

INTERNATIONAL RELATIONS • ENVIRONMENT •
CURRENT AFFAIRS

The Kyoto Protocol

A Complete, Exam-Ready Reference on the UNFCCC's First Binding Climate Treaty

History • Structure • Flexibility Mechanisms •
Compliance System • Commitment Periods • Criticism
• Kyoto vs. Paris • Glossary • MCQs

Adopted 11 Dec 1997

In Force 16 Feb 2005

192 Parties

Doha Amendment 2012

1997

ADOPTED —
KYOTO

2005

ENTERED INTO
FORCE

5.2%

1ST TARGET
CUT

18%

2ND TARGET
CUT

Table of Contents

01	Background & Road to Kyoto	The Climate Problem, IPCC & UNFCCC
02	Adoption of the Protocol	COP3, Kyoto, December 1997
03	Ratification & Entry into Force	Article 25, the 55/55 Rule, Russia
04	Structure of the Treaty	Articles, Annexes A, B & I
05	Guiding Principle	Common but Differentiated Responsibilities
06	Emission Targets & Gases	5.2% Cut, the Six/Seven GHGs
07	The Three Flexibility Mechanisms	ET, JI & CDM Explained
08	Compliance & MRV System	Compliance Committee, Registries, Units
09	The Marrakesh Accords	COP7, 2001 — The Rulebook
10	Commitment Periods	First (2008–12) & Second / Doha (2013–20)
11	Major Withdrawals & Non-Participation	USA, Canada, Japan, Russia, NZ
12	Achievements	What the Protocol Delivered
13	Criticism & Limitations	Why Kyoto Fell Short
14	Kyoto Protocol vs. Paris Agreement	Comparative Analysis

15	Pakistan & the Kyoto Protocol	CSS-Relevant Perspective
16	Glossary of Key Terms	Definitions for Quick Recall
17	Quick Revision Capsule	One-Page Fact Recall
18	Exam-Ready MCQs	25 Practice Questions with Answers
19	Past-Paper Style Short & Long Questions	CSS / PMS Practice Prompts

The Kyoto Protocol did not emerge in isolation. It was the product of a decade of accumulating scientific evidence and diplomatic groundwork on climate change, built on the foundation of the United Nations Framework Convention on Climate Change (UNFCCC). Understanding this background is essential for a CSS candidate, since examiners frequently test the treaty's origins alongside its provisions.

The Scientific Trigger

Concern about human-induced global warming gained institutional weight when the Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme. The IPCC's First Assessment Report of 1990 confirmed that human activity — chiefly the burning of fossil fuels — was increasing the concentration of greenhouse gases (GHGs) in the atmosphere, strengthening the case for international regulatory action.

The Rio Earth Summit and the UNFCCC (1992)

At the United Nations Conference on Environment and Development, held in Rio de Janeiro in June 1992 (commonly called the "Earth Summit"), the international community adopted the UNFCCC. The Convention entered into force in 1994 and set the ultimate objective of stabilising GHG concentrations in the atmosphere "at a level that would prevent dangerous anthropogenic interference with the climate system." Crucially, the UNFCCC itself imposed no binding emission targets — it only encouraged industrialised countries to voluntarily stabilise emissions at 1990 levels. This voluntary approach proved insufficient, setting the stage for a legally binding successor instrument.

DEFINITION — UNFCCC

The United Nations Framework Convention on Climate Change is the parent treaty of the Kyoto Protocol and the later Paris Agreement. It provides the overall legal and institutional framework — including the Conference of the Parties (COP) — under which subsequent climate agreements operate.

The Berlin Mandate (1995)

At COP1 in Berlin in 1995, Parties recognised that the voluntary commitments of the UNFCCC were inadequate and launched a new round of negotiations — known as the "Berlin Mandate" — specifically to set stronger, quantified emission-reduction obligations for industrialised (Annex I) countries for the period after 2000. This negotiating mandate directly produced the Kyoto Protocol two years later.

Why a New Protocol Was Needed

- The UNFCCC's voluntary approach failed to reverse the rising trend of global GHG emissions during the early 1990s.
- Developed countries, as historically the largest emitters since the Industrial Revolution, needed to take the lead under an equity-based principle.
- Negotiators wanted quantified, legally binding, and verifiable targets rather than vague aspirations.
- A market-based, cost-effective architecture was needed to make deep emission cuts politically and economically feasible.

