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VGF STRENGTH. PERFORMANCE. INNOVATION.



# **AXT Presentation**

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Chief Financial Officer

November 2009



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# Safe Harbor Statement

*This presentation contains forward-looking information about the Company's business and financial outlook. Forward-looking information addresses matters that are subject to risks and uncertainties. In addition to the risks associated with developing complex technology, the Company's future results will depend on a variety of factors, including the cancellation or modification of major contracts; the timing of significant orders; the cancellation of orders and returns of product; the ability of the Company to bring new products to market; the timing of product releases; product announcements by the Company's competitors and other competitive factors. For further discussion of risks and uncertainties relating to the Company, please see the Company's filings with the SEC.*



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# Investment Highlights

- **Excelled in Vertical Gradient Freeze (VGF) Technology**
- **Compound Semiconductor substrate supplier with Manufacturing Center in China**
- **\$0.5B addressable market, GaAs, InP and Ge**
- **Increasing market share with leading customer qualifications**
- **JV's in China, leverage cost, supply expansion advantages**



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# Compound Semiconductor Value Chain

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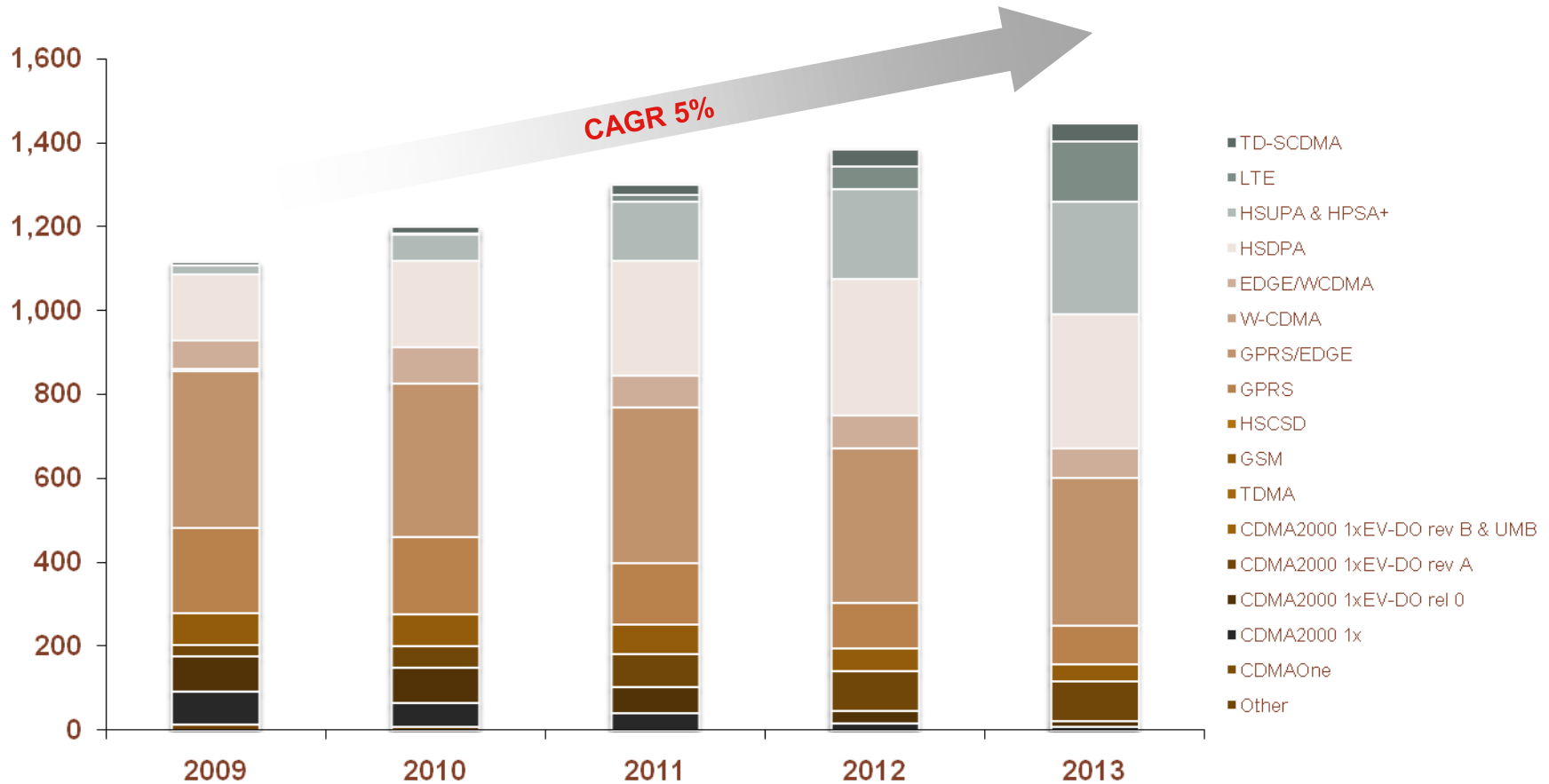
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# Product/Market Applications

