## A History of Innovation, Born from Sincerity and Creativity

1925

1912 1915

Tokubijo snap buckle requiring no fastening



pencil, later called the Sharp Pencil



Japan's first domestically

1963



1929

Sharp Dyne AC vacuum-tube radio

1964



1953

Japan's first mas

1966



1960

Mass production of color



1986

1989

3-in-1 facsimile with fax. copier, and phone functions



3-inch color TFT LCD TV

1987



character) display

1990



Word processor equipped with an AI dictionary for converting entire typed clauses into *kanji* 

1991



Development of a thin,

1988



1989

LCD projection system for 100-inch big-screen home entertainment

1962



Ultrasonic washer for cleaning large clocks



production of microwave

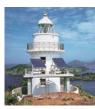


Mass production of standardized solar modules

1972



World's first all-transistor-diode desktop calculator



Ogami Island Lighthouse equipped with 225W solar cells, the world's largest (at the time) (photo courtesy of Japan Coast Guard)

1973



Japan's first home microwave oven with a turntable



Industry's first low-power cordless phone with an answering machine function



Industry's first dual-swing refrigerator with doors that opened from both the left

and right



World's thinnest (at the time) home facsimile



1995

Notebook-PC-type English-to-Japanese translation system, the industry's smallest 8.6-inch LCD TV, an and lightest



LCD ViewCam, which allowed users to shoot video while watching an LCD viewfinder and enabled instant playback of just-taken footage

1996

2001

1969

1970



World's first calculator incorporating LSIs



Double LED capable of simultaneously emitting visible light and near-infrared light



World's first color TV to display the channel number on the screen



Battery-operated compact electronic cash

1978



Plain paper copier incorporating IC control



World's first pocket calculator with an LCD



Fully automatic washing machine with a hole-less tub to save water and detergent

1997

1992



World's smallest and lightest (at the time) MD headphone player

1999



Zaurus personal information tool, which combined essential business functions in one compact unit

2000



Refrigerator using non-CFC vacuum insulation



Notebook PC incorporating Air conditioner with the industry's first humidifying and ventilation functions a large, high-resolution color TFT LCD

1974

1976



Success in reproducing TV (product shown is from 1977)



First solar-powered



Refrigerator with the most frequently used compartments located at the top



TV-in-TV for watching two programs at the same time

1980

1982



1979

Front-loading VCR priced in the affordable 150,000-yen price range



Portable stereo system with dual cassettes for creating original cassette tapes

1981



High-reflective Super Mobile LCD for the outdoor display of bright color images without the need for a backlight

2004

2010



World's first 1-bit amp utilizing 2.8 MHz high-speed sampling and 7th order delta-sigma modulation



Industry's first camera-equipped mobile phone (for J-Phone)

2005



Plasmacluster air purification technology, which used positive and negative ions to eliminate airborne mold

2006



Cyclonic vacuum cleaner, which used centrifugal force to separate dust and air, keeping exhaust air clean

2008



AQUOS, the LCD TV for the 21st century

2009

2012

1979



Pocket electronic translator translations



Japanese word processo



World's first microwave oven with a sensor for automatic cooking



Color TV with built-in VCR



Pocket computer with BASIC programming capability

1983



World's first stereo system that could automatically play both sides of a vinyl record

1984



High-definition LCD TV boasting 3.15 million pixels (the first Kameyama Model TV)



Superheated steam oven 'roasting' food with water



Full-color digital MFP employing Mycrostone



One-Seg-compatible mobile phone with a rotating screen (for Vodafone)



108-inch commercial-use LCD monitor, the world's largest (at the time)

2011



Energy-saving, long-life, mercury-free environmen friendly LED lamps

1981



World's smallest and lightest (at the time) plain



Personal computer



World's first combination PC and TV

Amorphous silicon solar cells mass-produced using an innovative roll-to-roll process



Multi-screen display system with the world's thinnest (at the time) system frame width of 6.5 mm