EXAM TIP

Examiners often ask: "The Kyoto Protocol operationalises which treaty?" The answer is the UNFCCC (1992). Kyoto did not replace the UNFCCC — it gave it binding teeth.

The Kyoto Protocol was adopted on **11 December 1997** at the Third Conference of the Parties (COP3) to the UNFCCC, held in Kyoto, Japan. More than 150 nations participated in the negotiations, which had been building since the Berlin Mandate of 1995 and were shaped by intense bargaining over the scale of targets, the inclusion of market mechanisms, and the differentiated treatment of developed versus developing countries.

Negotiation & Adoption Timeline

1990**IPCC First Assessment Report**

Confirms the human role in global warming, giving political momentum to a binding treaty.

1992**UNFCCC adopted at Rio Earth Summit**

Sets voluntary framework; enters into force in 1994.

1995**Berlin Mandate (COP1)**

Parties agree to negotiate binding targets for developed countries.

1997**Kyoto Protocol adopted (COP3), 11 December**

Legally binding emission targets agreed for 2008–2012.

1998–99**Protocol opened for signature**

Open from 16 March 1998 to 15 March 1999 at UN Headquarters, New York; received 84 signatures.

2001**Marrakesh Accords (COP7)**

Detailed implementation rules finalised, paving the way for ratification.

2004

Russia ratifies (18 November)

Pushes cumulative Annex I emissions share above the 55% threshold.

2005

Entry into force — 16 February

The Protocol becomes binding international law.

2012

Doha Amendment adopted (COP18), 8 December

Establishes second commitment period, 2013–2020.

2020

Doha Amendment enters into force — 31 December

Second commitment period formally concludes the same day.

Naming

The treaty is named after the city of Kyoto, Japan, where the COP3 conference was hosted — following the convention of naming major environmental treaties after their host cities (as with the Vienna Convention, the Montreal Protocol, and later the Paris Agreement).

Adoption of a treaty text is only the first step; a treaty becomes binding international law only once it "enters into force" according to its own terms. Article 25 of the Kyoto Protocol laid down a dual threshold for entry into force, and meeting this threshold took over seven years.

ARTICLE 25 — THE ENTRY-INTO-FORCE FORMULA

The Protocol would enter into force on the 90th day after it had been ratified by **not less than 55 Parties to the Convention**, including Annex I Parties which together accounted for at least **55 percent of the total 1990 carbon dioxide emissions** of Annex I countries.

The numerical threshold of 55 countries was reached relatively early, but the 55% emissions threshold proved far harder to satisfy, because the United States — historically the largest Annex I emitter — announced in 2001 that it would not ratify the Protocol. This made Russia's ratification decisive: Russia alone accounted for roughly 17% of Annex I 1990 emissions. When Russia ratified on **18 November 2004**, the cumulative emissions share crossed the 55% mark, and the Protocol entered into force 90 days later, on **16 February 2005**.

Key Ratification Facts

DETAIL	FACT
Date opened for signature	16 March 1998
Signature period closed	15 March 1999
Total signatures received	84
Numerical ratification threshold	55 Parties
Emissions threshold	55% of Annex I 1990 CO ₂ emissions

Decisive ratification	Russian Federation — 18 November 2004
Entry into force	16 February 2005
Current Parties (cumulative)	192

IMPORTANT NUANCE

The United States signed the Kyoto Protocol in 1998 but never ratified it, and formally announced its withdrawal from the process in 2001 under the Bush administration. Because it never ratified, the U.S. was never legally bound by Kyoto's targets — a fact frequently tested in exams and often confused with a "withdrawal."

The Kyoto Protocol consists of 28 Articles and two Annexes (Annex A and Annex B), and it operates on the annex-based architecture inherited from the UNFCCC (Annex I and Annex II countries).

Country Classifications

CATEGORY	WHO IT COVERS	OBLIGATIONS
Annex I	Industrialised countries and "economies in transition" (e.g., OECD members, former Soviet-bloc states)	Bound by quantified emission targets under Kyoto
Annex II	A subset of Annex I — the wealthiest OECD members	Must additionally provide financial and technological support to developing countries
Non-Annex I	Developing countries, including China, India, and Pakistan	No binding emission-reduction targets under Kyoto
Annex B	The specific list of Annex I Parties with individual quantified targets, listed in the Protocol itself	Legally listed numeric targets (e.g., EU –8%, USA –7% [unratified], Japan –6%)

Core Articles Worth Remembering

- **Article 3** — Sets the overall quantified emission-limitation commitments for Annex I Parties.
- **Article 4** — Allows groups of Parties (e.g., the European Union) to jointly fulfil their commitments as a "bubble."
- **Article 6** — Establishes Joint Implementation (JI).
- **Article 12** — Establishes the Clean Development Mechanism (CDM).

