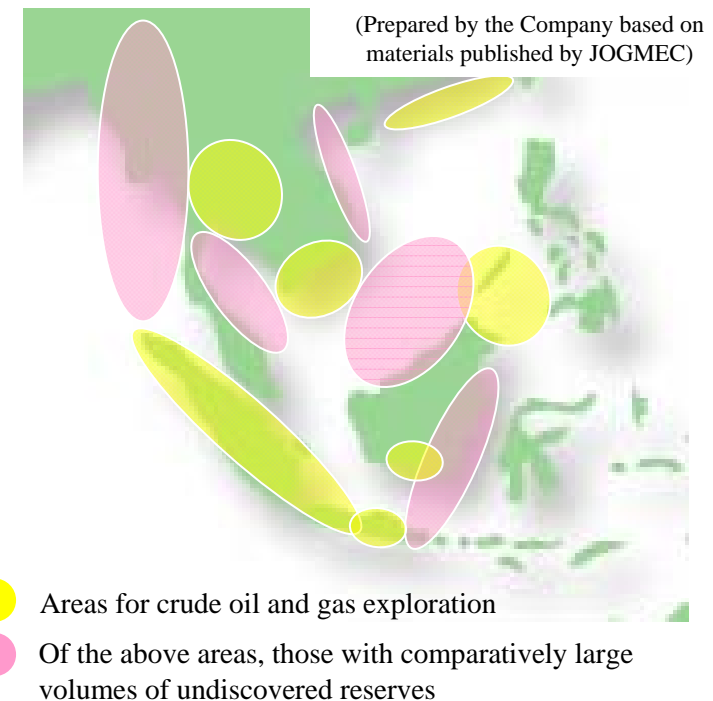
Expanding overseas operations

Oil and gas drilling waste management (Indonesia)

- PPLi's oil drilling waste management business is expanding steadily and is expected to account for approx. 30% of its net sales in fiscal year 2013.
- The development of crude oil and natural gas covers a wide area in Southeast Asia, and further business expansion is planned.



[Volumes of undiscovered crude oil and natural gas reserves in Southeast Asia]

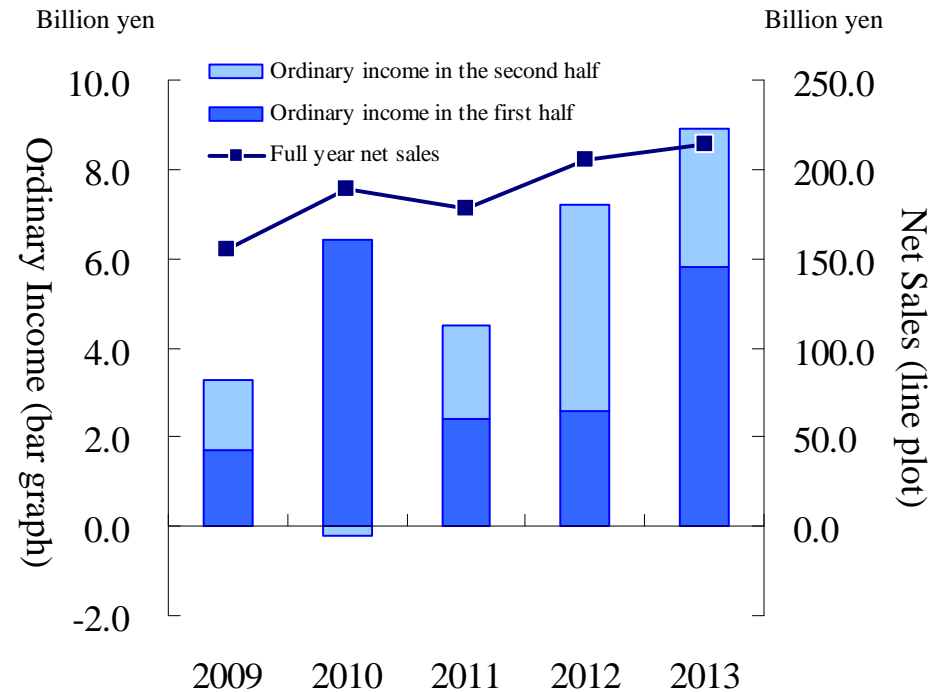


Precious metals recycling (Singapore)