Product	Market	Size/AXT Share	Growth Rate (2009-2014)
<b>GaAs</b>	Handset	\$140M /25%	CAGR 5%
	LED, Lasers	\$320m / 9%	
<b>InP</b>	Fiber Optics	\$40M /8%	CAGR 30%
<b>Ge</b>	Solar Cell	\$25M /15%	CAGR 41%



# Handset Market Forecast 2009 to 2013



2007-2012 CAGR 4%

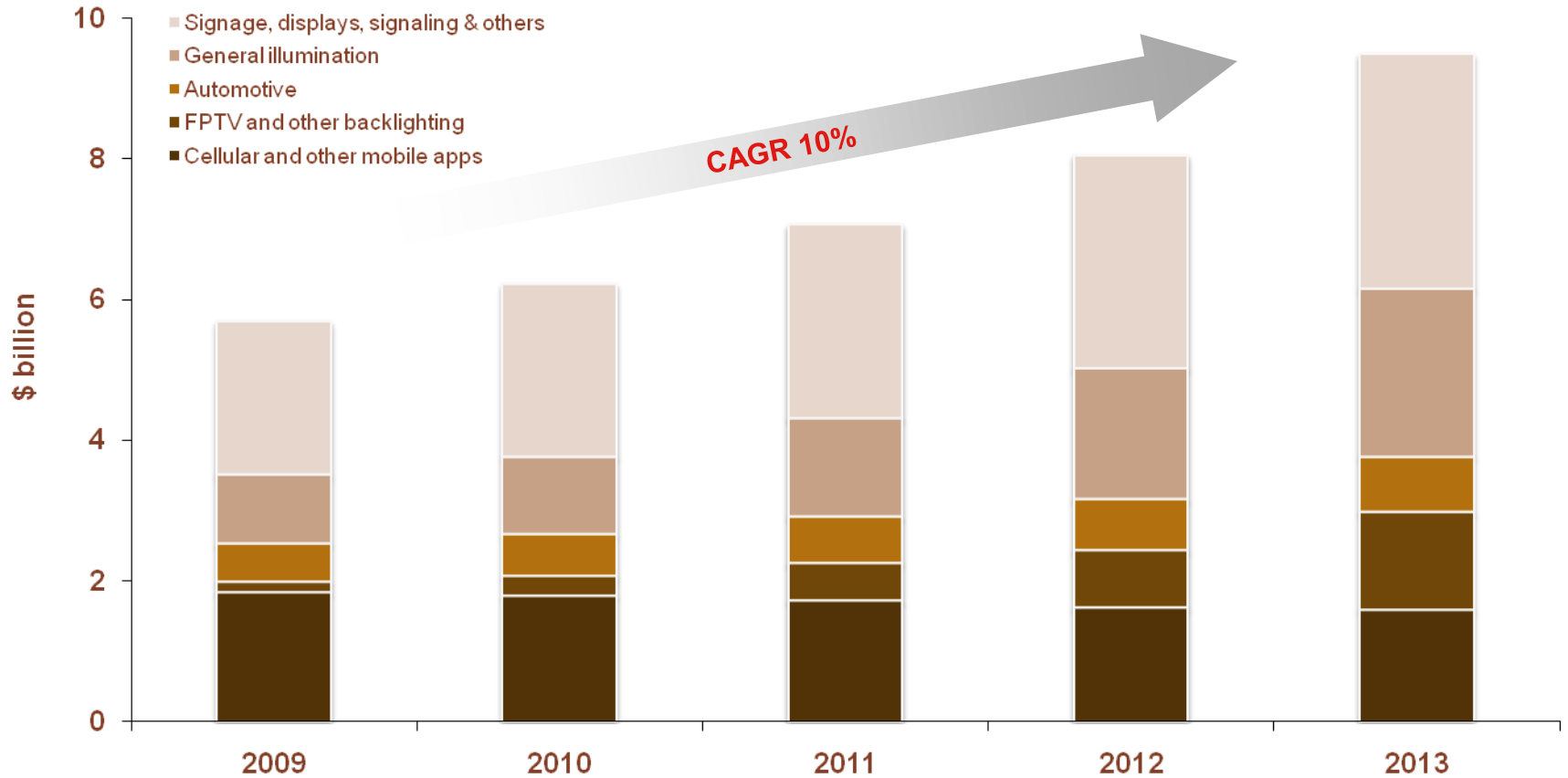
AXT, INC. 2009

Source: Strategy Analytics August 09



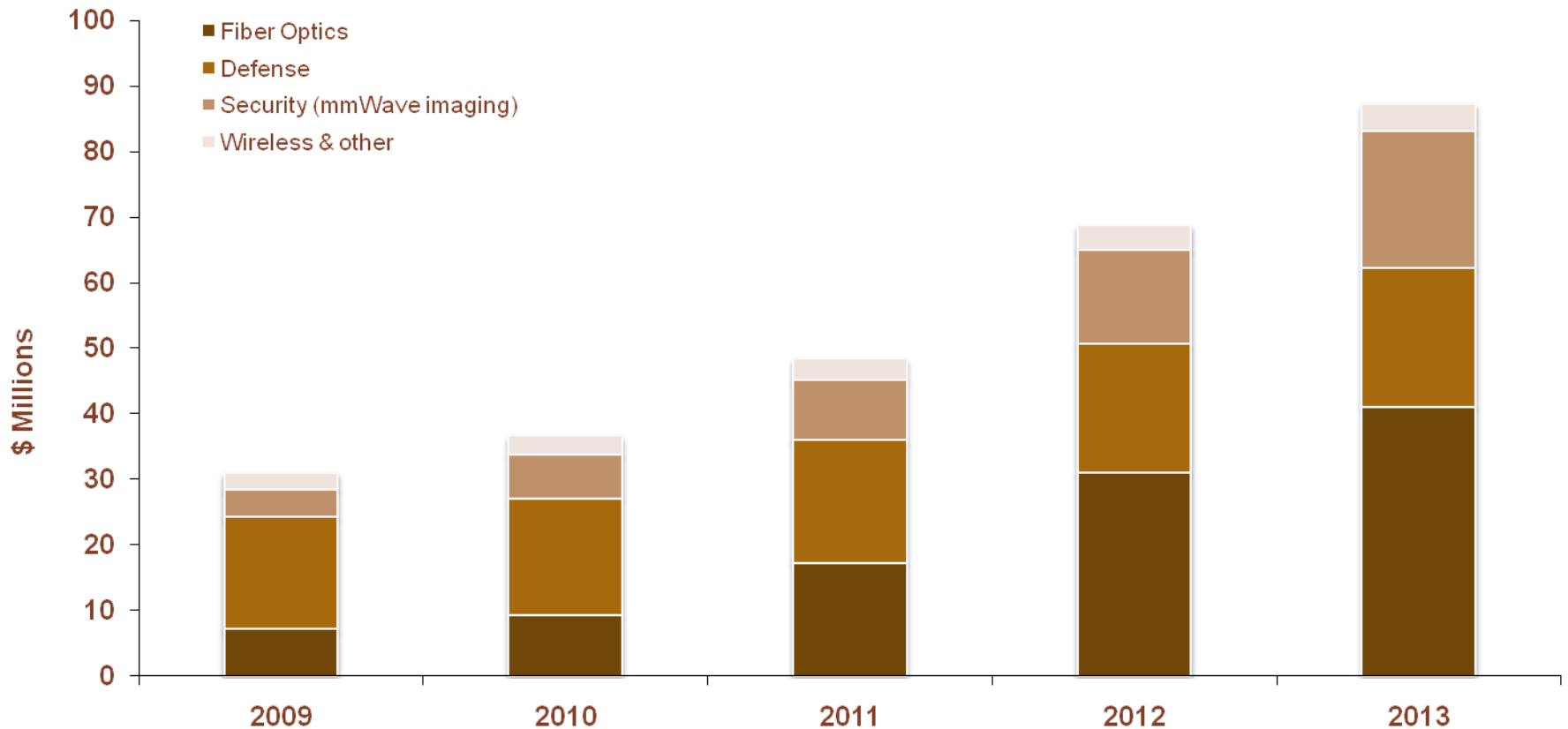
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# Market Drivers for LEDs