- **Article 17** — Establishes International Emissions Trading (IET).
- **Article 18** — Provides for a compliance mechanism to address non-compliance.
- **Article 25** — Sets the entry-into-force formula (the "55/55 rule").

The single most important normative idea underpinning the Kyoto Protocol is the principle of "**common but differentiated responsibilities and respective capabilities**" (CBDR-RC), inherited from Article 3 of the UNFCCC.

DEFINITION — CBDR-RC

All states share a common responsibility to protect the global climate system, but their individual responsibility differs because industrialised nations have contributed disproportionately to historical GHG emissions (through more than 150 years of industrial activity) and possess greater financial and technological capacity to act.

In practical terms, this principle meant that only **Annex I (developed) countries** accepted binding, quantified emission-reduction targets under Kyoto. Developing countries, including major and fast-growing emitters such as China and India, were not assigned binding targets in the first or second commitment periods — a design choice that became one of the Protocol's most contested features and a central reason the United States declined to ratify it.

EXAM TIP

CBDR-RC is a recurring theme across UNFCCC, Kyoto Protocol, and Paris Agreement questions. Be ready to explain how the Paris Agreement later softened this strict Annex-based differentiation in favour of "Nationally Determined Contributions" applicable to all countries.

The Headline Target

Under the first commitment period (2008–2012), Annex I Parties collectively committed to reducing their greenhouse gas emissions by an average of **5.2% below 1990 levels**. This was not a uniform cut — individual targets varied significantly by country, reflecting differing national circumstances agreed upon during negotiations.

PARTY / GROUP	TARGET (VS. 1990 LEVELS)
European Union (as a bubble)	–8%
United States (signed, not ratified)	–7%
Japan & Canada	–6%
Russia	0% (stabilisation at 1990 levels)
Australia	+8% (permitted increase)
Iceland	+10% (permitted increase)

Note: A few countries with special circumstances (e.g., small or growing economies) were permitted to increase emissions relative to 1990 rather than reduce them, reflecting negotiated flexibility.

Greenhouse Gases Covered

The original Kyoto "basket" covered six greenhouse gases, listed in Annex A. The Doha Amendment later added a seventh gas for the second commitment period.

#	GAS	COMMON SOURCE
1	Carbon dioxide (CO ₂)	Fossil fuel combustion, deforestation
2	Methane (CH ₄)	

		Agriculture, livestock, landfills, fossil fuel extraction
3	Nitrous oxide (N ₂ O)	Fertilisers, industrial processes
4	Hydrofluorocarbons (HFCs)	Refrigerants, aerosols
5	Perfluorocarbons (PFCs)	Aluminium production, semiconductor manufacturing
6	Sulphur hexafluoride (SF ₆)	Electrical insulation equipment
7	Nitrogen trifluoride (NF ₃) — <i>added by the Doha Amendment</i>	Electronics manufacturing

EXAM TIP

A favourite MCQ trap: "How many greenhouse gases did the original Kyoto Protocol cover?" Answer: **six**. NF₃ was added only later, through the 2012 Doha Amendment — making the second-period list **seven** gases.

The most influential and widely examined innovation of the Kyoto Protocol was its introduction of three market-based "flexibility mechanisms," designed to let Annex I Parties meet their targets cost-effectively by pursuing emission reductions wherever they were cheapest globally, rather than only within their own borders. Together, these mechanisms formally established international carbon trading.

ARTICLE 17**International Emissions Trading (IET) — "Cap and Trade"**

Allowed Annex I countries that had emission allowances (called Assigned Amount Units, or AAUs) to spare — because they had emitted below their target — to sell that surplus to other Annex I countries that were exceeding their targets. This created a direct carbon market among developed countries.

ARTICLE 6**Joint Implementation (JI)**

Permitted an Annex I country to invest in an emission-reduction or removal project in another Annex I country (typically an economy in transition, such as those in Eastern Europe) and receive credit for the resulting reductions, known as Emission Reduction Units (ERUs). This encouraged cross-border investment in cleaner technology between developed countries.

