

CDM项目监测、核查、核证与CER签发

CDM Project Monitoring, Verification, Certification
and CER Issuance

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Training

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中国资源综合利用协会可再生能源专业委员会

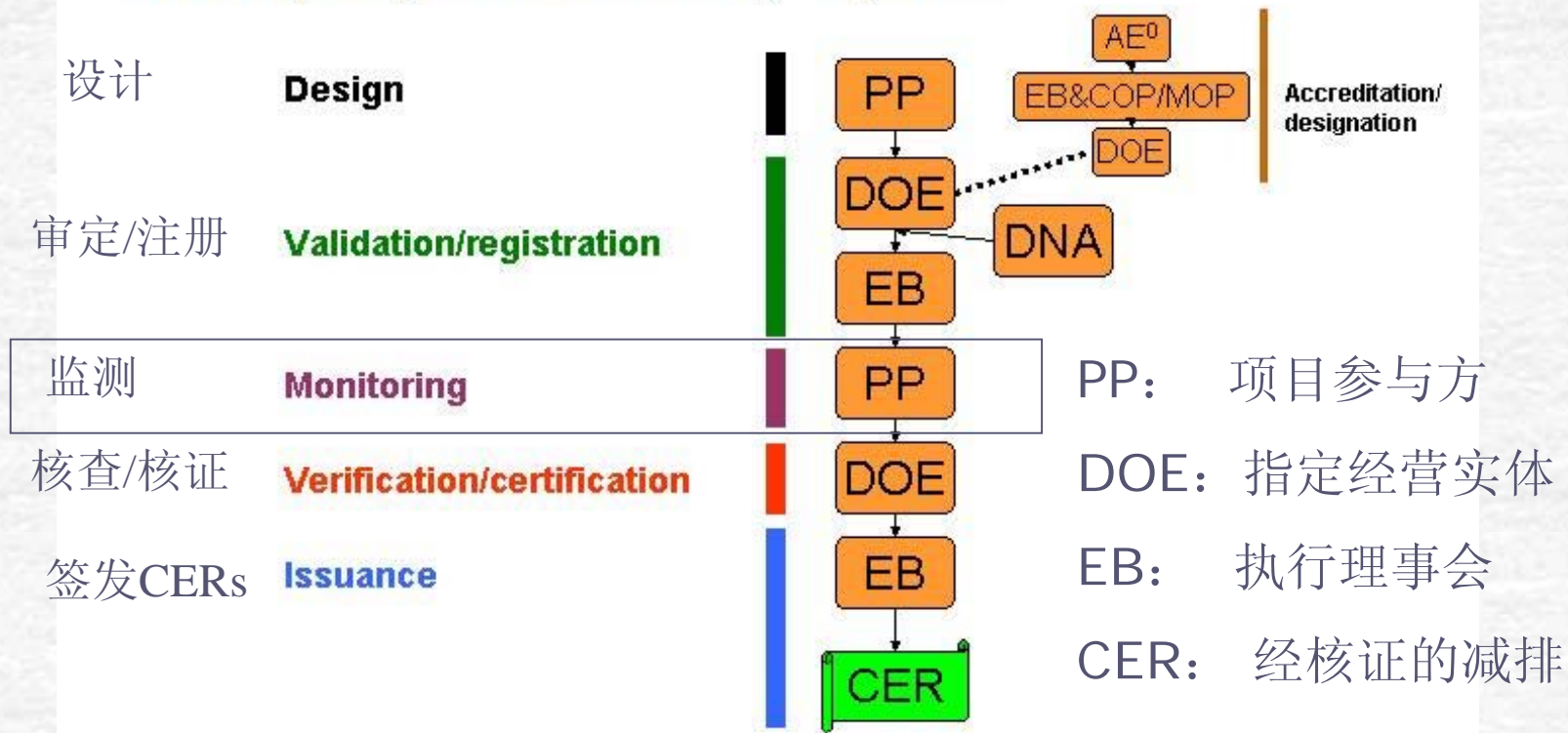
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Chinese Renewable Energy Industries Association (CREIA)

