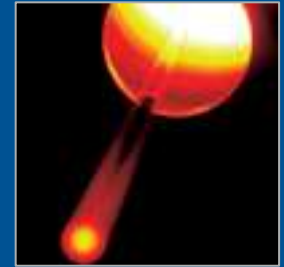


CORNING

World Wide Optical Fiber Markets &
Products for a Future Proof Network

Stone Wang
Vice President, Public Networks Sales
Greater China Telecom



Agenda

- Corning and GCT Introduction
- World-wide optical fiber market update
- Optimized optical products for cost-effective networks
- Summary

Corning Incorporated

Founded:

1851

Headquarters:

Corning, New York

Employees:

24,000 worldwide

2009 Sales:

\$5.4 Billion

Fortune 500 Rank (2009):

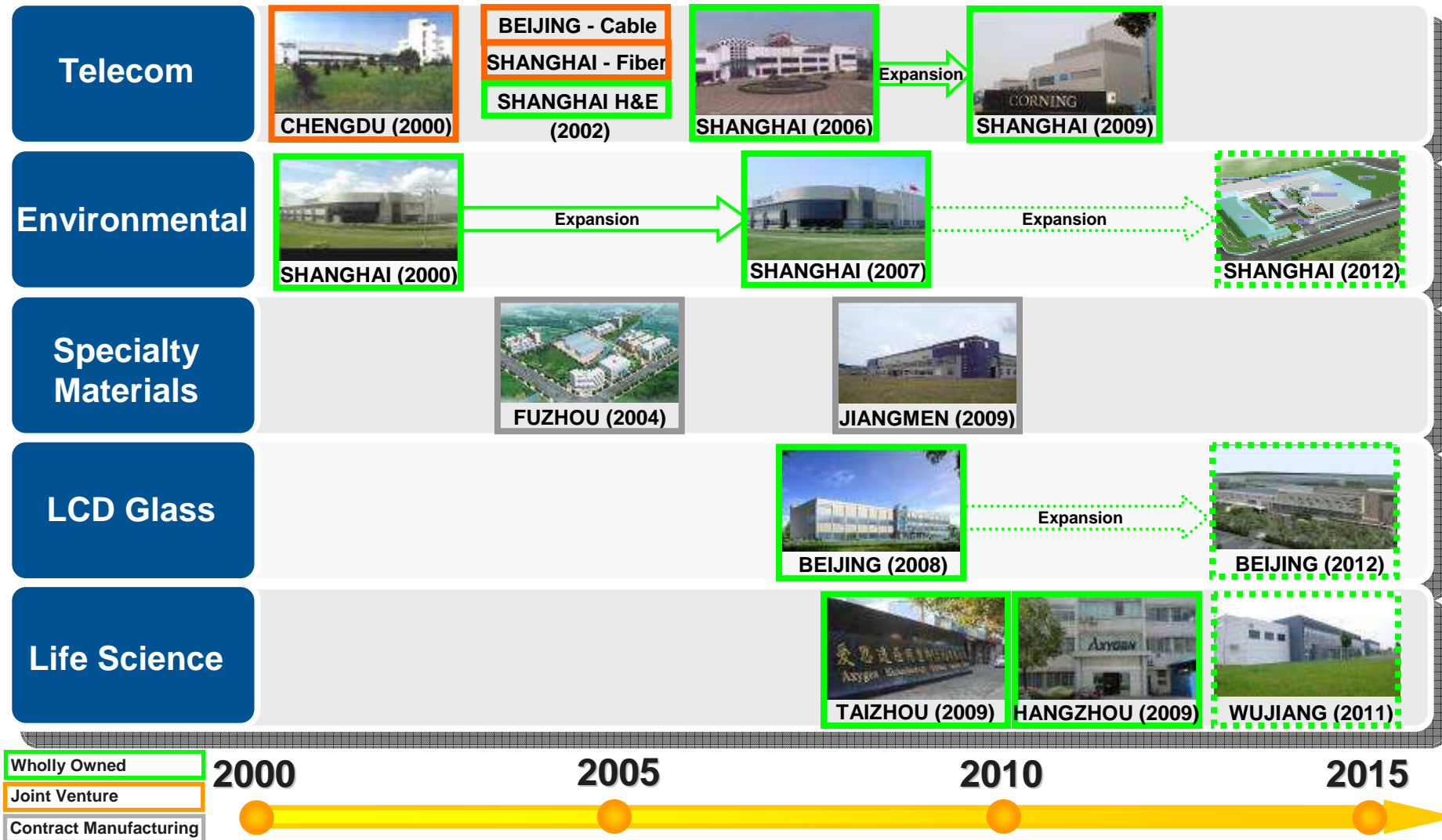
391

- Corning is the world leader in specialty glass and ceramics.
- We create and make keystone components that enable high-technology systems for consumer electronics, mobile emissions control, telecommunications, and life sciences.
- We succeed through sustained investment in R&D, more than 150 years of materials science and process engineering knowledge, and a distinctive collaborative culture.