ARTICLE 12

Clean Development Mechanism (CDM)

The most prominent mechanism. It allowed an Annex I country to finance an emission-reduction project in a **non-Annex I (developing) country** and earn tradable credits called Certified Emission Reductions (CERs), each equal to one tonne of CO₂ reduced. The CDM served a dual purpose: helping developed countries meet their targets more cheaply while promoting sustainable development and clean technology transfer in developing countries. It was overseen by the CDM Executive Board.

UNITS TO REMEMBER

AAU (Assigned Amount Unit) — the base unit of a country's overall allowed emissions.

CER (Certified Emission Reduction) — credit generated through CDM projects in developing countries.

ERU (Emission Reduction Unit) — credit generated through JI projects between developed countries.

RMU (Removal Unit) — credit generated through land-use, land-use change, and forestry (LULUCF) activities that remove carbon from the atmosphere (e.g., afforestation).

EXAM TIP

Remember the mechanism-partner pairing: **IET** = Annex I ↔ Annex I (trading surplus allowance); **JI** = Annex I ↔ Annex I (project-based); **CDM** = Annex I ↔ Non-Annex I (project-based, only mechanism involving developing countries).

Unlike the UNFCCC's voluntary approach, Kyoto built an actual compliance architecture, making it the only UNFCCC instrument to impose genuinely binding limits with a dedicated enforcement mechanism.

The Compliance Committee

Established under the Marrakesh Accords, the Kyoto Compliance Committee has two branches:

- **Facilitative Branch** — Provides early warning of potential non-compliance and offers advice and assistance to help Parties meet their commitments.
- **Enforcement Branch** — Determines whether an Annex I Party has met its emission target, its reporting obligations, and its eligibility requirements for using the flexibility mechanisms; it can apply consequences for non-compliance, including a requirement to make up any shortfall (plus a 30% penalty) in the subsequent commitment period, and suspension of eligibility to trade under Article 17.

Measurement, Reporting & Verification (MRV)

Annex I Parties were required to maintain national GHG inventories, submit periodic reports, and undergo expert review. Each Party had to establish a national registry to track the issuance, holding, transfer, and cancellation of Kyoto units (AAUs, CERs, ERUs, RMUs), all linked through an International Transaction Log administered by the UNFCCC Secretariat to prevent double-counting.

EXAM TIP

A distinguishing feature often tested: Kyoto's Compliance Committee had a genuinely binding enforcement branch with real consequences — something the Paris Agreement deliberately avoided in favour of a "facilitative, non-adversarial" compliance mechanism.

While the Kyoto Protocol was adopted in 1997, its detailed operational rulebook was not finalised until COP7 in Marrakesh, Morocco, in 2001. These decisions, collectively called the **Marrakesh Accords**, filled in the practical details necessary to make the Protocol workable and ratifiable.

What the Marrakesh Accords Settled

- Detailed operating rules for the three flexibility mechanisms (IET, JI, CDM).
- The design of the Compliance Committee and its two branches.
- Rules on land-use, land-use change, and forestry (LULUCF) accounting.
- Establishment of new funds — including the Adaptation Fund — to support developing countries.
- Reporting and review guidelines for national GHG inventories.

The Marrakesh Accords were essential in reassuring wavering states about the Protocol's practicality, directly contributing to the ratification momentum that eventually led to entry into force in 2005.

First Commitment Period: 2008–2012

The original and most widely-known phase of the Protocol. Thirty-seven industrialised countries plus the European Community accepted binding targets, aiming for an average 5.2% reduction below 1990 levels across the five-year period. According to UN Climate Change assessments, the emissions of these Annex I Parties fell by more than 22% relative to 1990 during this period — far exceeding the original target (though this figure was influenced by the economic collapse of former Soviet-bloc economies during the 1990s, not solely by climate policy).

Second Commitment Period: The Doha Amendment (2013–2020)

To bridge the gap between the end of the first commitment period in 2012 and the entry into force of the Paris Agreement in 2020, Parties adopted the **Doha Amendment** at COP18 in Doha, Qatar, on **8 December 2012**. It established a second commitment period running from **1 January 2013 to 31 December 2020**, with participating developed countries committing to cut emissions by at least **18% below 1990 levels** — a more ambitious goal than the first period's 5.2%.

DOHA AMENDMENT — KEY FACTS

Adopted: 8 December 2012, at COP18/CMP8 in Doha, Qatar

Coverage period: 1 January 2013 – 31 December 2020

Target: At least 18% reduction below 1990 levels (collectively)

Participating Parties: 37 countries plus the European Union

Ratification threshold: 144 instruments of acceptance

Entered into force: 31 December 2020 — the very last day of the commitment period it governed, after Nigeria's ratification pushed acceptances past the threshold

The unusually late entry into force of the Doha Amendment — on the final day of the period it was meant to regulate — is a striking and frequently examined fact. It illustrates how the Protocol's legal machinery struggled to keep pace with political developments as international attention shifted toward negotiating the Paris Agreement (adopted 2015, entered into force 2016).