AQUOS Quattron 3D LCD TV incorporating a four-primary-color 3D LCD



GALAPAGOS media tablet



Industry's first LED ceiling



Freestyle AQUOS, which could be carried around



## **Chronology (Developments at Sharp)**

	Developments at Sharp (for Sharp products, see pages Chronology-01 and 02)	World Events
1912	<ul> <li>Founder, Tokuji Hayakawa, invents the Tokubijo snap buckle and acquires utility model design patent</li> <li>Establishes metalworking shop in Matsui-cho, Honjo-ku, Tokyo (now Shin-ohashi, Koto-ku, Tokyo) on September 15</li> </ul>	
1914	Moves to Hayashi-cho, Honjo-ku, Tokyo (now Tachikawa, Sumida-ku, Tokyo)     Installs one-horsepower electric motor	World War I begins
1915	Invents Hayakawa Mechanical Pencil and begins export to the US and Europe     Establishes Hayakawa Brothers Company	Telephone line established between New York and San Francisco
1920	Establishes branch factory in Oshiage, Tokyo (now Yahiro, Sumida-ku, Tokyo)	League of Nations established
1923	All factories destroyed during Great Kanto Earthquake     Dissolves Hayakawa Brothers Company and relocates to Osaka	Great Kanto Earthquake (magnitude 7.9)
1924	Establishes Hayakawa Metal Laboratories in Tanabe-cho, Higashinari-gun, Osaka Prefecture (now the location of the Head Office)	
1925	<ul> <li>Succeeds in assembling first Japan-made crystal radio set; begins mass production and sales</li> <li>Establishes sales office in Utsubo, Osaka</li> </ul>	Japan's General Election Law established     Tokyo station begins radio broadcasts in Japan
1926	<ul> <li>Begins export of radio sets and components to China, Southeast Asia, India, and South America</li> <li>Establishes Tokyo office in Hayashi-cho (Honjo-ku, Tokyo), a former site of the company's factory</li> <li>Adopts assembly-line production for radios</li> </ul>	Japan Broadcasting Corporation (NHK) established
1927	Holds Sharp radio trade fairs in Kyushu, Japan and Shanghai, China	
1929	Releases AC vacuum-tube radios	Wall Street Crash; world economy enters the Great Depression
1930	<ul> <li>Hayakawa tours Hong Kong</li> <li>Begins attaching repair warranty notices to radios. Retailers would notify the company of repairs they did by sending back these notices to the company.</li> </ul>	
1931	Establishes sales agency in Hong Kong	Manchurian Incident
1933		Japan withdraws from League of Nations     New Deal economic programs begin in the US
1934	Establishes Shanghai office     Constructs Hirano Plant in Osaka	
1935	Hayakawa Metal Industry Institute Co., Ltd. incorporated with capital of 300,000 yen (May 1)	Youths' School Ordinance issued in Japan
1936	<ul> <li>Installs intermittent belt conveyor system</li> <li>Makes Yokohama Motor Parts Manufacturing a subsidiary</li> <li>Changes company name to Hayakawa Industrial Co., Ltd.</li> <li>Establishes branch offices in Taipei and Seoul</li> </ul>	February 26 Incident in Japan
1937	Establishes Hayakawa Commercial School for Youth	Sino-Japanese War begins
1941		Pacific War begins
1942	Changes company name to Hayakawa Electric Co., Ltd.	War-time confiscation of metals begins in Japan
1943	Head office building completed	
1944	Establishes Hayakawa Electric branch factory     Establishes Izumi Plant in Izumi-cho (now Izumi City), Osaka (sold in 1948)	
1945	Establishes Kyoto Plant in Shimogyo-ku (now Minami-ku), Kyoto (sold in 1947)	Pacific War ends     United Nations established
1946	Forms labor union     Designated special accounting company	World's first electronic calculator built at University of Pennsylvania, US     Act on corporations' accounting emergency measures issued in Japan
1947		Invention of the transistor in the US
1948	Establishes Sharp Shoji	GHQ announces 9 principles for stabilizing the Japanese economy
1949	Released from special accounting company designation     Public stock offering, company listed on Osaka Securities Exchange	Dodge Line implemented in Japan     Single exchange rate of US1\$ = 360 yen implemented     Founding of People's Republic of China