Past to Present

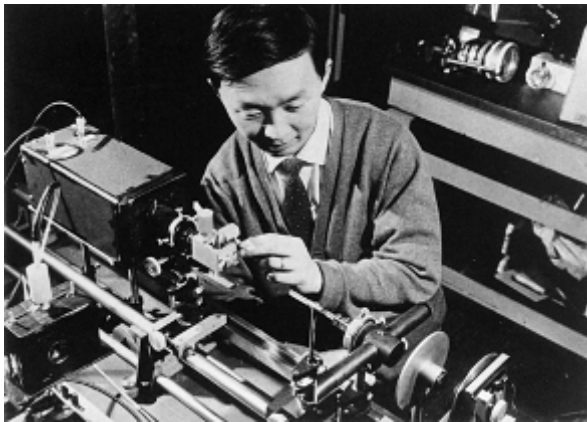
All of Corning divisions have business units in China



40 Years Ago Corning Scientists Invented Low-Loss Optical Fibre

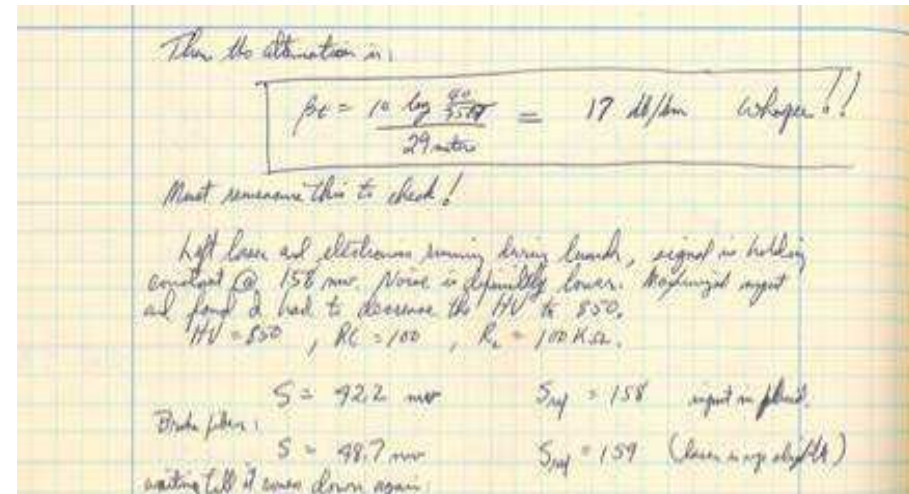
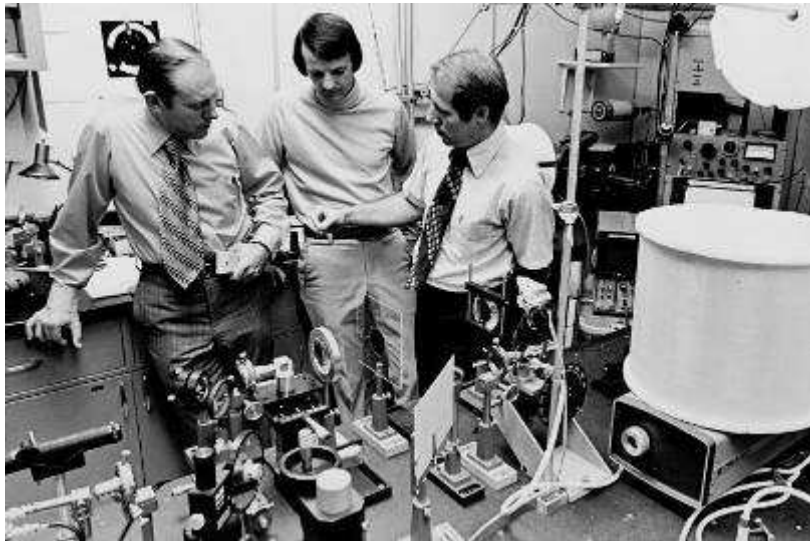
CORNING

40
Forty Years of Optical Fiber Innovation



Charles Kao Wins 2009 Nobel Prize for envisioning Optical fibre and Corning credited for bringing that vision to reality

draw fibers using other types of glass, without much success. Four years after Kao and Hockham's article, a research team from the Corning Glass Works in the United States, with F.P. Kapron, D.B. Keck, P.C. Schultz, F. Zimar, under the leadership of R.D. Maurer, succeeded by a clever chemical method called CVD (Chemical Vapor Deposition) in making glass fibers of fused silica with the low losses that Kao had envisioned. To make a core and a cladding with very close refractive indices, they doped titanium in the fused silica core, and used pure fused silica in the cladding [Appl. Phys. Lett. 17, 423 (1970)]. A few years later, they even reached