REDUCED PARTICIPATION IN THE SECOND PERIOD

Several major Annex I emitters that took part in the first commitment period declined to take on new targets under the Doha Amendment, including **Canada** (which formally withdrew from the Kyoto Protocol altogether in December 2011), as well as **Japan, Russia, and New Zealand**, which chose not to accept second-period targets while remaining Parties to the Protocol itself.

Major Withdrawals & Non-Participation

A RECURRING WEAK POINT IN KYOTO'S DESIGN

COUNTRY	STATUS
United States	Signed in 1998 but never ratified; announced it would not proceed with ratification in 2001. Never legally bound.
Canada	Ratified and participated in the first commitment period, then formally withdrew from the Kyoto Protocol in December 2011, citing the exclusion of major emitters like the U.S. and China from binding targets.
Japan	Participated fully in the first commitment period but declined to accept a binding target under the Doha Amendment's second period.
Russia	Its ratification in 2004 triggered entry into force; it did not take on a new target for the second commitment period.
New Zealand	Met its first-period target but opted out of binding second-period commitments.
Australia	Initially declined to ratify but did so in December 2007, later fully participating.

This pattern of shrinking participation is central to understanding why the Kyoto Protocol's second commitment period covered a much smaller share of global emissions than its first, and why the international community ultimately negotiated the more universally applicable Paris Agreement.

- **First legally binding climate treaty** — Kyoto remains the only UNFCCC instrument to have imposed genuinely binding, quantified emission limits on states.
- **Creation of international carbon markets** — The Protocol formally established carbon trading as a policy tool, laying institutional groundwork used by later national and regional carbon markets (such as the EU Emissions Trading System).
- **The Clean Development Mechanism** — Channelled substantial investment into clean-energy and sustainable-development projects across the developing world, registering thousands of projects globally.
- **Institutional precedent** — Its Compliance Committee, national registries, and MRV architecture became templates that later agreements (including the Paris Agreement's transparency framework) built upon.
- **Emissions performance** — Annex I Parties with binding commitments substantially exceeded their aggregate targets in both commitment periods, according to UNFCCC assessments — though this outcome was significantly aided by the post-Soviet economic contraction of the 1990s.
- **Raised global awareness** — Kyoto elevated climate change from a scientific and environmental issue to a mainstream matter of international diplomacy and economic policy.

- **Non-participation of the United States** — The world's largest historical emitter at the time never ratified the Protocol, severely limiting its real-world impact and undermining its legitimacy.
- **No targets for major developing-country emitters** — China (which became the world's largest annual emitter during the Kyoto era) and India faced no binding targets, a consequence of the CBDR principle that many developed states viewed as unfair.
- **Shrinking coverage over time** — Canada's withdrawal and the non-participation of Japan, Russia, and New Zealand in the second period meant the Doha Amendment covered only a small fraction of global emissions (roughly 12–15% by some estimates).
- **Weak, delayed ratification of the Doha Amendment** — It took eight years for the Doha Amendment to secure the 144 acceptances needed, and it entered into force on the last day of the period it governed, undermining its practical relevance.
- **Carbon leakage concerns** — Critics argued that emissions-intensive industries might simply relocate to countries without binding targets, offsetting genuine global reductions.
- **Rigid, top-down target-setting** — The negotiated, binding-target model proved politically difficult to sustain, prompting the shift toward the more flexible, bottom-up "Nationally Determined Contributions" model under the Paris Agreement.

EXAM TIP

A strong essay or long-answer response should balance Kyoto's genuine institutional achievements against these structural weaknesses — examiners reward candidates who avoid one-sided assessments.