# Total InP IC Market 2009 – 2013 Will Grow at a CAGR of 30%

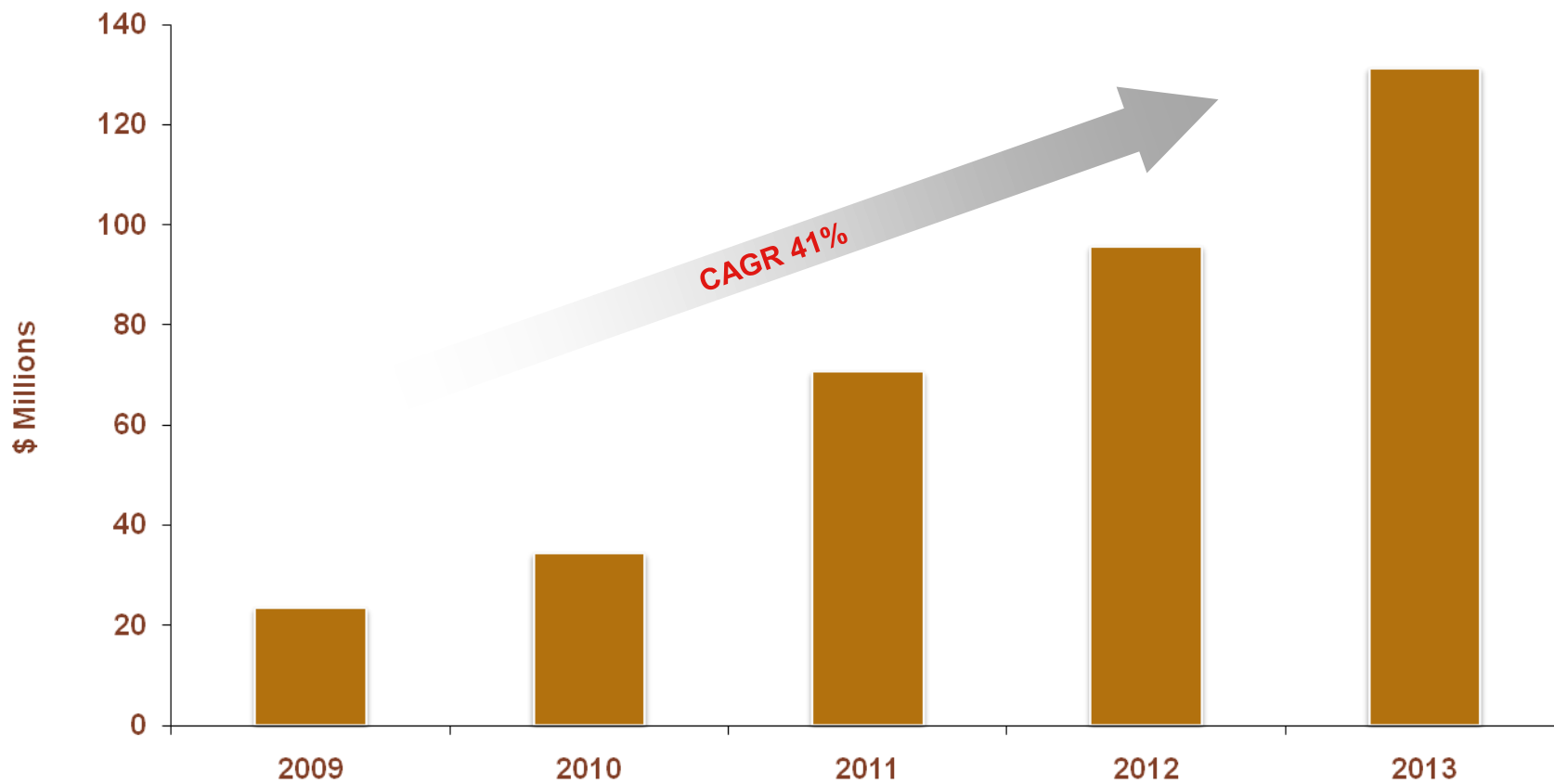