Guan Yisong

Monitoring: 监测

CDM project activity cycle



监测计划： Monitoring Plan

监测计划应能够提供并符合确认下列事项的所有相关数据：

A monitoring plan shall provide for the collection and archiving of all relevant data necessary for determining:

👉 在计入期项目边界内温室气体源人为排放量

anthropogenic emissions by sources of greenhouse gases occurring within the project boundary during the crediting period;

👉 在计入期项目边界内温室气体源人为排放量基准线

the baseline of anthropogenic emissions by sources of greenhouse gases within the project boundary during the crediting period;

👉 在计入期项目边界外重要的并可归因于项目活动而增加的温室气体源人为排放

increased anthropogenic emissions by sources of greenhouse gases outside the project boundary that are significant and reasonably attributable to the project activity during the crediting period.

若项目参与方或东道国认为项目所造成的环境影响较显著，则监测计划应包括收集与项目相关的环境影响的信息。

A monitoring plan shall provide for the collection and archiving of information related to the environmental impacts of the project, if those impacts are considered significant by the project parties or the host Party.

监测计划： Monitoring Plan

- ➡ CDM项目应包括一个收集准确排放数据的监测计划
 - ➡ 基准线与监测方法学应紧密相关
 - ➡ 监测计划是未来项目核查的基础
 - ➡ 监测计划应能够监控基准线和项目排放的产生的风险
 - ➡ 基准线与监测计划的设计应根据已批准的方法学，如果使用新的方法学应将新基准线和监测方法学一并提交批准
 - ➡ 可使用简化的基准线方法学与监测计划
- ➡ CDM projects must have a monitoring plan to collect accurate emissions data.
 - ➡ A strong link should be established between baseline and monitoring methodologies
 - ➡ The monitoring plan is the basis of future verification
 - ➡ The monitoring plan should enable to monitor the risks inherent to baseline and project emissions.
 - ➡ The baseline and monitoring plan must be designed according to approved methodologies. New baseline and monitoring methodologies shall be proposed and approved together.
 - ➡ Simplified baseline methodologies and monitoring plans can be used.

监测： Monitoring

- 👉 监测方法学是否有特殊报告的要求？其要求是否被贯彻

Are there any specific reporting requirements in the monitoring methodology? Are these being followed?

- 👉 什么参数应被监测？

What factors should be monitored?

- 👉 排放相关参数：燃料消耗、活动层级等

Emission related factors: fuel consumption, activity levels etc.

- 👉 数据的可信度：商业、法规及其他

Reliability of data: Commercial, regulated, then others.

- 👉 基准线因子：(项目计入期)

Baseline factors (Credit-based projects):