Corning Greater China Telecom



Beijing Cable



Shanghai Fiber



Chengdu Cable/H&E



Shanghai H&E

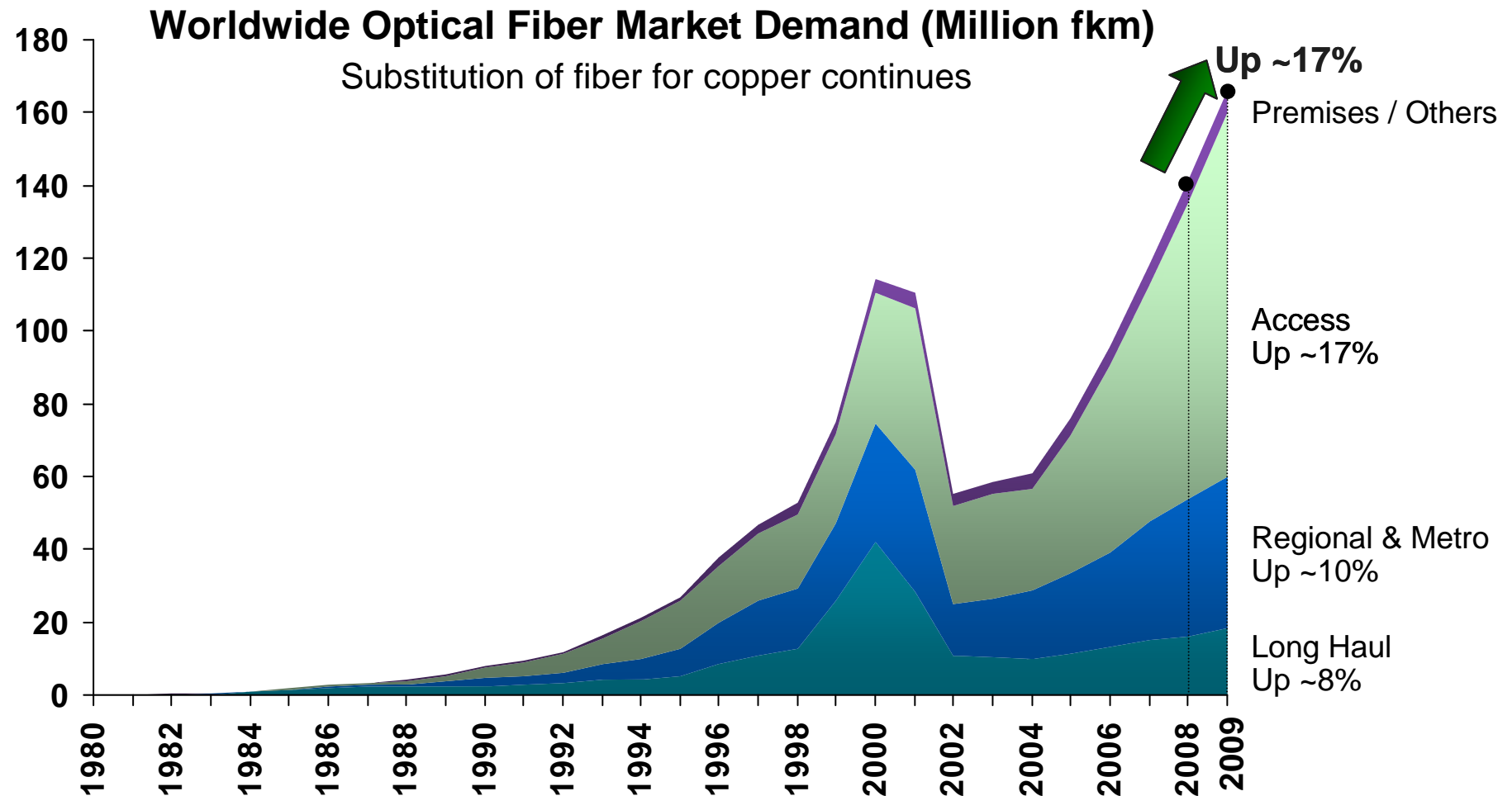
Optical Fiber
Optical Cable
Enterprise Networks
Fiber-to-the-home
1500+ people
4 Manufacturing Sites

One leadership team
One face to customers

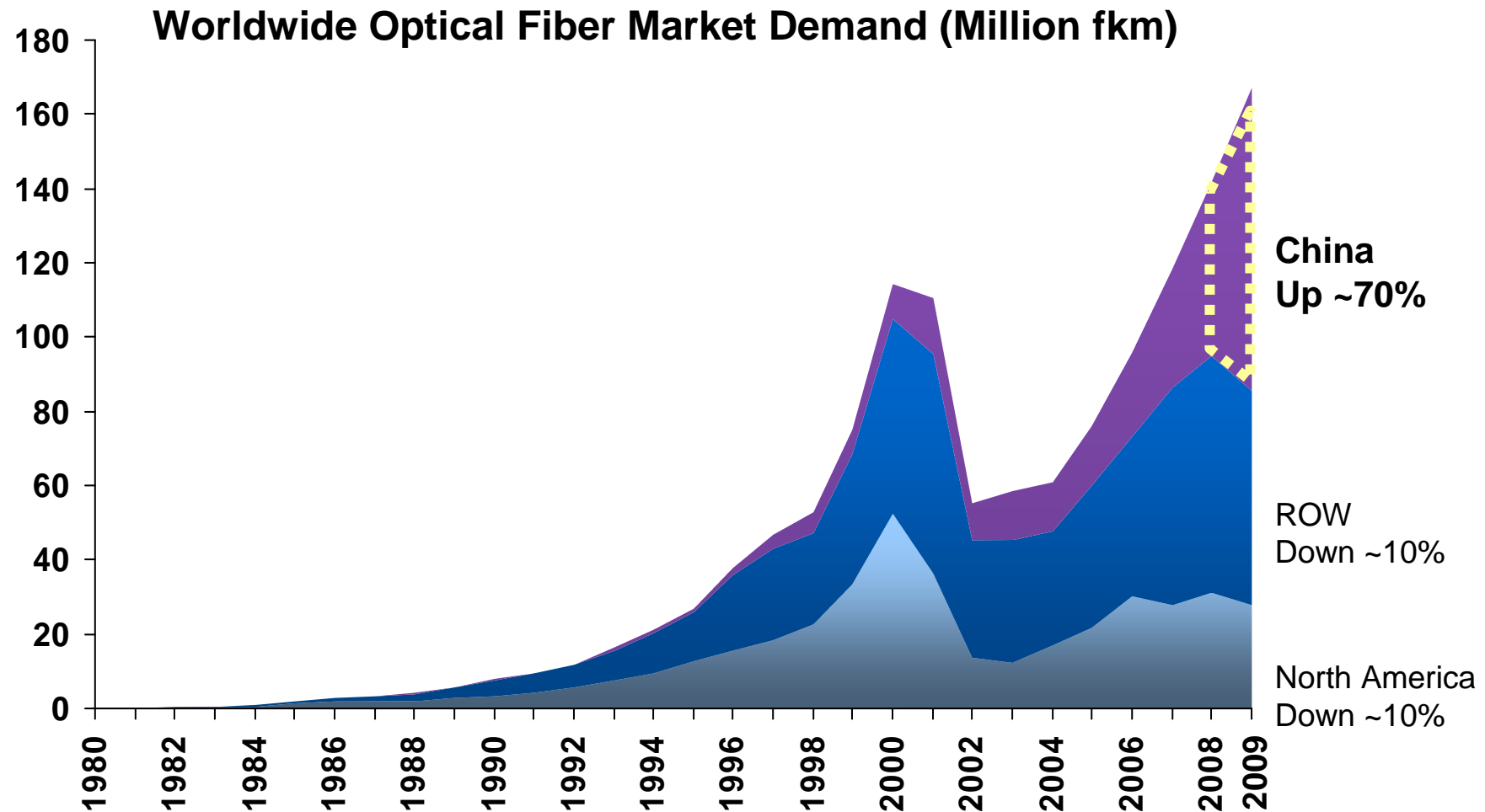
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Global Optical Fiber market grew significantly in 2009 despite worldwide recession...