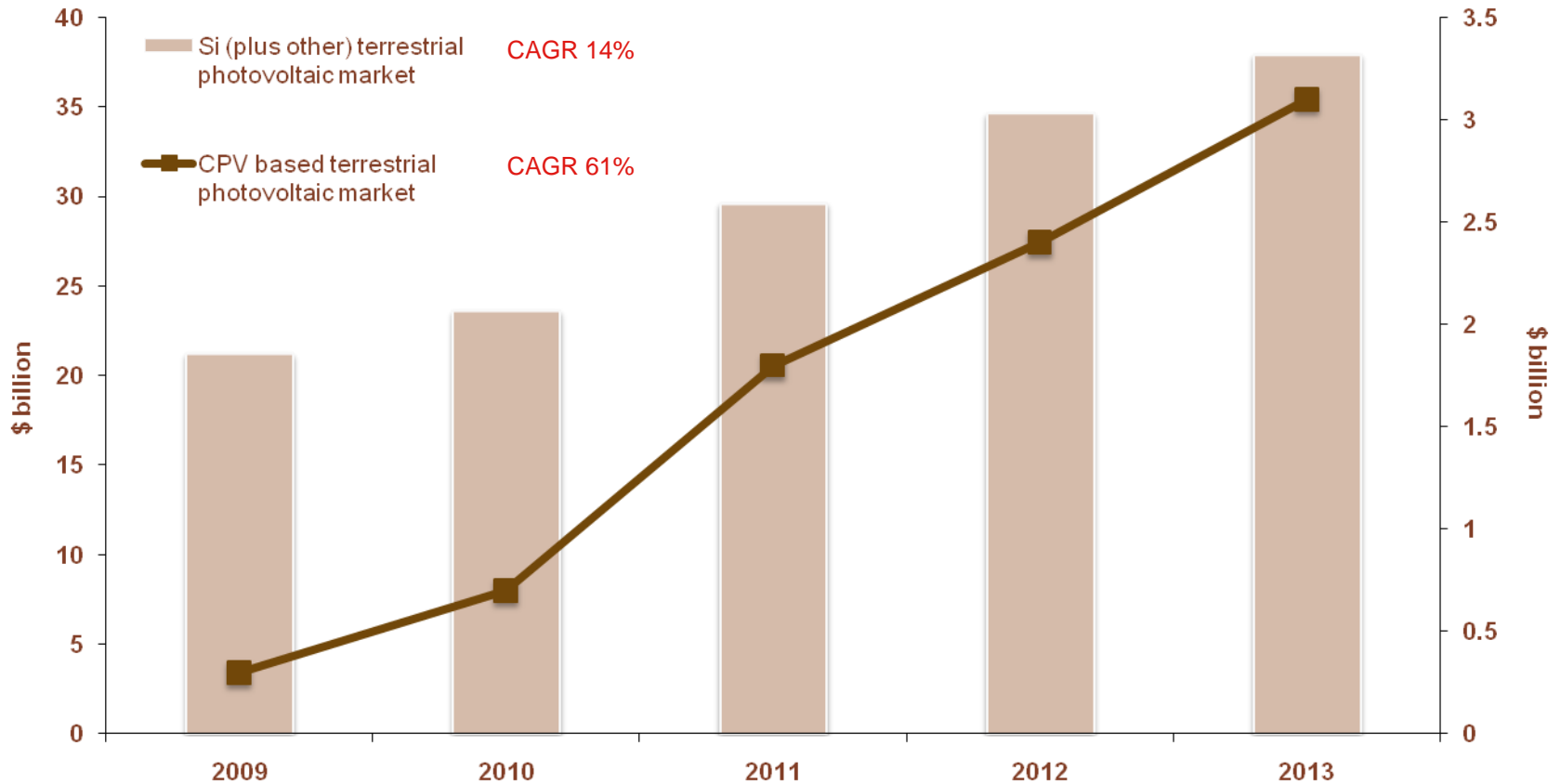
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# Accelerating Demand for Ge Substrates