Kyoto Protocol vs. Paris Agreement

A COMPARATIVE SNAPSHOT

FEATURE	KYOTO PROTOCOL (1997)	PARIS AGREEMENT (2015)
Approach	Top-down: binding targets negotiated and assigned to Annex I countries	Bottom-up: countries set their own Nationally Determined Contributions (NDCs)
Country coverage	Binding targets only for developed (Annex I) countries	Applies to all Parties, developed and developing alike
Legal nature of targets	Legally binding quantified targets	NDCs are nationally determined; the process of submitting/updating them is binding, but the targets themselves are not enforced with penalties
Compliance mechanism	Binding enforcement branch with real consequences	Facilitative, non-punitive transparency framework
Temperature goal	No explicit global temperature target	Holding warming "well below 2°C," pursuing efforts to limit it to 1.5°C
Market mechanisms	IET, JI, CDM (Articles 17, 6, 12)	Article 6 cooperative mechanisms (successor carbon-market framework)
Relationship	Superseded in practice as the primary global climate framework	Current governing framework for global climate action

CONTINUITY, NOT REPLACEMENT

The Paris Agreement did not formally terminate the Kyoto Protocol — the two operate under the same parent treaty (the UNFCCC) and, for a period, ran in parallel. However, Paris has effectively become the dominant framework guiding international climate policy since 2016.

Pakistan is classified as a **Non-Annex I** country under the UNFCCC and Kyoto Protocol framework, meaning it never carried binding emission-reduction obligations under Kyoto, consistent with the principle of common but differentiated responsibilities. Pakistan ratified the Kyoto Protocol and participated in the Clean Development Mechanism as a host country for various registered CDM projects, particularly in renewable energy, energy efficiency, and waste-management sectors.

For CSS aspirants, Pakistan's position within the Kyoto framework is best understood through several key themes:

- **Low historical emitter, high climate vulnerability** — Pakistan contributes a very small share of cumulative global GHG emissions yet is repeatedly ranked among the countries most vulnerable to climate change impacts, a paradox central to Pakistan's climate diplomacy.
- **CDM host country** — Pakistan hosted CDM projects that attracted foreign investment into cleaner energy infrastructure, illustrating the practical developing-country benefit of Kyoto's flexibility mechanisms.
- **Transition to the Paris framework** — Since the Paris Agreement's adoption, Pakistan's climate commitments are now expressed through its Nationally Determined Contributions, submitted under the newer, more universal framework.
- **Institutional linkage** — Pakistan's Ministry of Climate Change (and its predecessor bodies) has served as the national focal point for UNFCCC, Kyoto, and Paris-related obligations and reporting.

EXAM TIP

Essay and current-affairs papers often ask candidates to link Pakistan's climate vulnerability (e.g., the 2010 and 2022 floods) to the broader CBDR debate — a strong answer references Kyoto's Non-Annex I classification as historical context before pivoting to Pakistan's present-day NDC commitments under Paris.

Annex I Parties — Industrialised countries and economies in transition listed in Annex I of the UNFCCC, bound by Kyoto's quantified emission targets.

Annex II Parties — A subset of Annex I (wealthy OECD states) obligated to provide financial and technological assistance to developing countries.

Non-Annex I Parties — Developing countries without binding Kyoto emission targets.

Assigned Amount Unit (AAU) — The core unit representing a Party's total permitted emissions under its Kyoto target.

Certified Emission Reduction (CER) — A credit generated by a Clean Development Mechanism project, equal to one tonne of CO₂ reduced or avoided.

Emission Reduction Unit (ERU) — A credit generated through a Joint Implementation project between two Annex I countries.

Removal Unit (RMU) — A credit generated through land-use and forestry activities that remove CO₂ from the atmosphere.

Common but Differentiated Responsibilities (CBDR) — The principle that all states share responsibility for the climate but developed states bear greater obligation, given their historical emissions and greater capacity.

COP / CMP — Conference of the Parties (UNFCCC's governing body); CMP is the "Conference of the Parties serving as the Meeting of the Parties" to the Kyoto Protocol specifically.

Marrakesh Accords — The detailed operational rules for implementing Kyoto, agreed at COP7 in 2001.

Doha Amendment — The 2012 amendment establishing Kyoto's second commitment period (2013–2020) and an 18% emissions-cut target.

LULUCF — Land Use, Land-Use Change, and Forestry; activities (like afforestation) that can be counted toward emission targets via carbon removal.

Carbon leakage — The risk that emissions-intensive production shifts to countries without binding climate targets, undermining global reduction goals.

Nationally Determined Contribution (NDC) — The Paris Agreement mechanism through which every country (not just Annex I) sets its own climate targets.