- 👉 政治法律、经济、社会发展、技术

Political-legal, economical, socio-demographic, technology

- 👉 泄漏因子

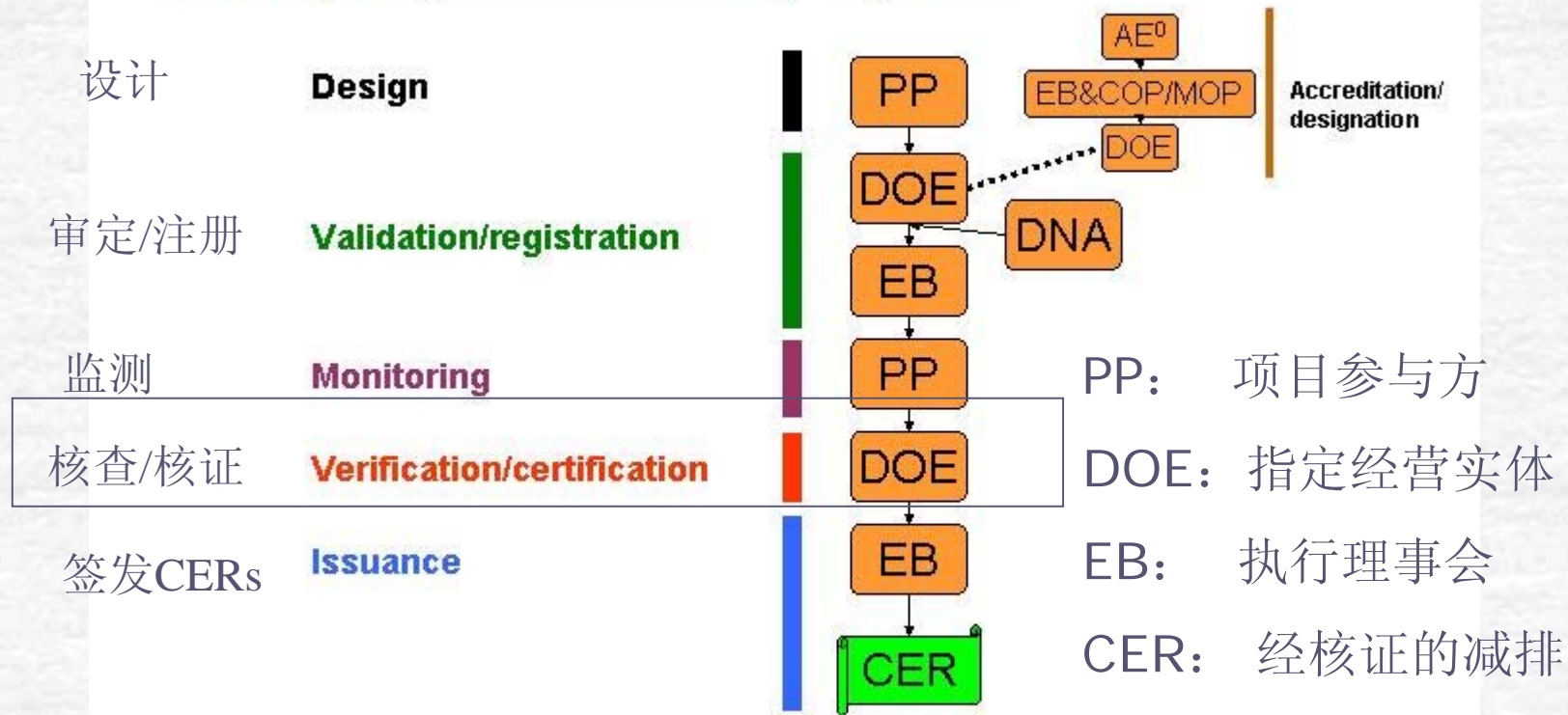
Leakage factors

- 👉 项目边界外直接或间接影响

Indirect or direct effects outside project boundaries

核查/核证 Verification/certification

CDM project activity cycle



核查： Verification

核查是指由指定的经营实体定期独立审评和事后确定已登记的CDM 项目活动在核查期内产生的、经监测的温室气体(GHG)源人为减排量。核查期的期限长短尚没有规定。但是, 核查期不得长于计入期。

Verification is the periodic independent review and ex post determination by a designated operational entity of monitored reductions in anthropogenic emissions by sources of greenhouse gases (GHG) that have occurred as a result of a registered CDM project activity during the verification period. There is no prescribed length of the verification period. It shall, however, not be longer than the crediting period.

初始核查（自愿）： Initial Verification(voluntary)

👉 初始核查的目的是核查项目已按照计划实施、监测系统已有效运行，确保项目可以产生可核查的CERs

The objective of an initial verification is to verify that the project is implemented as planned, to confirm that the monitoring system is in place and fully functional, and to assure that the project will generate verifiable emission reductions.

👉 确保项目按照计划已经实施，监测系统有效运行，项目已经具备产生CERs的条件

-to ensure that the project has been implemented as planned, that the monitoring system is in place and that the project is ready to generate and record GHG emission reductions;

👉 评估在项目实际设计与建设中所导致监测计划的变化与调整（请注意CDM和JI规则中并没有对如何处理这些变化和调整作出规定）

-to assess adjustments and amendments to the monitoring plan that may have become necessary during the detailed design and construction of the project (Please note that the CDM and JI modalities do not give guidance on handling changes to previously validated monitoring plans);

👉 为项目产生高质量的CER提供保证

-to provide assurance of generation of high quality emission reductions and clear the way for project commissioning.