- In April 2012, the precious metals recycling business was launched in addition to the existing waste treatment business.
- The collection of recycling materials from the Philippines and other peripheral countries is expanding
-> Net sales in the first half of fiscal year 2013 increased 15% over the second half of fiscal year 2012.

Situation in FY2013

- Copper and zinc prices leveled off. Precious metal prices were sluggish, but the yen continued to depreciate.
- Domestic demand for copper and zinc recovered slightly in the construction and automobile sectors.
- The collection of platinum group materials has trended upwards, given stronger collection efforts overseas (North America, Europe, and Asia).



* Full year earnings (for fiscal year 2013) are on a pro forma basis.

Future actions

■ Precious metals and copper

- Strengthen the collection of tin and other by-product metals at Kosaka Smelting & Refining.
- Maintain the full capacity operation of the TSL furnace.

■ Zinc

- The zinc processing plant in Thailand will launch operations (to commence in December 2013).
- Strengthen the international competitiveness of Akita Zinc, mainly through energy cost reductions.

■ PGM

- Improve and expand collection systems at the Company's bases in Europe and North America.

Strengthen recycling smelting & refining

Global collection of platinum group materials (PGM) expanded

Japan: Maintained market share despite the flat market.

North America:

Increased sales personnel for this core market.

Europe: 2010: Established a sampling factory.

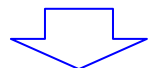
2013: Allocated sales personnel and strengthened the collection structure.

Asia: Expanding collection by viewing it as a future growth market.

Further expanded collection mainly overseas

Strengthened recycling smelting and refining at Kosaka Smelting & Refining

- In 2008, a recycling-type smelting and refining furnace commenced full-scale operation.
- The treatment of scrapped boards and other recycling resources collected in Japan and overseas has been expanded.
[In fiscal year 2012, volumes increased by 30% compared to fiscal year 2010.]

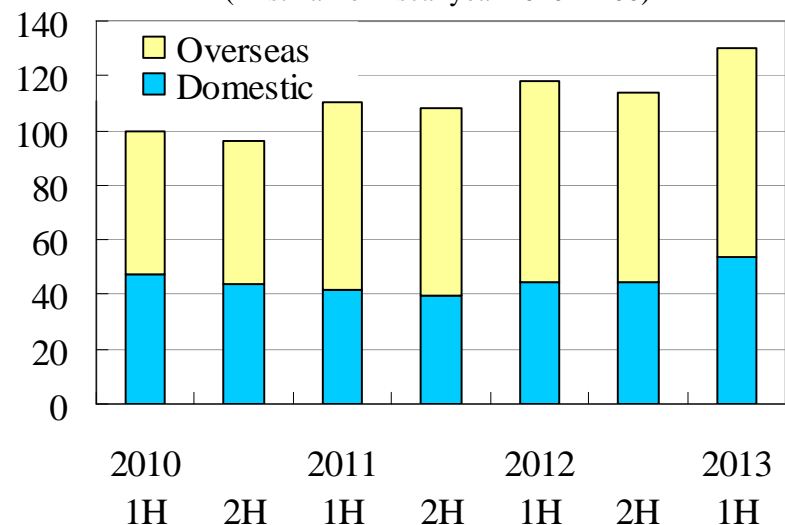


With expanded treatment volumes, the collection of tin and other by-product metals was improved and expanded.

Strengthened earnings momentum by collecting metals from various resources.