ADOPTED

11 December 1997, COP3, Kyoto, Japan

ENTERED INTO FORCE

16 February 2005

PARENT TREATY

UNFCCC (1992, Rio Earth Summit)

TOTAL PARTIES

192

ENTRY-INTO-FORCE RULE55 Parties + 55% of Annex I 1990 CO₂ emissions**DECISIVE RATIFIER**

Russia — 18 November 2004

FIRST PERIOD TARGET

–5.2% below 1990 levels (2008–2012)

SECOND PERIOD TARGET

–18% below 1990 levels (2013–2020, Doha Amendment)

ORIGINAL GHGS COVERED6 (CO₂, CH₄, N₂O, HFCs, PFCs, SF₆); NF₃ added later**GUIDING PRINCIPLE**

Common but Differentiated Responsibilities

THREE MECHANISMS

IET (Art. 17), JI (Art. 6), CDM (Art. 12)

RULEBOOK

Marrakesh Accords, COP7, 2001

DOHA AMENDMENT ADOPTED

8 December 2012, COP18, Qatar

DOHA AMENDMENT IN FORCE

31 December 2020

NEVER RATIFIED

United States

WITHDREW (2011)

Canada

SUCCESSOR FRAMEWORK

Paris Agreement (2015 / in force 2016)

PAKISTAN'S STATUS

Non-Annex I; CDM host country

1. The Kyoto Protocol was adopted at which Conference of the Parties?

- A. COP1
- B. COP2
- C. COP3**
- D. COP7

Answer: C. COP3, held in Kyoto, Japan, in December 1997.

2. On what date was the Kyoto Protocol adopted?

- A. 16 February 1997
- B. 11 December 1997**
- C. 8 December 2012
- D. 15 March 1999

Answer: B. 11 December 1997.

3. When did the Kyoto Protocol enter into force?

- A. 11 December 1997
- B. 1 January 2000
- C. 16 February 2005**
- D. 31 December 2020

Answer: C. 16 February 2005 — 90 days after Russia's ratification met the dual threshold.

4. The Kyoto Protocol operationalises which parent treaty?

- A. Montreal Protocol
- B. UNFCCC**
- C. Paris Agreement
- D. Basel Convention

Answer: B. The United Nations Framework Convention on Climate Change (1992).

5. Which country's ratification proved decisive in meeting the 55% emissions threshold for entry into force?

- A. China
- B. Japan
- C. Russia**
- D. Germany

Answer: C. Russia ratified on 18 November 2004.

6. What was the average emission-reduction target for Annex I countries in the first commitment period (2008–2012)?

- A. 2%
- B. 5.2%**
- C. 18%
- D. 25%

Answer: B. 5.2% below 1990 levels.

7. How many greenhouse gases did the original (1997) Kyoto Protocol basket cover?

- A. Four
- B. Five
- C. Six**
- D. Seven

Answer: C. Six gases; NF_3 was added later via the Doha Amendment, making seven.

8. Which mechanism allows an Annex I country to earn credits by funding emission-reduction projects in a developing (non-Annex I) country?

- A. International Emissions Trading
- B. Joint Implementation
- C. Clean Development Mechanism**
- D. LULUCF

Answer: C. The Clean Development Mechanism (Article 12).

9. Joint Implementation projects take place between which pair of Parties?

- A. Annex I and Annex I**
- B. Annex I and Non-Annex I
- C. Non-Annex I and Non-Annex I
- D. Annex II only

Answer: A. Joint Implementation (Article 6) operates between two Annex I Parties.

10. Which article of the Kyoto Protocol establishes International Emissions Trading?

- A. Article 6
- B. Article 12
- C. Article 17**
- D. Article 25

Answer: C. Article 17.

11. What guiding principle underlies the differentiated treatment of developed and developing countries under Kyoto?

- A. Polluter Pays Principle
- B. Common but Differentiated Responsibilities**
- C. Precautionary Principle
- D. Sustainable Development Principle

Answer: B. Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC).

12. Where were the detailed implementation rules of the Kyoto Protocol, known as the Marrakesh Accords, adopted?

- A. COP3, Kyoto
- B. COP7, Marrakesh**
- C. COP15, Copenhagen
- D. COP18, Doha

Answer: B. COP7, Marrakesh, Morocco, in 2001.

13. The Doha Amendment established the Kyoto Protocol's second commitment period covering which years?

- A. 2008–2012
- B. 2013–2020**
- C. 2015–2025
- D. 2020–2030

Answer: B. 1 January 2013 to 31 December 2020.

14. What emission-reduction target did the Doha Amendment set for the second commitment period?

- A. 5.2%
- B. 12%
- C. 18%**
- D. 30%

Answer: C. At least 18% below 1990 levels.