Developments at Sharp World Events

1950	Plant to employ the visually impaired incorporated as Tokusen Metal Limited Partnership     Establishes business principles called the Five Accumulations of Competency	Korean War begins; military procurement sparks economic boom     NHK Tokyo begins experimental television broadcasts in Japan
1951	Successfully develops prototype TV set	Broadcasts by private radio stations begin in Japan     San Francisco Peace Treaty signed
1952	<ul> <li>Begins publication of <i>Sharp News</i>, an information magazine for retailers</li> <li>Special bus begins touring the country to advertise Sharp radios and TVs</li> <li>Signs cooperative agreement with RCA of the US for TV technology</li> <li>Forms Sharp Friends Club to strengthen ties between dealers, retailers, and the company</li> </ul>	Japan joins IMF (International Monetary Fund) and IBRD (International Bank for Reconstruction and Development)
1953	Begins full-scale mass production of first Japan-made TV sets (TV3-14T)	Full-scale TV broadcasts begin in Japan     1953 dubbed the start of Japan's electric appliance age
1954	Constructs TV plant at the head office (now Tanabe Plant, Osaka) and installs endless conveyor system     Opens Ikutoku-en nursery school	Bell Laboratories of the US develops solar cells
1955	Formulates in-house standards (HS: Hayakawa Standards)	Japan joins GATT (General Agreement on Tariffs and Trade)
1956	<ul> <li>Spins off sales division to establish Sharp Electric Co.</li> <li>Constructs new building for Osaka Head Office</li> <li>Constructs new building for Tokyo Branch in Taito-ku, Tokyo</li> </ul>	Japan joins United Nations     Japan economic white paper states "Japan is no longer in a post-war period"
1957	<ul> <li>Establishes Tokyo Sharp Geppan to sell Sharp products on monthly installment system; Sharp Geppan companies subsequently established nationwide</li> <li>Constructs Hirano Plant No. 2 in Higashi-sumiyoshi-ku (now Hirano-ku), Osaka</li> <li>Releases transistor radios</li> <li>Establishes laboratory</li> </ul>	USSR launches Sputnik 1, the world's first artificial satellite     Act on temporary measures for promoting electronics industry issued in Japan
1958	Begins publication of <i>Mado</i> , an in-house magazine     Sharp Electric merges with Hayakawa Dengyo, a company that sold fluorescent lighting     Sharp Shoji and QRK Shokai (exclusive Sharp dealer) combined to form Osaka Sharp Sales (regional sales companies subsequently established)     Institutes Sharp Friend Shop system; Sharp Friend Shop Associations formed nationwide	EEC (European Economic Community) inaugurated     Japan issues 10,000-yen bill     Texas Instruments of the US develops ICs (integrated circuits)
1959	Begins R&D on solar cells     Constructs Yao Plant as company moves to become a comprehensive consumer electronics manufacturer     Expands sales network in Southeast Asia by signing dealer agreements with Sampo Electronics and Roxy Electric	Metric system adopted in Japan     Wedding of the Crown Prince and Princess in Japan
1960	Constructs Yamato-koriyama Plant No. 1 (now Nara Plant)     Establishes corporate health insurance association     Introduces IBM computer at the head office	Color TV broadcasts begin in Japan     Japanese cabinet announces policy of doubling national income
1961	Establishes Central Research Laboratories	
1962	<ul> <li>Establishes Sharp Electronics Corporation (SEC) in the US, the company's first overseas sales base</li> <li>Begins mass production of commercial-use microwave ovens (R-10)</li> <li>Osaka Municipal Hayakawa Welfare Hall completed with construction funds donated by President Hayakawa</li> <li>Builds shrine on Mt. Koya for holding Buddhist memorial services for deceased employees</li> </ul>	Cuban missile crisis     Number of television subscribers in Japan reaches 10 million people
1963	Establishes service company in Osaka     Company reorganized into three divisions: radio, home appliances, and industrial equipment     Establishes Sharp Tokyo Product Center	Japan acquires GATT Article 11 status     US President Kennedy assassinated     First satellite broadcast between Japan and the US
1964	<ul> <li>Release world's first all-transistor diode electronic desktop calculator (CS-10A) as company moves to become a comprehensive electronics manufacturer</li> <li>Builds mass-production line for solar cells</li> </ul>	Japan acquires IMF Article 8 status and joins OECD     Tokaido Shinkansen bullet train begins operations in Japan     Summer Olympics held in Tokyo
1965	Institutes 70 Strategy to strengthen distribution system     Launches ATOM Unit program	
1966	Releases home-use microwave oven with a turntable (R-600)	Population of Japan exceeds 100 million
1967	<ul> <li>Launches 55 Campaign that included Sharp technology fairs to celebrate 55th anniversary of company's founding</li> <li>Constructs Hiroshima Plant to mass produce transistor radios</li> <li>Sharp Electric absorbed into Hayakawa Electric</li> <li>Sharp Electronic Sales Okinawa Corporation established in Okinawa, then under US rule</li> </ul>	Kennedy Round agreements to liberalize trade signed     EC (European Community) established     Basic Act for Environmental Pollution Control enacted in Japan     ASEAN (Association of Southeast Asian Nations) formed
1968	Establishes Hayakawa Electric Europe GmbH (HEEG) (name changed to Sharp Electronics [Europe] GmbH [SEEG] in 1970) as sales base in West Germany     Holds first Basic Management Policy Conference     Constructs Tochigi Plant to mass produce color TVs     Establishes Business Cooperation Centers nationwide	Consumers Protection Basic Act enacted in Japan Air Pollution Control Act enacted in Japan Prototype LCD produced at RCA in the US Anti-dumping lawsuit filed by US Electronics Industry Association against Japanese TV manufacturers Japan's GNP becomes No. 2 among free nations of the world