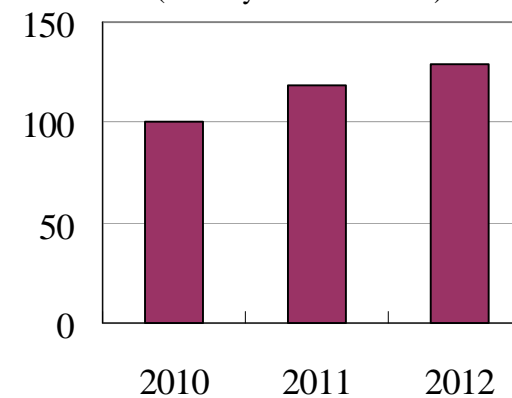
Change in the collection of recycling materials for PGM

(First half of fiscal year 2010 = 100)



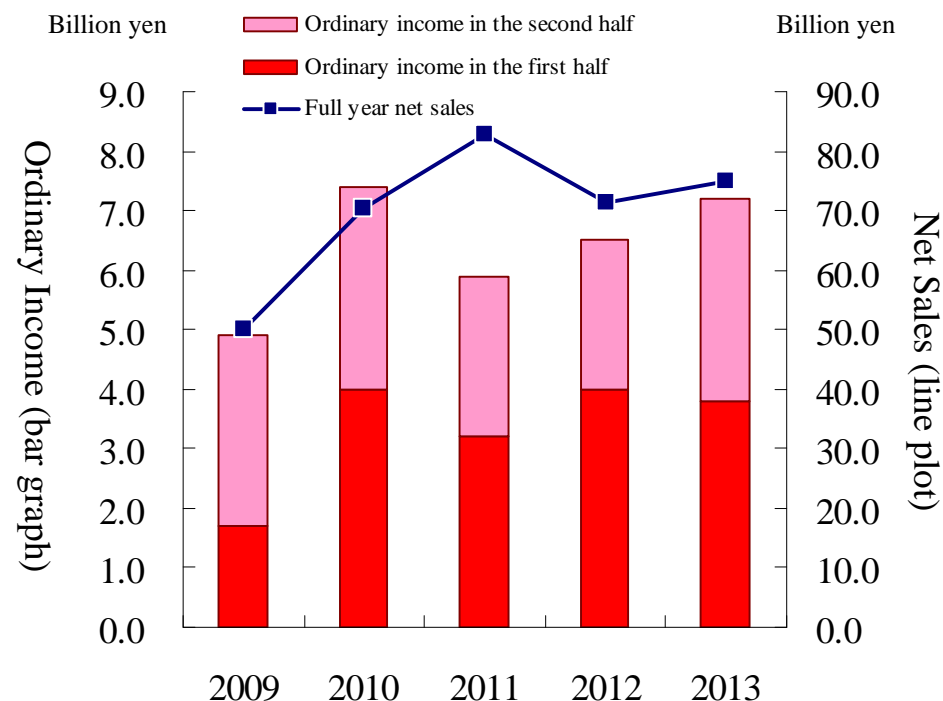
Kosaka: Change in recycling materials treatment volumes

(Fiscal year 2010 = 100)



Situation in FY2013

- Sluggish demand in electronic components and semiconductors for use in personal computers. Demand for use in smartphones is likely to recover from the second half of the current fiscal year onward, despite some adjustments in the first half.
- Increasing demand for solar batteries, chiefly attributable to expanding mega-solar markets in Japan and the United States.
- Use in high quantity data tapes to replace use in existing tapes is progressing.



* Full year earnings (for fiscal year 2013) are on a pro forma basis.

Future actions

- Semiconductors**
 - LED: Capture demand for LEDs used in proximity sensors and expand sales for use in the medical sector.
 - HEMT: Acquire early authorization and expand sales in response to users' mass production plans.
- Electronic materials**
 - Silver power: Establish increased production systems and expand sales of next generation materials.
- Magnetic materials**
 - Metal powder: Strengthen earnings momentum through the development of new magnetic powder and the improvement of productivity.
 - Carrier powder: Promote development for new uses and expand shares in existing uses.
- New development**
 - Deep ultraviolet LEDs: Promote development and expand sales for use in the sterilization and medical sectors.