15. When did the Doha Amendment formally enter into force?

- A. 8 December 2012
- B. 1 January 2013
- C. 31 December 2020**
- D. 16 February 2021

Answer: C. 31 December 2020 — the very last day of the period it governed.

16. Which major country signed but never ratified the Kyoto Protocol?

- A. Canada
- B. Japan
- C. United States**
- D. Russia

Answer: C. The United States signed in 1998 but never ratified.

17. Which country formally withdrew from the Kyoto Protocol in December 2011?

- A. Canada**
- B. Australia
- C. New Zealand
- D. United Kingdom

Answer: A. Canada withdrew in December 2011.

18. What unit represents a Party's overall allowed emissions under its Kyoto target?

- A. Assigned Amount Unit (AAU)**
- B. Certified Emission Reduction (CER)
- C. Emission Reduction Unit (ERU)
- D. Removal Unit (RMU)

Answer: A. Assigned Amount Unit.

19. A credit generated by a Clean Development Mechanism project is called a:

- A. AAU
- B. CER**
- C. ERU
- D. RMU

Answer: B. Certified Emission Reduction.

20. Under the UNFCCC/Kyoto classification, Pakistan is categorised as:

- A. Annex I
- B. Annex II
- C. Non-Annex I**
- D. Annex B only

Answer: C. Non-Annex I — a developing country with no binding Kyoto emission targets.

21. Which agreement is widely regarded as the successor framework to the Kyoto Protocol?

- A. Montreal Protocol
- B. Copenhagen Accord
- C. Paris Agreement**
- D. Basel Convention

Answer: C. The Paris Agreement, adopted in 2015.

22. Under the Paris Agreement, individual country climate pledges are called:

- A. Assigned Amount Units
- B. Annex Targets
- C. Nationally Determined Contributions**
- D. Quantified Emission Objectives

Answer: C. Nationally Determined Contributions (NDCs).

23. The Kyoto Protocol's Compliance Committee consists of which two branches?

- A. Judicial and Legislative
- B. Facilitative and Enforcement**
- C. Advisory and Executive
- D. Technical and Political

Answer: B. A Facilitative Branch and an Enforcement Branch.

24. What numeric threshold of Parties was required, alongside a 55% emissions share, for Kyoto to enter into force?

- A. 25 Parties
- B. 40 Parties
- C. 55 Parties**
- D. 100 Parties

Answer: C. 55 Parties, under Article 25.

25. How many Parties are currently party to the Kyoto Protocol?

A. 55

B. 144

C. 192

D. 197

Answer: C. 192 Parties.

Short Questions (5–8 marks)

1. Define "Common but Differentiated Responsibilities" and explain its application in the Kyoto Protocol.
2. Explain the significance of Article 25 in the entry into force of the Kyoto Protocol.
3. What were the Marrakesh Accords, and why were they necessary?
4. Differentiate between the Clean Development Mechanism and Joint Implementation.
5. List the greenhouse gases originally covered under the Kyoto Protocol.
6. Why did the United States decline to ratify the Kyoto Protocol?
7. What is the Doha Amendment, and what target did it set?

Long Questions / Essay Prompts (15–20 marks)

1. "The Kyoto Protocol was a landmark treaty, but its structural weaknesses ultimately limited its effectiveness." Critically evaluate this statement.
2. Trace the historical evolution of international climate governance from the UNFCCC (1992) through the Kyoto Protocol (1997) to the Paris Agreement (2015).
3. Discuss the three flexibility mechanisms of the Kyoto Protocol and assess their effectiveness in achieving global emission reductions.
4. Compare and contrast the Kyoto Protocol and the Paris Agreement in terms of structure, participation, and enforcement.
5. Analyse Pakistan's position within the global climate governance regime, from the Kyoto Protocol to its current Nationally Determined Contributions.
6. To what extent did the principle of Common but Differentiated Responsibilities both enable and undermine the Kyoto Protocol's global effectiveness?

WRITING STRATEGY

For long questions, structure answers with: (1) a brief definitional introduction, (2) chronological or thematic body paragraphs backed by specific dates and figures from this guide, (3) a balanced discussion of achievements versus limitations, and (4) a forward-looking conclusion connecting Kyoto to the Paris Agreement and current climate diplomacy.

SCHOLAR EYE

CSS & PMS Exam Preparation Resources

This study guide is prepared for educational purposes as part of the Scholar Eye Education/Reference series.

For more topic guides, past papers, and preparation resources, visit **scholareye.xyz**