Chronology-03

	Developments at Sharp	World Events
1969	Launches MI campaign Signs cooperative technical agreement with North American Rockwell Corporation on ICs Saka Municipal Abeno Youth Center completed with construction funds donated by President Hayakawa Establishes office equipment sales companies in Tokyo, Osaka, and Nagoya Establishes Sharp Electronics (U.K.) Ltd. (SUK) as sales base in the UK Develops world's first GND (gallium arsenic negative-resistance light-emitting diode) semiconductor Releases world's first electronic calculator incorporating MOS LSIs (QT-8D)	US Apollo 11 lands on the moon and man walks on its surface for the first time
1970	Changes company name to Sharp Corporation  Establishes Sharp Precision Machinery Co., Ltd. (name changed to Sharp Manufacturing Systems Corporation in 1994)  Senior Executive Director Akira Saeki named president, President Tokuji Hayakawa named chairman  Constructs Advanced Development and Planning Center  Implements business group system  Releases gallium arsenide double LED	Japan World Expo '70 held in Senri, Osaka (77 countries participate and visitors number 64.21 million in 6 months)
1971	Establishes Sharp Corporation of Australia Pty. Ltd. (SCA) as sales base in Australia	President Nixon announces economic policies to defend the US dollar ("Nixon Shock")  Exchange rate adjusted to 308 yen per US dollar under the Smithsonian Agreement (yen adjusted by 16.88%)  US trade deficit for the first time in 80 years
1972	<ul> <li>Releases company's first copier</li> <li>Launches new sales company system (regional sales companies consolidated into 16 companies by region)</li> <li>Launches S734 Project for developing COS calculators</li> <li>Adds Sharp Grand Award to annual employee commendation</li> <li>Opens Consumer Information Centers at nine service companies throughout Japan</li> <li>Establishes Sharp System Products Co., Ltd.</li> <li>Forms Sharp Employee Stockholder Association</li> </ul>	Winter Olympics in Sapporo US returns Okinawa to Japan Japan-China diplomatic relations restored US-China joint communiqué announced
1973	<ul> <li>Establishes Business Philosophy, Business Creed, and Basic Business Principles</li> <li>Sets up employee savings scheme</li> <li>Establishes Sharp Data Corporation (SDA) (name changed to Sharp Korea Corporation [SKC] in 1984) as manufacturing base in Korea</li> <li>Begins production of C-MOS LSIs; releases pocket-sized COS calculator with LCD</li> </ul>	Japan shifts the yen to floating exchange rate system     First oil crisis; OPEC raises crude oil prices and declares production cuts; shortage of goods and soaring prices
1974	Holds first company-wide QC circle convention Constructs Sharp Tokyo Building Establishes Sharp Electronics of Canada Ltd. (SECL) as sales base in Canada Establishes Sharp-Roxy Corporation (M) Sdn. Bhd. (SRC) as manufacturing base in Malaysia (name changed to S&O Electronics [Malaysia] Sdn. Bhd. [SOEM] in 2008)  Launches ELM products Formulates company-wide quality standards (SS: Sharp Corporation Standards)	Large-Scale Retail Store Law enacted in Japan     Japanese economy registers negative growth for the first time since WWII
1975	Begins mass production of color TVs at SCA in Australia	Vietnam War ends
1976	Launches New Life product strategy     Sharp solar cells installed on Ume, Japan's first operational ionosphere-observing satellite	Japan's trade surplus increases; voluntary export restraints demanded by the US and Europe
1977	Establishes Sharp System Service     Launches Sharp Taskforce (Kin-Pro) system     Tokusen Metal Limited Partnership certified as special subsidiary of Sharp Corporation	Japan voluntarily restrains exports of color TVs to the US
1978		Japan-China Treaty of Peace and Friendship signed
1979	Establishes Sharp Electronics (Svenska) AB (SES) (name changed to Sharp Electronics [Nordic] AB [SEN] in 2000) as sales base in Sweden     Sharp Manufacturing Company of America (SMCA) starts operations as production division of SEC     Establishes SBC Software	Diplomatic relations restored between China and the US for the first time in 30 years (US breaks diplomatic relations with Taiwan)     Second oil crisis     5th G7 Summit held in Tokyo
1980	<ul> <li>Announces one-trillion yen initiative</li> <li>Forms Sharp Fellowship Society</li> <li>Launches New Business product strategy under a "new business style" concept</li> <li>Chairman Tokuji Hayakawa passes away</li> <li>Establishes Sharp Business Co., Ltd.</li> <li>Establishes Sharp-Roxy Electronics Corporation (M) Sdn. Bhd. (SREC) as manufacturing base in Malaysia (merged into SMM in 2009)</li> </ul>	Iran-Iraq War begins     Revision to the foreign exchange law in Japan; liberalization of capital transactions
1981	<ul> <li>Establishes Sharp Consumer Electronics Co., Ltd.</li> <li>Constructs Shinjo Plant (now Katsuragi Plant) in Nara</li> <li>Constructs mass-production plant for EL displays (starts full-scale operations in 1983)</li> <li>Develops laser diode with VSIS architecture</li> </ul>	Trade dispute over automobiles between Japan and the US; trade friction intensifies
1982	Establishes Sharp (Phils.) Corporation (SPC) as manufacturing base in the Philippines     Establishes Sharp Finance Corporation	CDs (compact disks) go on sale