Actions to address growing markets

■ Silver powder for solar batteries

Global demand for solar batteries in 2013: Expected to increase by approx. 20% from a year ago.

- United States and Asia: Market expansion mainly for mega solar.
- Japan: Increased demand triggered mainly by the purchase system (Feed-in Tariff System).

In the second half of fiscal year 2013, production capacity will be expanded by 15% to respond to increasing demand.

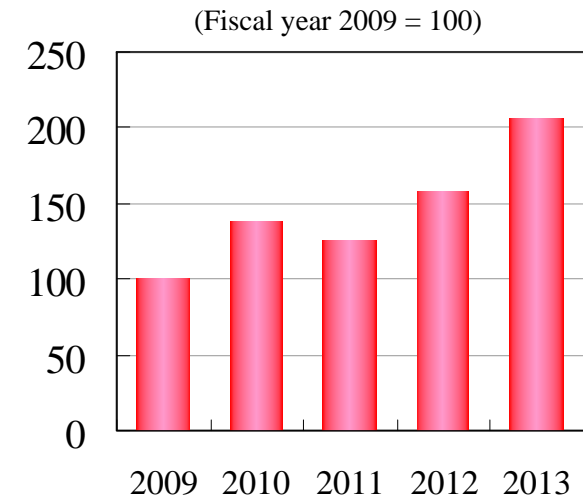
■ LEDs for proximity sensors

Global delivery quantity of smartphones in 2013: expected to increase by approx. 40% from a year ago.

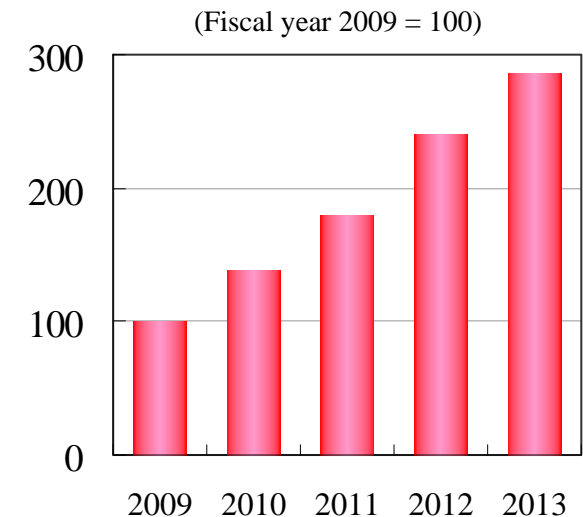
- Higher-priced models also maintained solid sales, chiefly attributable to the launch of new models.
- Buoyant sales of lower-priced models in emerging countries.

Strengthened production capacity of high output LEDs in response to increasing demand for use in smartphones.

Change in silver powder sales volume



Change in LED sales volume



Situation in FY2013

- Copper strip products: Performed well in use in automobiles. Demand for use in semiconductors and electronic components was sluggish, mainly in PCs. Demand for use in smartphones expanded.
- Electroplating: Demand held solid, primarily for automotive applications.
- Metal-ceramic substrates: Demand for use in industrial machinery showed a recovery trend. Demand for use in railways and new forms of energy was solid.