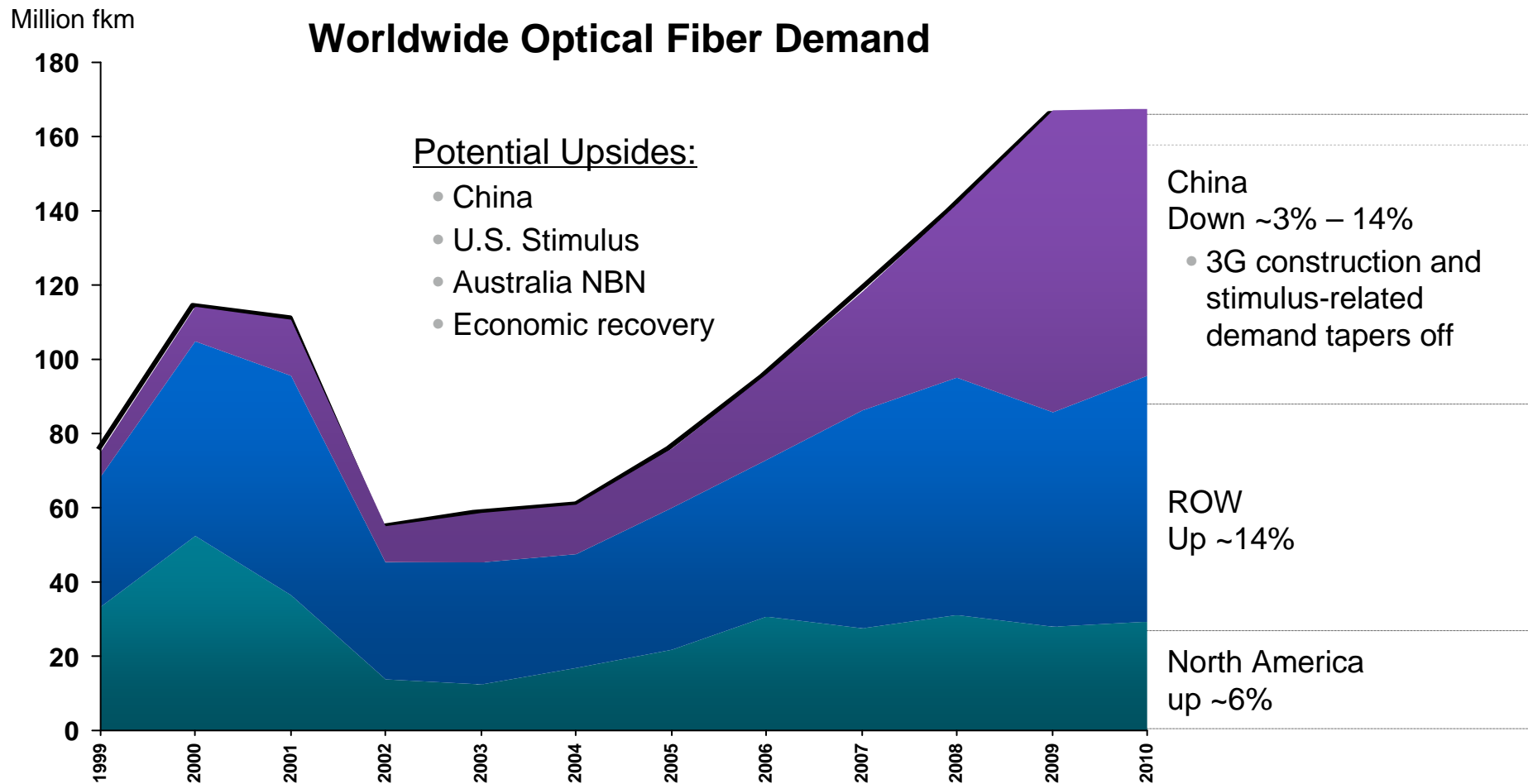


...as demand in China surged driven by 3G buildouts,
copper in/copper out and *real* government stimulus