定期核查：Periodic Verification

👉 核查是指指定经营实体对温室气体在确认的核查期减排的定期独立复审以及事后确认。

Verification is the periodic independent review and *ex post* determination by the Designated Operational Entity / Independent Entity of the monitored reductions in GHG emissions during the defined verification period.

👉 一核查实际的监测系统和程序是否符合监测计划中的规定，

-to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan,

👉 一评估对温室气体减排数据和说明报告的温室气体减排是否具有较高的可信度，

-to evaluate the GHG emission reduction data and express a conclusion with a high, but not absolute, level of assurance about whether the reported GHG emission reduction data is “free” of material misstatements,

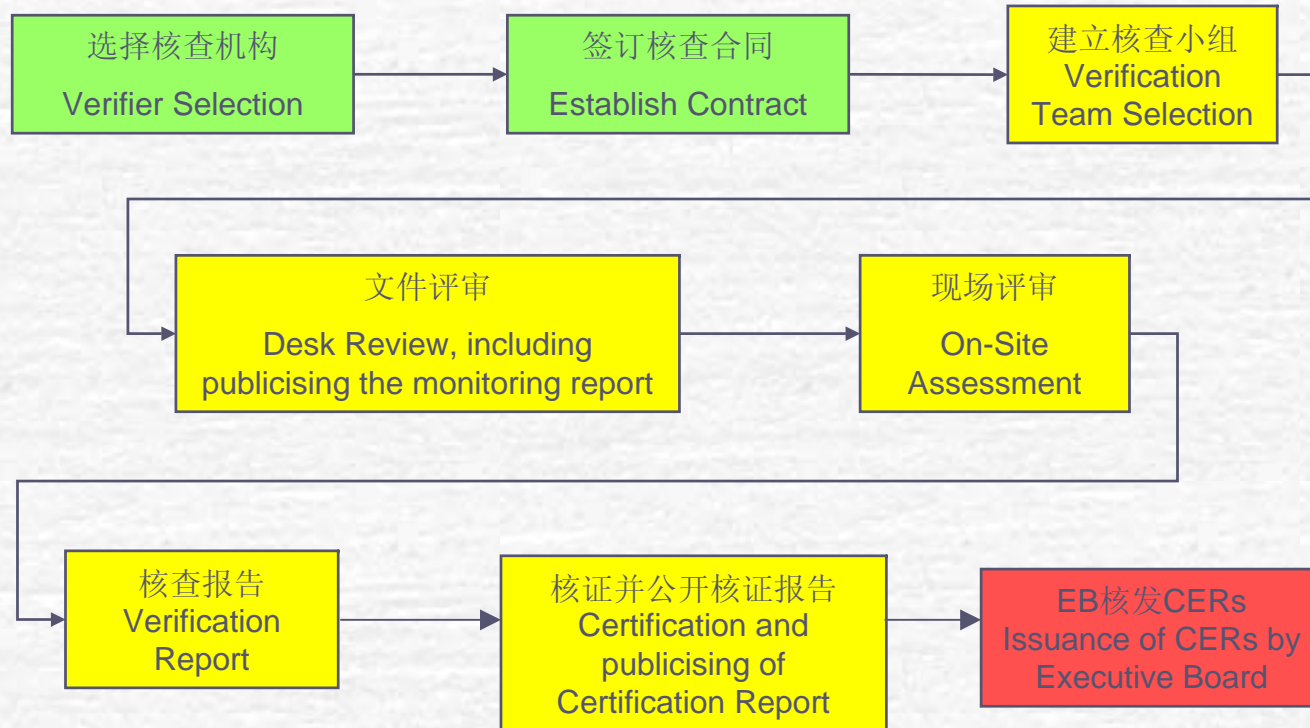
👉 一是否有充分的证据支持减排数据，例如：监测记录。

-the reported GHG emission data is sufficiently supported by evidence, i.e. monitoring records.