Future actions

■ Copper strip products

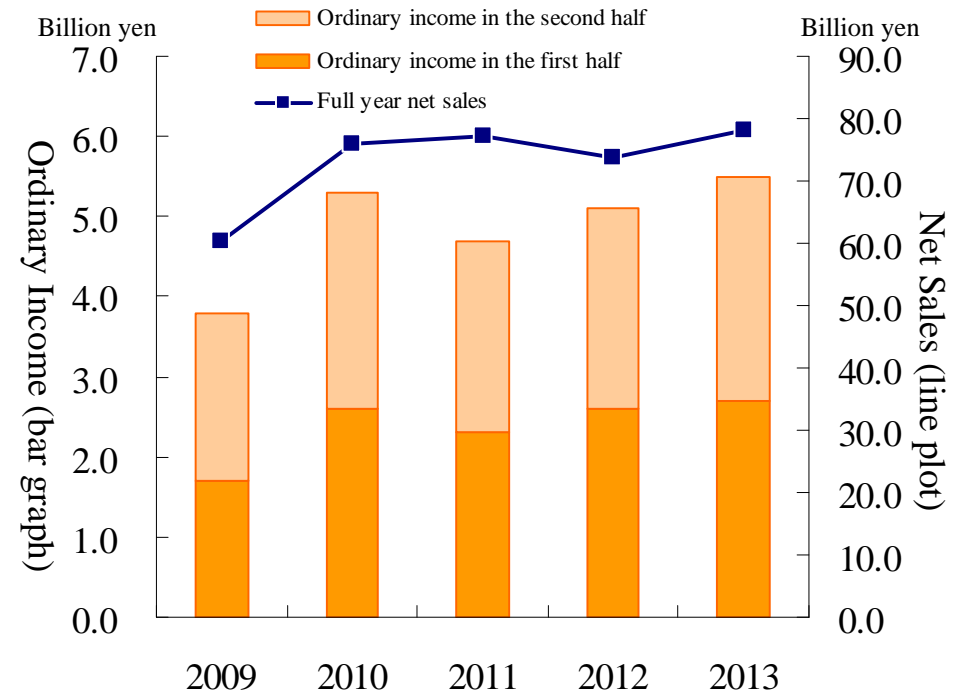
- For use in automobiles: Development and sales expansion of high performance copper alloy for hybrid cars and electric vehicles.
- For use in semiconductors and electronic components: Improvement of productivity and profitability through new plant operation

■ Electroplating

- Strengthen and expand sales for use in automobiles by increasing production lines in Japan and Thailand.
- Strengthen earnings momentum through advancements in plating technology, including local plating.

■ Metal-ceramic substrates

- Expand sales of products for use in railways and increase market shares.
- Establish the mass production system of products for use in the new energy sector (wind and solar power generation).



* Full year earnings (for fiscal year 2013) are on a pro forma basis.

Actions to address the automobile industry

<Automobile market conditions>

Although, in the second half of FY2012, sales volume fell 10% from the first half mainly due to the withdrawal of government subsidies for eco-friendly car purchases, in FY2103, sales will be strong throughout the first and second halves.

■ Copper strip products business

<Domestic>

- Develop and expand sales of high performance (high conductivity and strength) copper alloy for hybrid cars and electric vehicles.
- Enhance competitive strength through improvements in productivity and the yield rate.

<Overseas>

- Expand sales by using production and sales bases in China and Southeast Asia.

■ Electroplating business

<Domestic>

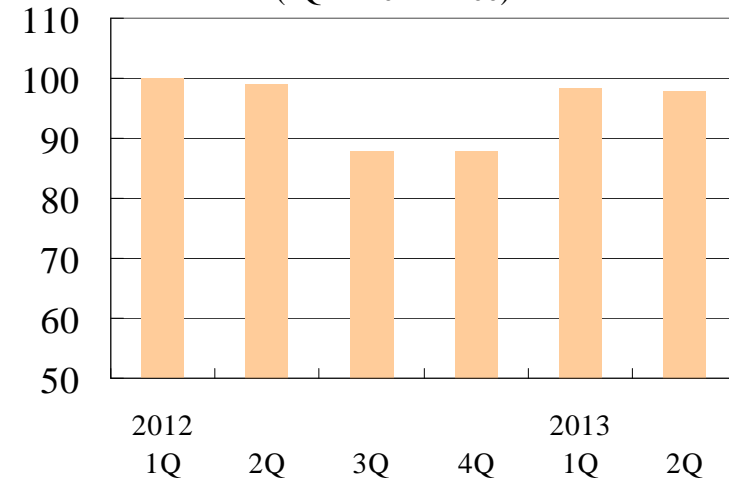
- Expand sales of electroplating for use in high pressure connector terminals for hybrid cars.
- In the second half of fiscal year 2013, increase and strengthen production lines.