**Developments at Sharp** World Events • Establishes Sharp-ECD Solar Co., Ltd. as joint venture with Energy Conversion Devices Inc. of the US 1982 Sharp multinet system goes online • Tokusen Metal Limited Partnership reorganized into Sharp Tokusen Industry Co. • Establishes Sharp Engineering Corporation Game console released by toy manufacturer become huge 1983 hit in Japan • EL displays installed on the Space Shuttle 1984 • Sharp Manufacturing Company of U.K. (SUKM) starts operations as production Mikhail Gorbachev elected General Secretary of the Communist Party of the USSR division of SUK NTT (Nippon Telegraph and Telephone Corporation) and JT • Holds comprehensive technology exhibitions in Beijing and Shanghai (Japan Tobacco Inc.) launched as public corporations • Establishes Sharp-Roxy Appliances Corporation (M) Sdn. Bhd. (SRAC) as Yen rises rapidly following the Plaza Accord manufacturing base in Malaysia (ceases operations in 2002) • Establishes Sharp-Roxy Sales & Service Company (M) Sdn. Bhd. (SRSSC) as 1985 sales base in Malaysia • Establishes Creative Lifestyle Focus Center Constructs Fukuyama Plant • Establishes Sharp Trading Corporation • Builds prototype of 3-inch color LCD TV • Space Shuttle Challenger explodes after takeoff, killing all 7 • Builds "futuristic electric house" on the grounds of Yao Plant crew members • Establishes Sharp Electronics (Schweiz) AG (SEZ) as sales base in Switzerland Publication of the Maekawa Report calling for expanding • Establishes Sharp Electronics GmbH (SEA) as sales base in Austria (merges with domestic demand in Japan SEEG in 2004 to become SEEG Austria Branch) Meltdown at Chernobyl nuclear power plant in the USSR • Establishes Sharp-Roxy Sales (Singapore) Pte., Ltd. (SRS) as sales base in releases radioactivity across Europe Singapore • US-Japan Semiconductor Agreement signed 1986 • Establishes Sharp Electrónica España S.A. (SEES) as manufacturing and sales • US increases net foreign debt base in Spain (ceases manufacturing in 2011) • Senior Executive Director Haruo Tsuji named president, President Akira Saeki named chairman • Establishes Sharp Electronics Taiwan Co., Ltd. (SET) as manufacturing base in Taiwan (liquidated in 2010) • Launches Liquid Crystal Display Division Establishes Sharp Electronics Sales Corporation • Dow Jones Industrial Average drops 22.6% on 'Black Monday', the largest one-day percentage decline ever • Establishes Sharp Appliances (Thailand) Limited (SATL) as manufacturing base in • Land prices skyrocket in Tokyo area Thailand 1987 • Establishes Sharp Electronics (Singapore) Pte., Ltd. (SESL) as kit export base in Singapore • Chairman Akira Saeki appointed as corporate advisor • Establishes Sharp-Roxy (Hong Kong) Ltd. (SRH) as sales base in Hong Kong • The Sharp Columbus, a promotional event boat, cruises the waters of Japan for 18 • Iran-Iraq War ends after 8 years months • Establishes Sharp Corporation of New Zealand Ltd. (SCNZ) as sales base in New Zealand • Establishes Sharp Precision Manufacturing (U.K.) Ltd. (SPM) as manufacturing 1988 base in the UK (liquidated in 2010) • Introduces in-house recruiting system • Develops hologram laser unit jointly with Philips International B.V. of the Netherlands • Proclaims goal of becoming comprehensive electronics manufacturer on the strength of its optoelectronics technologies • Develops world's first 14-inch color TFT LCD • Establishes Sharp Manufacturing France S.A. (SMF) as manufacturing base in US and Japan launch Structural Impediments Initiative France Fall of the Berlin Wall • Establishes Sharp Thebnakorn Co., Ltd. (STCL) as sales base in Thailand (name changed to Sharp Thai Co., Ltd. [STCL] in 2007) • Malta Summit between leaders of the US and the USSR brings Cold War to an end 1989 • Establishes Kalyani Sharp India Limited (KSIL) as manufacturing base in India • Tokyo Stock Exchange average closes at a record high (name changed to Sharp India Limited [SIL] in 2005) Establishes Sharp Manufacturing Corporation (M) Sdn. Bhd. (SMM) as manufacturing base in Malaysia • USSR amends constitution; Gorbachev becomes first USSR • Establishes Sharp Corporation (Taiwan) (SCOT) as sales base in Taiwan • Establishes Sharp Laboratories of Europe, Ltd. (SLE) as base to conduct basic president • Iraq invades Kuwait, resulting in the Gulf Crisis research in the UK