核查内容： Contents of verification

- 👉 检查项目文件
 - 👉 实施现场查验
 - 👉 使用来自其它来源的补充数据
 - 👉 审评监测结果，并核查用其监测方法是否应用得当、其文件记录是否完整和透明
 - 👉 若有必要，建议项目参与方适当修改监测方法
 - 👉 利用登记的PDD和监测计划所列一致的方法确认该项目的额外性。
 - 👉 识别并告知项目参与方任何有关项目活动的实施与登记的项目设计书不一致之处；项目参与者应关注这些问题并提供相关的补充信息
 - 👉 公布监测报告
- 👉 Check of project documentation;
 - 👉 On-site inspections;
 - 👉 If appropriate, check of additional data from other sources;
 - 👉 Review of monitoring results and verification of monitoring methodologies for estimation of GHG emissions have been applied correctly and that supporting documentation is complete and transparent;
 - 👉 Recommendation of changes to the monitoring methodology for any future crediting period, if necessary;
 - 👉 Determination of additional reductions in GHG emissions using calculation procedures consistent with those contained in the registered project design document and in the monitoring plan;
 - 👉 Confirmation that the actual project activity and its operation conform with the registered project design document. Project participants should be informed of any concerns, and shall address these concerns and supply relevant additional information;
 - 👉 Making the monitoring report publicly available

定期核查过程： The Periodic Verification Process



文件评审： Desk Review

通过文件评审，核查方应对项目情况了解。文件评审至少应包括：

The verification team should become familiar with the project

👉 最新版PDD文件及其附件，包括监测报告

the last revision of the PDD and attached documents, including the most recent monitoring plan,

👉 最新版的监测报告，包括主张项目的减排

the last revision of the monitoring report, including the claimed emission reductions for the project,

👉 最新版的前一次审定报告和/或初始核查报告

the last revision of the validation report and/or the last revision of the initial verification report,

👉 最新版的前一次定期核查报告（如果存在）

the last revision of the previous periodic verification report (as applicable),

👉 管理手册及当地的营业许可（如果存在）

the written management manual, operating licenses of local authorities (as applicable).

👉 其他文件例如流程图、设备手册、性能记录等

Other documents, such as process flow diagrams, technical drawings, manuals of equipment suppliers, performance records

现场评审： On-site Assessment

核查方应使用风险评估的方法。核查方应根据审核追踪线索对现场进行调查，和一并检查已有的监测计划和记录。

During the verification, the verifier investigates on-site, using a risk-based approach. The verifier will typically follow the audit trails and data sets on site for the specific indicators, and cross check with the existing monitoring plan and records.

👉 监测指标的收集、汇集、报告的流程

Information flows for generating, aggregating/collating and reporting the selected monitoring parameters

👉 确定温室气体数据的计算和假设

Calculations and assumptions made in determining the GHG data

👉 对选定的监测参数可能出现任何重大的错误情况的控制情况

Controls in place to prevent, or detect and correct any significant errors or omissions in the selected monitoring parameters reported

核查报告：Verification Report

- 👉 核查方应向项目方提交草拟核查报告说明所有与主张的减排量有关的问题。项目方须针对这些问题进行说明并在最终核查报告完成之前提供相关的补充信息。

A draft verification report shall provide the project proponent with any concerns and conclusions related to the claimed emission reductions. The project proponent will have the possibility to address the concerns and supply relevant additional information before a final verification report is provided.

- 👉 根据透明性的原则，核查报告应说明核查是如何展开的。所有的核查发现应清楚地说明和确认。

Building on the transparency principle, the verification report shall give an overview of the verification process deployed by the verifier in order to arrive at the verification conclusions. All verification findings shall be clearly identified and justified.

- 👉 **说明核查范围：** give an overview of the scope of the verification,

- 👉 **通过核查发现问题的讨论：** general discussion of details captured by the verification protocol,

- 👉 **核查的减排量清楚的结论：** clearly state the conclusions related to the verification and the verified amount of emission reductions

核查发现： Verification Findings

👉 当存在以下情况时，核查机构可开出**进一步行动要求**

The term “**Forward Action Request**” shall be used in the verification report, when:

👉 在下一个核查期应注意的监测或报告问题

the actual project monitoring and reporting requires attention for the next consecutive verification period,

👉 对监测计划调整的建议

an adjustment of the MP is recommended.