<Overseas>

- In fiscal year 2014, additional production lines are planned to be established in Thailand.

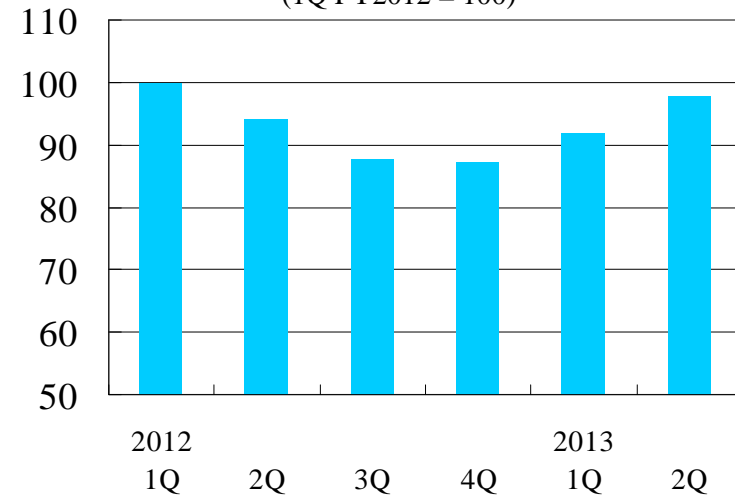
Change in sales volumes of copper strip products (DOWA Metal Co., Ltd.)

(1Q FY2012 = 100)



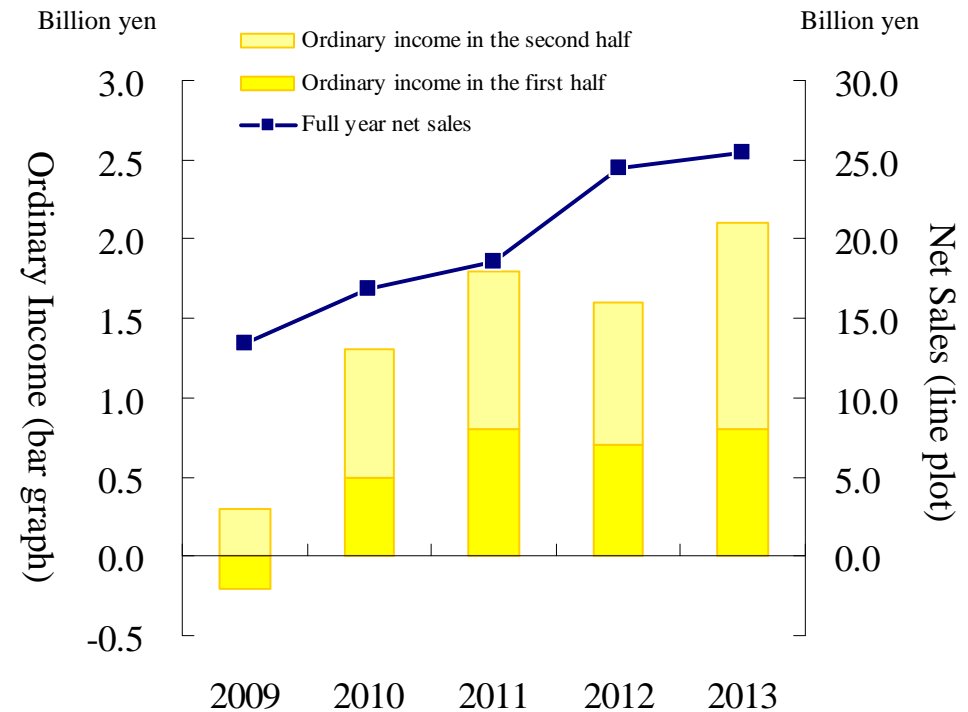
Change in revenue from processing plating products