East and West Germany reunite for the first time in 44 years
Volume controls on Japan's real estate investment lead to the

• Gulf War begins as multinational forces invade Iraq

• End of 69-year history of USSR; establishment of CIS

bursting of the bubble economy

• Establishes Sharp Finance Corporation

Chronology-05

Chronology-05

• Launches Liquid Crystal Display Group

• Establishes childcare leave system

the UK

Teams)

1990

1991

• SUKM receives the UK Queen's Award for Export and Technology

changed to Sharp Electronics France S.A. [SEF] in 1991)

• Achieves non-consolidated net sales of 1 trillion yen (fiscal 1989)

• Establishes Sharp International Finance (U.K.) Plc. (SIF) as financial subsidiary in

• Establishes Sharp Burotype Machines S.A. (SBM) as sales base in France (name

Establishes Sharp Electronics (Italia) S.p.A. (SEIS) as sales base in Italy
 Company-wide small-group activities renamed Sharp CATS (Creative Action

• Establishes Sharp Electronics Benelux B.V. as sales base in the Netherlands

• Begins production at color TFT LCD plant (NF-1 production line) at Advanced

	Developments at Sharp	World Events
1992	Establishes Sharp Electronic Components (Taiwan) Corporation (SECT) as electronic components sales base, and Sharp Technology (Taiwan) Co., Ltd. (STT) as IC design and development base (STT liquidated in 2007)  Ties up with Intel Corporation in flash memory business  Establishes Sharp Live Electronics Sales Corporation  Establishes Shanghai Sharp Air-Conditioning Systems Co., Ltd. (SSAC) as manufacturing base in China (name changed to Shanghai Sharp Electronics Co., Ltd. [SSEC] in 1994)  Constructs Makuhari Building  Establishes Sharp Thebnakorn Manufacturing (Thailand) (STTM) as production division of STCL	At the Earth Summit in Rio de Janeiro, Brazil, the UNFCCC (United Nations Framework Convention on Climate Change) was adopted  European currency crisis
1993	<ul> <li>Begins production at Fukuyama Plant using 0.6 µm process design rules</li> <li>Establishes Sharp Office Equipments (Changshu) Co., Ltd. (SOCC) as manufacturing base in China</li> </ul>	Maastricht Treaty creates the EU (European Union)
1994	<ul> <li>Develops industry's first reflective TFT LCD requiring no backlight</li> <li>Establishes Wuxi Sharp Electronic Components Co., Ltd. (WSEC) as manufacturing base in China</li> <li>Establishes P.T. Sharp Yasonta Indonesia (SYI) as manufacturing base, and P.T. Sharp Yasonta Antarnusa (SYA) as sales base in Indonesia (the two merged to form P.T. Sharp Electronics Indonesia [SEID] in 2005)</li> </ul>	Start of residential PV monitoring program in Japan     NAFTA (North American Free Trade Agreement) comes into force
1995	<ul> <li>Establishes Sharp Laboratories of America, Inc. (SLA) as research base in the US</li> <li>Establishes P.T. Sharp Semiconductor Indonesia (SSI) as manufacturing base for semiconductors in Indonesia</li> <li>Begins operations at Mie Plant for mass production of LCDs</li> <li>Establishes Sharp Electronics (Malaysia) Sdn. Bhd. (SEM) as combined R&amp;D base and parts supplier in Malaysia</li> </ul>	WTO (World Trade Organization) launched To 3.3-magnitude earthquake strikes Osaka-Kobe area in Japan Microsoft Windows 95 released, spurring PC sales
1996	Establishes Nanjing Sharp Electronics Co., Ltd. (NSEC) as manufacturing base in China     Official Sharp Internet website opens	Start of the IT bubble     A string of bankruptcies of financial companies and bad loans cause financial instability in Japan