Data Source: Corning Analysis

2010 Optical Fiber Market: Flat to Down 5%

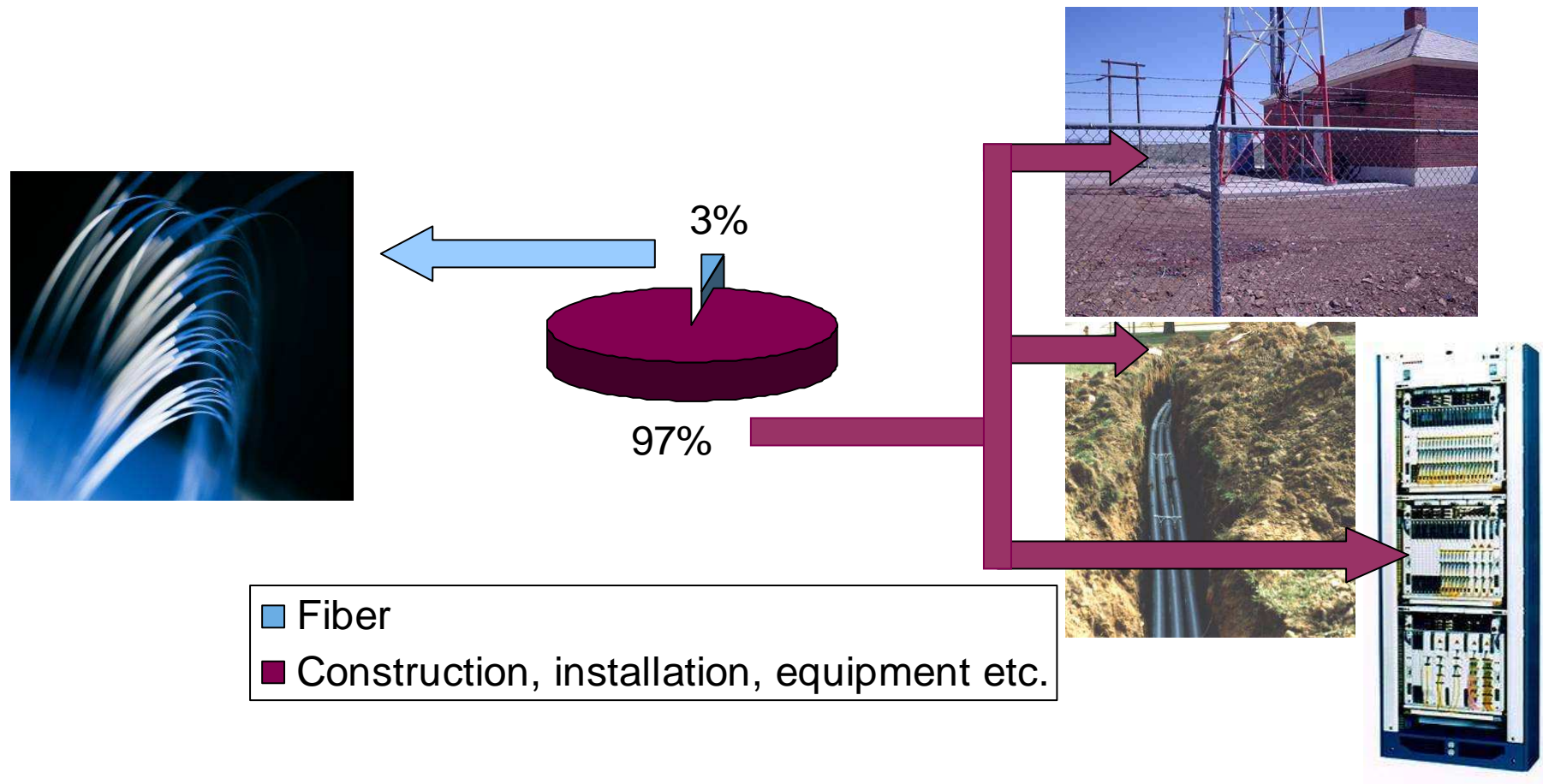


Data Source: Corning Analysis

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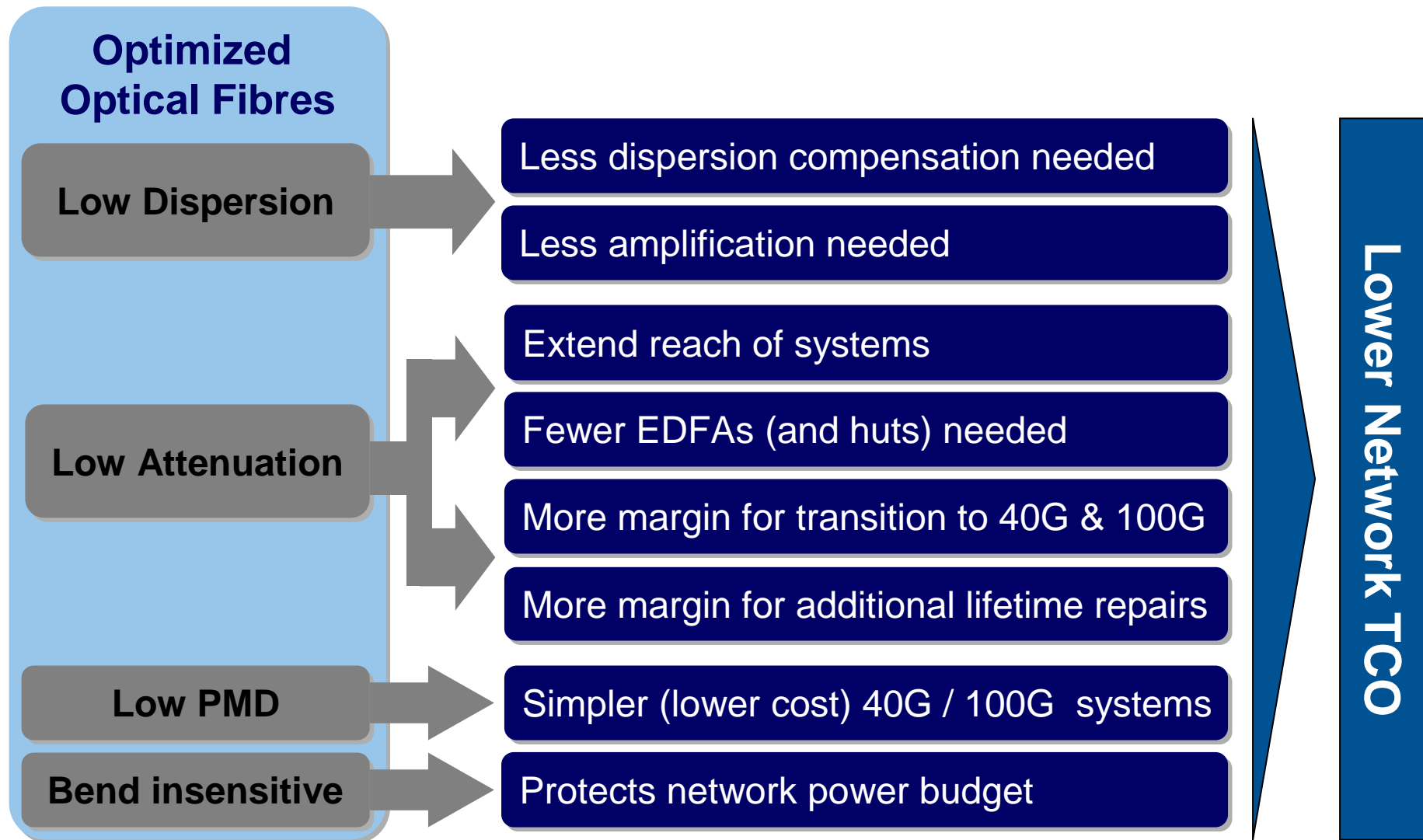
Fiber represents a small fraction of overall network cost: Choosing the right fiber is critical