(1Q FY2012 = 100)



Situation in FY2013

- Industrial furnaces:
Solid sales chiefly for overseas applications.
- Heat treatment:
Performed well in use for automobiles in Japan and the United States.
Sales in India are currently decelerating.
While domestic demand for use in construction machinery is strong, the recovery in exports is slow.



* Full year earnings (for fiscal year 2013) are on a pro forma basis.

Future actions

- **Overseas business**
 - Expand sales of industrial furnaces and expand maintenance business through local manufacturing.
 - Launch heat treatment processing business in Indonesia.
- **Domestic business**
 - Improve earnings strength by integrating bases for industrial furnaces (design and manufacture).
 - Improve the operating ratio by integrating and adjusting production lines among the factories for heat treatment.
- **R&D**
 - Enter into the new coating business (DLC: Diamond-Like Carbon).

Strengthen the domestic and overseas heat treatment business

Expand the overseas heat treatment business

<North America>

Plant expansion completed. In the second half of fiscal year 2013, five additional furnaces will be installed.

<Thailand>

In fiscal year 2014, two additional furnaces are planned to be installed.

<Indonesia>

In October 2013, heat treatment processing operations commenced.

<India and China>

Furnaces manufactured in India and China were installed in Indonesia and North America.

Respond to increased demand through prompt capital investment

Enter into the DLC coating business

Special feature: High degrees of hardness and abrasion resistance and low frictional properties were achieved by creating hard carbon film.

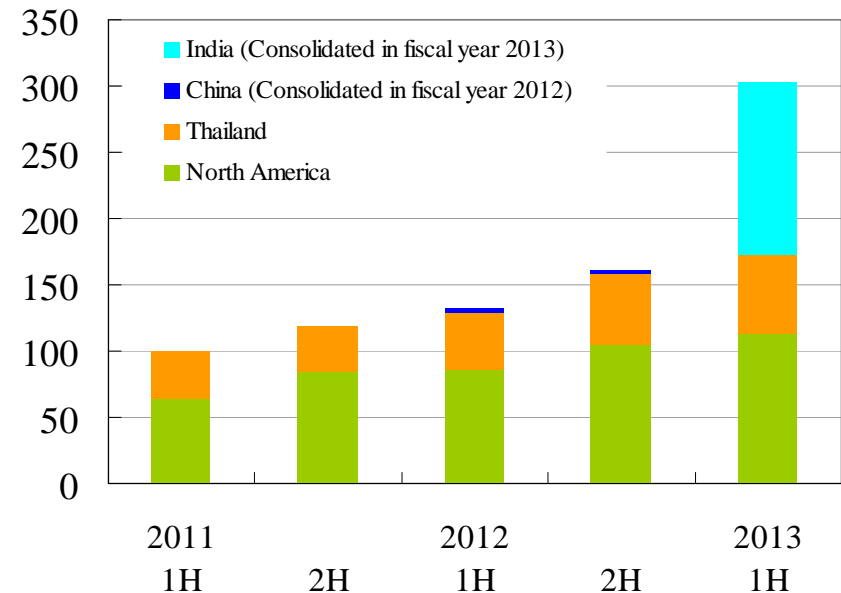
Use: Sliding components of automobiles (engines, etc.), mold members, etc.

Size of the market: 10 billion yen a year, market growth rate of 15% (estimated).

Pursue early commercialization, aiming for net sales of 2 billion yen (in 5 years).

Change in net sales of heat treatment processing at overseas bases

(First half of 2011 = 100)



Changes in ordinary income and net income