1997	All Sharp production bases in Japan certified for ISO 14001 Establishes Shanghai Sharp Mold and Manufacturing Systems Co., Ltd. (SSMC) as manufacturing base in China Establishes Sharp Electrónica Mexico S.A. de C.V. (SEMEX) as manufacturing base in Mexico Launches Environmental Protection Group and starts 3G-1R Strategy Introduces integrated distribution system in Japan	Hong Kong reverts to China Asian currency crisis Kyoto Protocol adopted at COP3 (third session of the Conference of the Parties to the UNFCCC)
1998	<ul> <li>Establishes Sharp Middle East Free Zone Establishment (SMEF) as sales base in Dubai, United Arab Emirates</li> <li>Jointly develops world's first CG-Silicon (continuous grain silicon) technology with Semiconductor Energy Laboratory Co., Ltd.</li> <li>Develops and begins mass production of world's first stacked CSP (chip size package)</li> <li>Establishes Sharp Document Systems Corporation and Sharp Amenity Systems Corporation</li> <li>Corporate Senior Executive Director Katsuhiko Machida named president, President Haruo Tsuji named corporate advisor</li> <li>Formulates Sharp Business Standards and Action Guidelines</li> <li>Establishes Sharp Electronics Marketing Corporation</li> <li>President Machida declares that by 2005 all TVs Sharp sells in Japan will be LCD TVs</li> </ul>	Winter Olympics held in Nagano, Japan Japan's Home Appliance Recycling Law enacted Russian currency crisis Japan's trade surplus reaches a record high (13 trillion 985.1 billion yen)
1999	Launches Sharp Space Town information service Develops 1-bit amplifier technology for reproducing ultra high-fidelity sound Establishes Sharp Electronics Inc. of Korea (SEI) as sales base in Korea Establishes Sharp Software Development India Pvt. Ltd. (SSDI) as software development company in India Publishes first Environmental Report	EU announces the euro as its official currency; enters circulation in January 2002     Dow Jones Industrial Average closes above \$10,000 for the first time     Turkey and Taiwan struck by 7.6-magnitude earthquakes     Over 40% of Japanese have mobile phones
2000	Launches advertising campaign for AQUOS, calling it a TV for the 21st century Establishes Sharp Microelectronics of China (Shanghai) Co., Ltd. (SMC) as sales base in China (name changed to Sharp Electronics [Shanghai] Co., Ltd. [SES] in 2003) Establishes Sharp Business Systems (India) Limited (SBI) as sales base in India Becomes world's largest manufacturer of solar cells. Maintains this position for seven consecutive years, until 2006	No major problems as a result of Y2K computer bug BS (broadcast satellite) television begins in Japan IT bubble bursts, causing IT slump
2001	Releases TVs with Advanced Super-V LCD  Establishes S.I. Solutions jointly with IBM Japan  Kansai Recycling Systems Co., Ltd. starts operations (established in 1999)  Establishes Sharp Telecommunications of Europe, Ltd. (STE) as mobile telecommunications development base in the UK  Establishes usability labs  Establishes Comprehensive Call Centers (Customer Assistance Centers) for handling customer inquiries  Establishes BRM (business risk management) Committee	9/11 terrorist attacks in New York and Washington, D.C.

• Ties up with El-Araby Group for air conditioning business in Egypt
• Operations begin at Mihara Plant