👉 核查发现：**Findings** established during the verification may be that:

👉 核查不能对报告的全部或部分减排获得足够的证据。在这种情况下，这部分减排量不能得到核查与核证。

The verification is not able to obtain sufficient evidence for the reported emission reductions or part of the reported emission reductions. In this case these emission reductions shall not be verified and certified;

👉 核查对报告的减排发现实质性的误差。在这种情况下，存在误差的减排将从事前的确认达到的减排量中予以扣除。

The verification has identified material misstatements in the reported emission reductions. In this case emission reductions with material misstatements shall be discounted based on the verifiers ex-post determination of the achieved emission reductions.

核查声明： Verification Statement

- 👉 核查完成之后，核查机构将为项目提出者提供核查声明。核查声明是最终核查报告的一部分，应与公开

After completed verification, a verification statement shall be provided by the verifier to the project proponent. The verification statement will be part of the final verification report and shall be made publicly available.

- 👉 核查声明包括： This verification statement shall include:

- 👉 核查范围： the scope of the verification

- 👉 核查期： the period of the verification

- 👉 核查结论，包括经核证的在一定期间内的减排量

conclusions of the verification, including the verified amount of emission reductions for the given period

- 👉 有关核查声明精确性责任声明

liability statement with regards to the accuracy of the verification statement

- 👉 保密声明： statement of confidentiality

- 👉 核查声明应对报告的温室气体减排的全面性、可比性、精确性、正确性做出最终结论。核查声明是经核证的减排的基础。

- 👉 The verification statement shall give the final verdict of the project in terms of the completeness, comparability, accuracy and correctness of the reported GHG emission reductions. The verification statement will be the basis for the certified emission reductions.

核证： Certification

👉 核证是DOE出具书面保证函，说明项目活动在一个具体时期内所达到温室气体源减排量得到了核证

👉 *Certification* is the written assurance by the DOE that, during a specified time period, a project activity achieved the reductions in anthropogenic emissions by sources of greenhouse gases as verified.