- Total cost of 5 000 route km network ~ \$270M

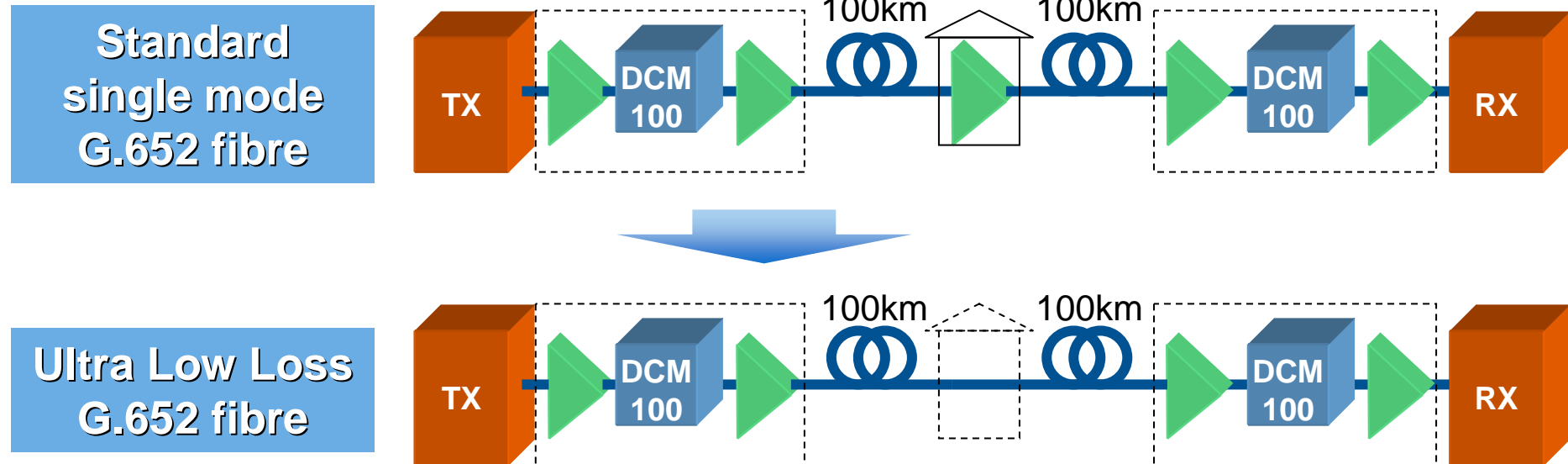
Source: ITWeb (Vodacom, Neotel, MTN National fibre backbone), Corning Estimate

How fiber attributes can impact network costs



Example:

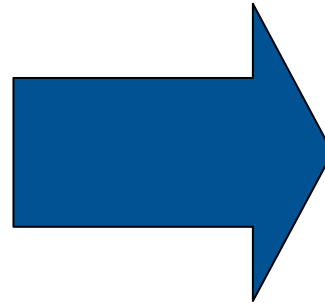
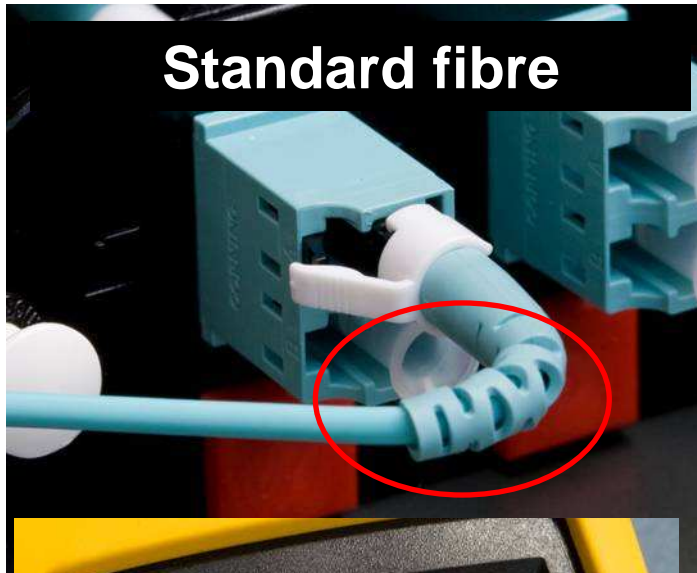
Ultra Low Loss fibres can eliminate the need for intermediate amplification sites