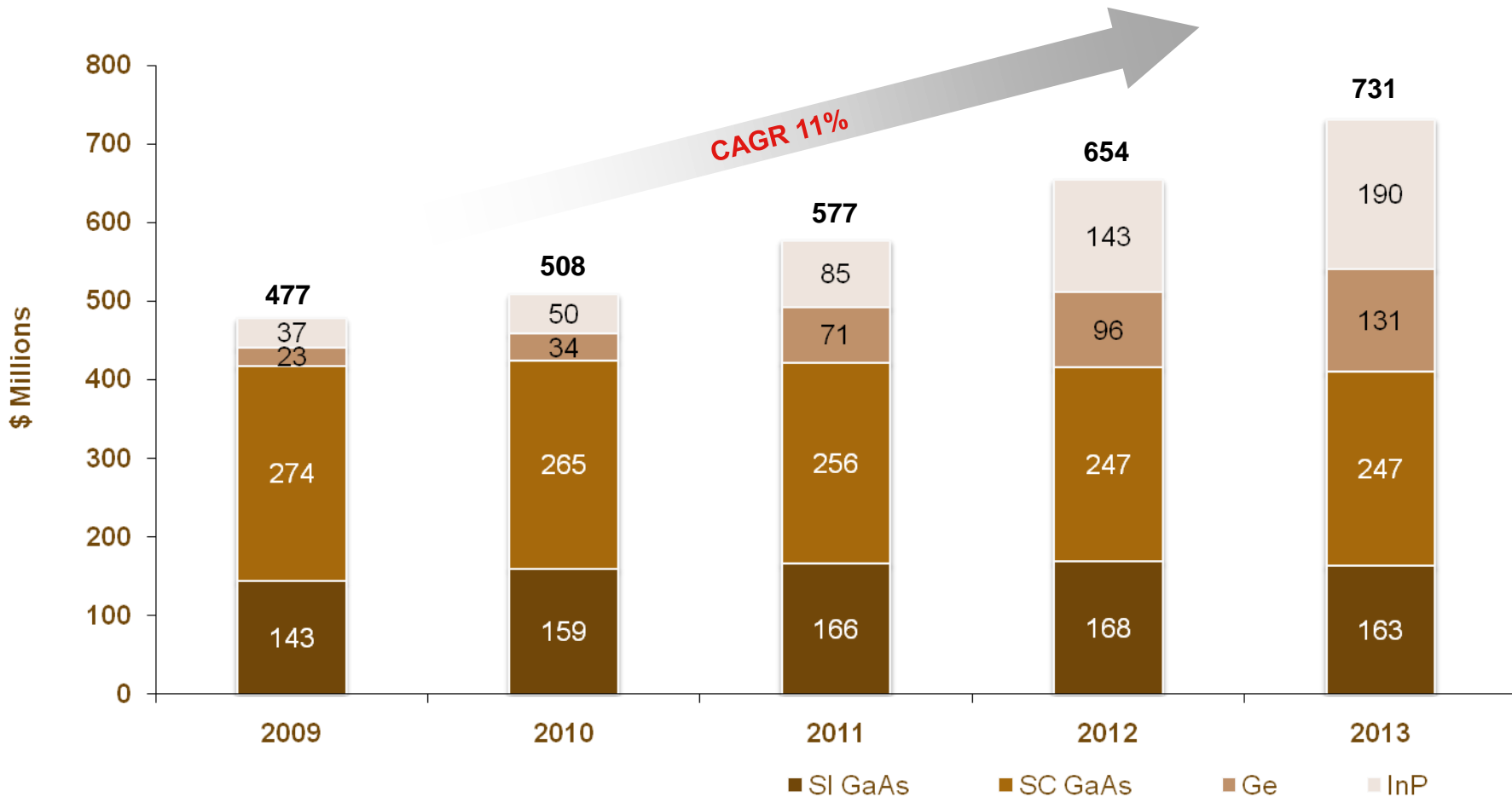
# Terrestrial Photovoltaic Market: 2009-2013