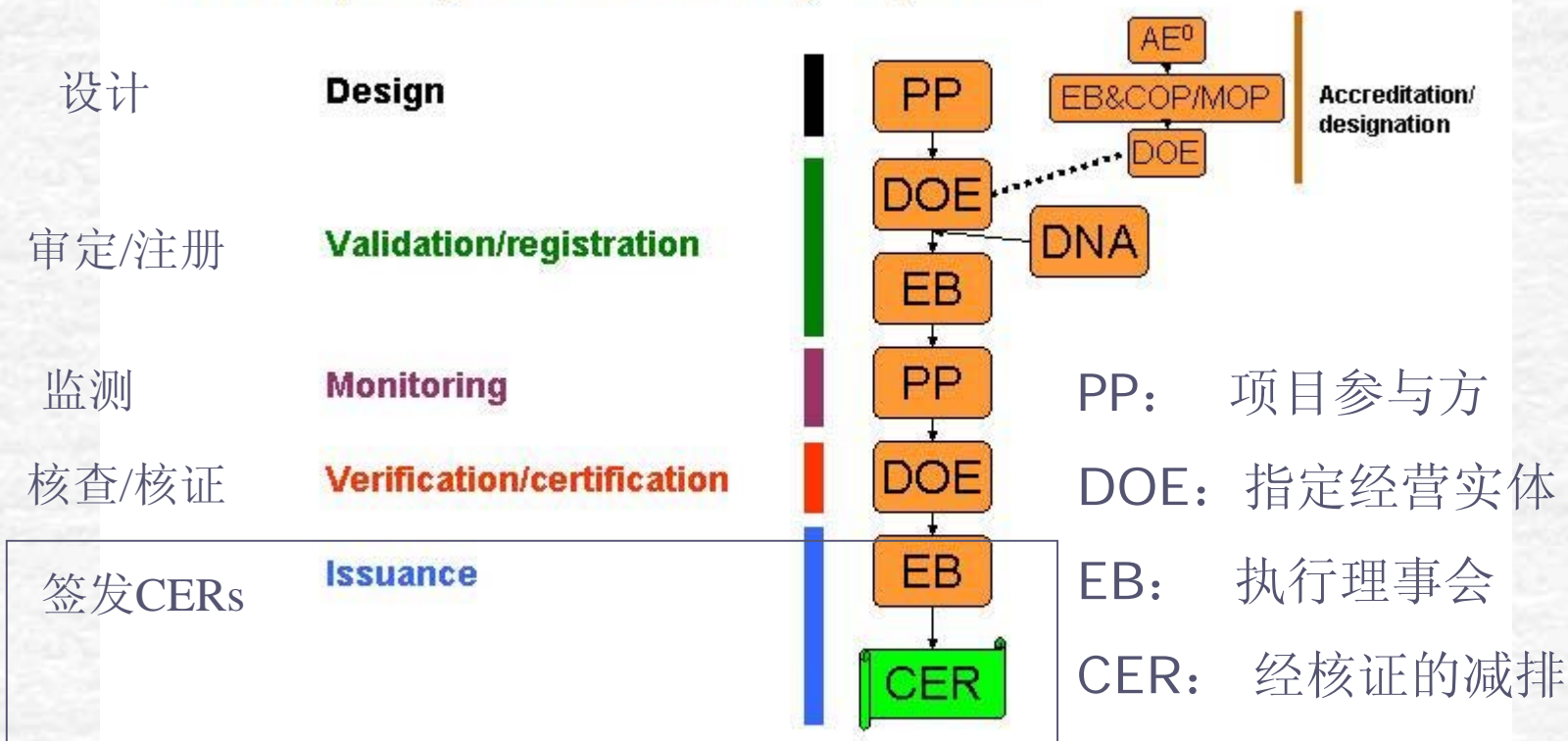
核证报告： Certification report

- 👉 DOE应向项目参与者、有关的缔约方及EB提交核证报告。该报告应予公开。
- 👉 核证报告应包括请求EB签发已经通过核查的人为的温室气体减排量

- 👉 The DOE shall provide a verification report to the project participants, the Parties involved and the executive board. The report shall be made publicly available.
- 👉 The certification report shall constitute a request for issuance to the Executive Board of CERs equal to the verified amount of reductions of anthropogenic emissions by sources of greenhouse gases.

签发CERs Issuance of CERs

CDM project activity cycle



签发CERs: Issuance of CERs

👉 在收到签发请求的15 天内考虑CERs的签发

The issuance of CERs is considered final 15 days after the date of receipt of the request for issuance.

👉 EB将指示CDM注册处发放具体数量的CERs

the EB will then instruct the CDM registry to issue the specified quantity of CERs in the CDM registry

👉 扣除CER总数的2%作为CDM基金

deduct two per cent of the total CERs as CDM "Levy".

👉 余下的CERs则按照有关缔约方和项目参与方的要求转入其登记册账户

forward the remaining CERs to the registry accounts of Parties and project participants involved, in accordance with their request.

签发复审： Issuance review

如果参与项目活动的缔约方或执行理事会（EB）三个成员要求复审拟签发的核证的减排量：

- ➡ 此种复审应限于与经营实体欺诈渎职或不称职有关的问题
- ➡ EB在收到此种复审要求之后应在其下次会议上决定行动方针，如果执行理事会裁定复审要求合理，即应进行审查并决定是否应核准发放核证的减排量
- ➡ EB将在其作出进行审查的决定后30天内完成审查
- ➡ 执行理事会应将其决定告知项目参与方并公布有关核准拟议的发放核证的排减量的决定及其理由

If a Party involved in the project activity or at least three members of the EB request a review of the proposed issuance of CERs.

- ➡ Such a review shall be limited to issues of fraud, malfeasance or incompetence of the DOE
- ➡ Upon receipt of a request for such a review, the executive board, at its next meeting, shall decide on its course of action. If it decides that the request has merit it shall perform a review and decide whether the proposed issuance of CERs should be approved;
- ➡ The executive board shall complete its review within 30 days following its decision to perform the review;
- ➡ The executive board shall inform the project participants of the outcome of the review, and make public its decision regarding the approval of the proposed issuance of CERs and the reasons for it.

补充信息: Additional information

👉 <http://cdm.ccchina.gov.cn>

👉 <http://cdm.unfccc.int/pac/howto>

👉 <http://cdm.unfccc.int/pac/index.html>

谢谢!

Thanks!