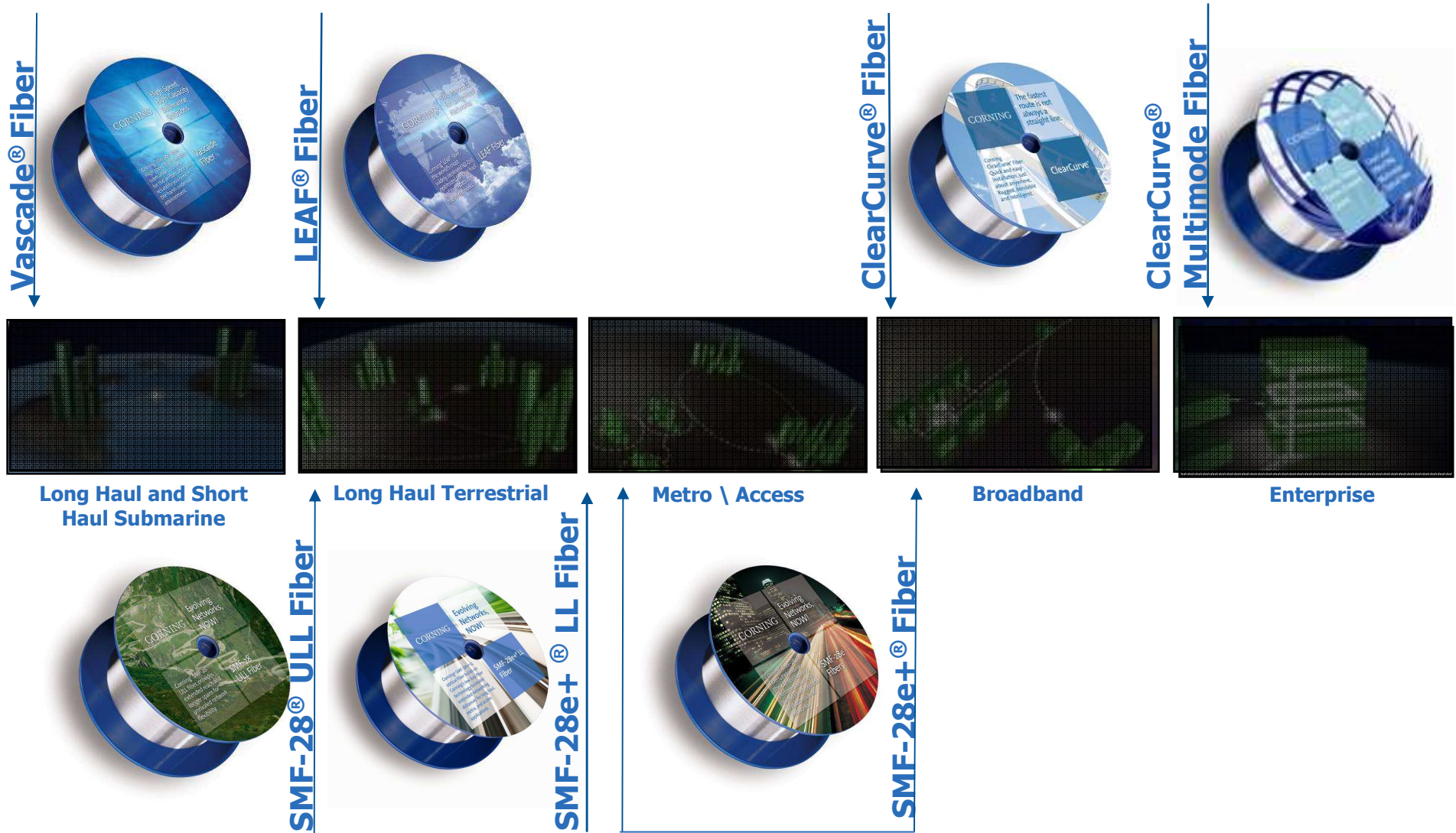
- Construction cost savings: \$300,000 on day-one
 - One amplifier hut, complete with back-up power, a/c etc.
- Equipment cost savings: \$60,000 per lit fibre pair
 - One EDFA, complete with equipment rack and controls
- Ongoing operation cost savings:
 - Equipment maintenance, electrical power, hut maintenance, security

Example:

Bend-insensitive fibres are more forgiving of poor installation practices...