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# Total Market Opportunity





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# AXT Competitive Advantages

	AXT	Competitors
<b><i>Crystal Growing Furnace Cost</i></b>	<b>Build</b>	Buy ?
<b><i>Facilities Cost</i></b>	<b>Existing</b>	Greenfield ?
<b><i>Labor Cost</i></b>	<b>China</b>	Germany + Japan
<b><i>Raw Materials Availability</i></b>	<b>Buy from JVs</b>	Buy on open market
<b><i>Product Lead-times</i></b>	<b>6-8 weeks</b>	10-12 weeks
<b><i>Time to Capacity</i></b>	<b>~ 6 months</b>	~ 18+ months

**AXT has advantages in all elements!**



# Joint Ventures

- **Five JV Operations started in 1999 - 2001**
  - Supplies critical raw materials
    - Ga, As, Ge, pBN, B2O3
    - All located locally; Beijing/Nanjing
  - Majority Ownership in Ga and pBN
  - Minority Ownership (25%) in Ge and As
  - AXT uses majority of JV's capacity
- **Provides price and volume stability and guarantees vs. competition purchasing on open market**



# Hidden Value Of Consolidated Joint Ventures

- **Jiya, our 46% owned Ga producer – we have received approx. 3 times our investment of \$996K ie \$2.965M in the form of dividends. Jiya is shown on our books at cost of \$996K.**
- **Jinmei, our 83% owned Ga toll processor – we have received approx. 1.5 times our investment of \$592K ie \$915K in the form of dividends. Jinmei is shown on our books at cost of \$592K.**
- **Boyu, our 70% owned PbN crucible manufacturer – we have received approx 9 times our investment of \$410K ie \$3.695M in the form of dividends. Boyu is shown on our books at cost of \$410K.**



# Business Focus 2009

- **Increasing market share in SI and SC GaAs through new qualifications and competitive displacement**
- **Increase Ge capacity to capture market share/growth opportunity**
- **Developing 6" Ge capability to address major terrestrial Solar Cell market in 2010/2011**
- **Refocus Engineering efforts, expand higher margin business in InP**
- **Leverage our experience and growth opportunity in China**
- **Improvement of technologies that support new, emerging markets**



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**AXT, Inc.**

# 2006 - 2009 Financial Summary





# 2006 to 2009 Statement of Operations Data

(In millions – except margins and EPS)	2006	2007	2008	Q209 ytd	Q309
<b>Revenue</b>	\$44.4	\$58.2	\$73.1	\$20.7	\$16.8
<b>Gross Profit</b>	\$12.7	\$20.3	\$18.0	\$2.3	\$5.5
<b>Gross Margin</b>	28.7%	34.8%	24.6%	11.0%	32.9%
<b>Net Income (Loss)</b>	\$0.9	\$5.3	\$(0.7)	\$(6.8)	\$2.1
<b>Diluted EPS</b>	\$0.03	\$0.16	\$(0.03)	\$(0.23)	\$0.07

Note – Reported under US GAAP on file with SEC



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## 2006 to 2009 Balance Sheet Data

(in millions)

	2006	2007	2008	2009 Q2	2009 Q3
<b>Cash and investments (excl. restricted cash)</b>	\$35.5	\$39.2	\$31.3	\$30.6	\$33.8
<b>Net Acct. Receivable</b>	\$9.6	\$12.1	\$11.5	\$12.9	\$14.0
<b>Net Inventory</b>	\$20.3	\$24.8	\$35.1	\$28.3	\$28.6
<b>Total Assets</b>	\$98.3	\$112.8	\$111.7	\$103.0	\$109.1
<b>Total Debt/Credit Line</b>	\$7.7	\$6.7	\$3.0	\$3.0	\$3.0

NOTE: Reported under US GAAP on file with SEC

# THANK YOU!

## OUR VISION

To be the number one advanced semiconductor materials supplier of choice through superior quality, effective cost of ownership, and a customer focused philosophy.

## OUR MISSION

To identify and develop growth opportunities that will ultimately result in exceeding customer's expectations, market share enhancement, sustainable profitability, and provide shareholder value.



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