• Develops 3D LCD that can be switched between 2D and 3D formats

2002

	Developments at Sharp	World Events
2003	Revises Sharp Business Standards and Action Guidelines; enacts Sharp Charter of Corporate Behavior  Launches Sharp Green Club (SGC)  SEMEX in Mexico begins production of AQUOS LCD TVs  Establishes consumer electronics R&D center in China  Constructs Mie Plant No. 3 to manufacture System LCDs  Changes name of small-group activities to R-CATS and starts unique activities  Establishes CSR Promotion Division  Develops reflective/transmissive Mobile Advanced Super-V LCD	Joint US-British forces attack Iraq     Terrestrial digital television broadcasts begin in Tokyo, Osaka, and Nagoya in Japan
2004	Starts eS-SEM strategic management system Operations begin at Kameyama Plant Establishes Sharp Technical Components (Wuxi) Co., Ltd. as manufacturing base in China Opens AQUOS Plaza sites in Tokyo, Nagoya, and Osaka for the repair of large-screen AQUOS LCD TVs Announces environmental vision of becoming a zero global warming impact company by 2010 (achieved in 2008)	Massive undersea earthquake (magnitude 9.0) off Sumatra and massive tsunami in countries around Indian Ocean     Avian influenza runs rampant throughout Asia     Full-scale start of Germany's feed-in tariff policy for promoting renewable energy
2005	<ul> <li>Takes part in Team Minus 6%, Cool Biz, and Warm Biz, three initiatives of Japan's Ministry of the Environment</li> <li>Establishes Sharp Electronics Sales (China) Co., Ltd. (SESC) as sales base in China</li> <li>Launches Sharp Yonago Corporation</li> <li>Establishes Sharp Manufacturing (Thailand) Co., Ltd. (SMTL) as manufacturing base in Thailand (reorganization of STTM)</li> <li>Establishes Sharp Group Charter of Corporate Behavior and Sharp Code of Conduct</li> <li>Electronic calculators recognized as IEEE Milestone</li> </ul>	Kyoto Protocol enters into force
2006	<ul> <li>Establishes Sharp Manufacturing Poland Sp. z o.o. (SMPL) as manufacturing base in Poland</li> <li>Kameyama Plant wins the Economy, Trade and Industry Minister's Prize in the 8th Japan Water Award</li> <li>Teams up with NPO Weathercaster Network to begin eco-education in elementary schools in Japan</li> </ul>	RoHS Directive takes effect in Europe     Start of One-Seg, the terrestrial digital TV broadcast service for mobile devices in Japan
2007	Corporate Senior Executive Director Mikio Katayama named president, President Katsuhiko Machida named chairman  Establishes Sharp Electronics Russia LLC (SER) as sales base in Russia  SEEG split into three separate entities for consumer electronics, information products, and solar power systems  Establishes Toyama Plant to manufacture silicon for solar cells	Subprime mortgage crisis in the US leads to worldwide financial chaos
2008	Introduces executive officer system     Establishes Health and Environment Systems Group     Sharp Corporation attains Privacy Mark certification     Announces goal of becoming a total solutions provider for solar power	Magnitude-8.0 earthquake in Sichuan, China     Summer Olympics held in Beijing     Financial services firm Lehman Brothers of the US declares bankruptcy; burst of the real estate bubble triggers worldwide financial crisis
2009	<ul> <li>Establishes Sharp Electronics (Vietnam) Company Limited (SVN) as sales base in Vietnam</li> <li>Announces new environmental vision of becoming an Eco-Positive Company</li> <li>Starts production of LCD panels at Green Front Sakai</li> </ul>	WHO raises influenza pandemic alert to phase 6     Eco-Point system introduced in Japan to stimulate consumer electronics sales
2010	<ul> <li>Akira Saeki, corporate senior advisor and former president, passes away</li> <li>Develops high-conversion-efficiency solar cells</li> <li>Starts production of solar cells at Green Front Sakai</li> <li>Solar cell business recognized as IEEE Milestone</li> <li>Establishes Sharp Corporation Mexico, S.A. de C.V. (SCMEX) as sales base in Mexico</li> <li>Establishes Enel Green Power &amp; Sharp Solar Energy S.r.l. (ESSE) as independent power producer in Italy</li> <li>Establishes 3 Sun S.r.l. as manufacturing base in Italy</li> <li>Establishes Sharp Electronics Research &amp; Development (Nanjing) Co., Ltd. (SERD) as design and development base in China</li> <li>Acquires Recurrent Energy, LLC, a US developer of solar power plants</li> </ul>	China's GDP surpasses that of Japan to become world's second largest economy
2011	<ul> <li>Establishes Sharp Laboratories of China Co., Ltd. (SLC) as R&amp;D base in China</li> <li>Establishes Sharp Solar Maintenance Asia Co., Ltd. (SSMC) as maintenance company for solar power plants in Thailand</li> <li>Establishes Sharp Brasil Comércio e Distribuição de Artigos Eletrônicos Ltda. (SBCD) as sales base in Brazil</li> <li>Establishes Sharp (China) Investment Co., Ltd. (SCIC) as Chinese headquarters</li> <li>Establishes HEMS Alliance with nine other companies</li> </ul>	Magnitude-9.0 earthquake and subsequent tsunami cause widespread damage in Japan, including at a nuclear power plant     Large scale flooding in Thailand     Euro currency crisis deepens and spreads to more and more countries     Analog television broadcasts end in most of Japan
2012	Executive Managing Officer Takashi Okuda named president, President Mikio Katayama named chairman     Establishes strategic global partnership with world's leading EMS Hon Hai Group of Taiwan     Starts mass production of LCD panels using IGZO (oxide semiconductor) technology     Establishes Sharp Electronics (Europe) Limited (SEE) as European headquarters in the UK	Japan's feed-in tariff law takes effect     Summer Olympics held in London

Chronology-07

Circulation of euro currency begins in the EU

FIFA World Cup held jointly by Korea and Japan