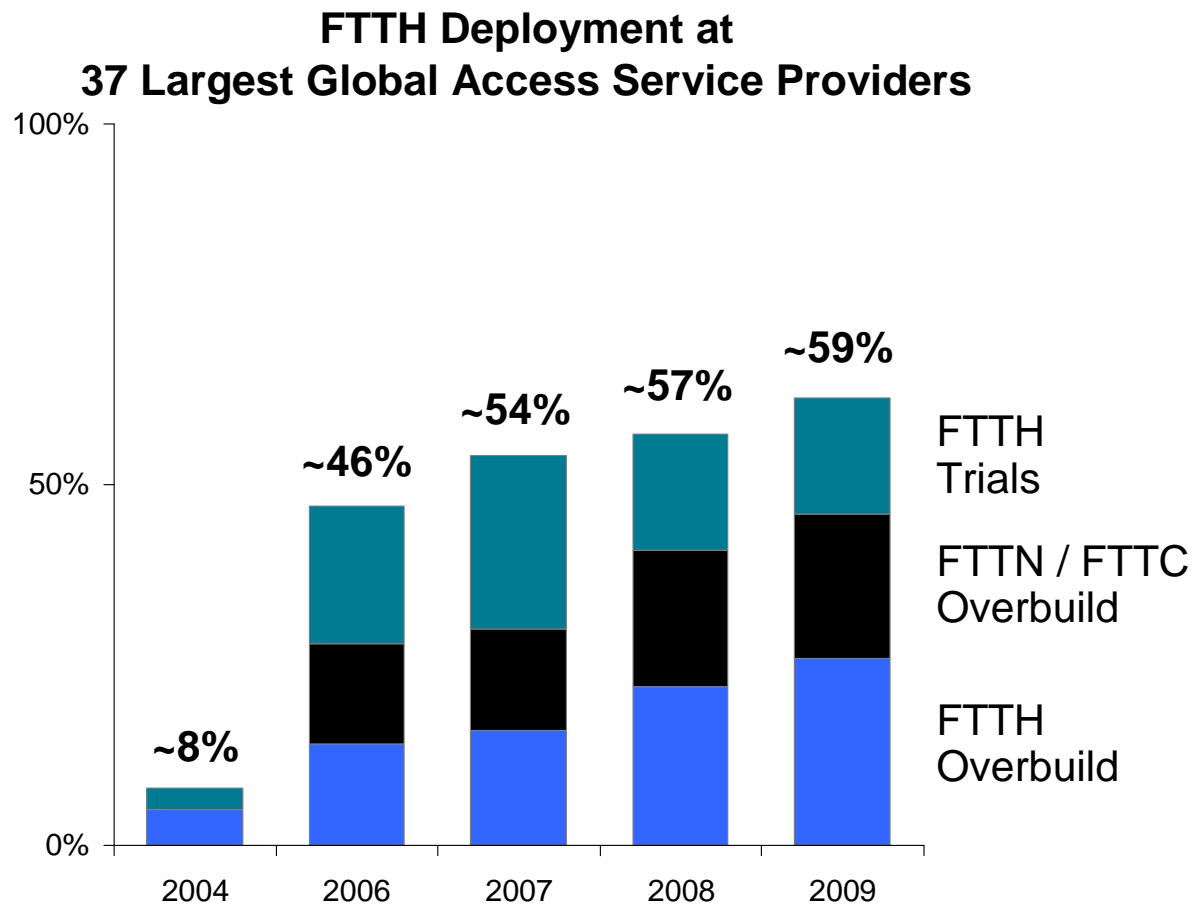


As the world's leading optical fibre manufacturer,
Corning offers solutions from the ocean to the desktop



FTTH builds developing slower than anticipated, but still very early in the adoption cycle

Of all worldwide households, only ~6% passed with FTTH and ~2% connected

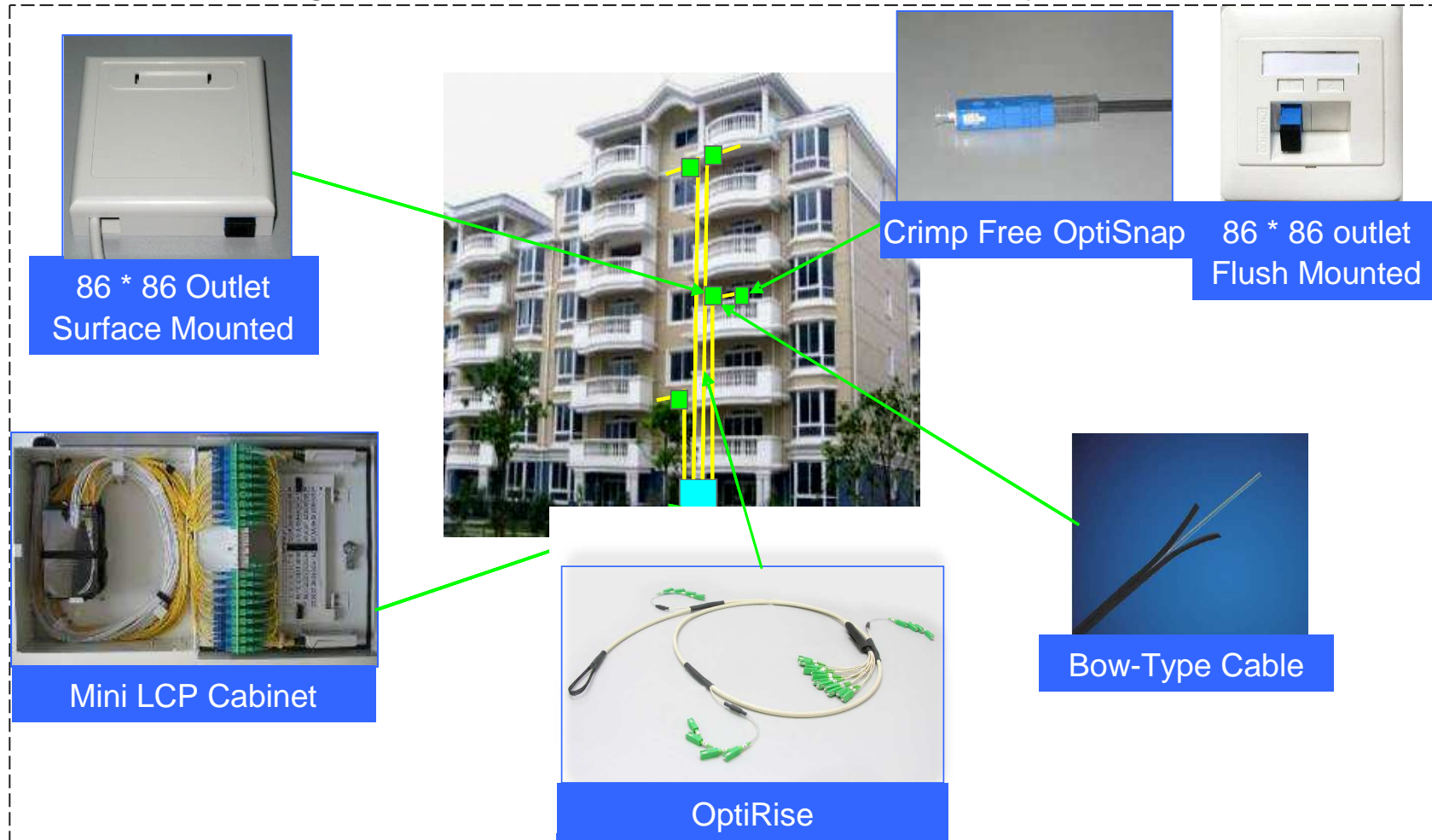


- Pro-investment regulation developing slower than expected
- Legacy architectures proving resilient
- Triple-play less prevalent outside U.S.
- Large early adopters past peak deployment period

Greater China Telecom FTTH MDU Solution

What is a FTTH Multi-Dwelling Unit Solution?

Corning MDU Solutions – Field and Factory Terminated



Summary

- The China fiber & cable market is world's largest
 - Corning is dedicated to respectfully serving this market
- Fiber is one of the most important components of a network
 - Can Minimize construction & equipment costs
 - Enable easy upgrades to higher capacities
- Corning Greater China Telecom will continue to be a leader in China
 - Latest fiber and cable technology
 - Newly developed low-cost FTTH solutions
 - One organization, one face to the customer