

Standard for Sustainable Construction in Switzerland: Experiences and Perspectives

57th LCA Discussion Forum

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Overview

Topic

Network for Sustainable Construction Switzerland NNBS

Standard for Sustainable Construction Switzerland SNBS

Experiences and Perspectives

Questions



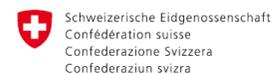
Netzwerk Nachhaltiges Bauen Schweiz
Réseau Construction durable Suisse
Network Costruzione Sostenibile Svizzera
Sustainable Construction Network Switzerland

Sustainable Construction Network Switzerland



Sustainable Construction Network Switzerland

- The network builds a key part of the fourth national sustainable development strategy
- National competence center since 2012
- Platform covering most regions in Switzerland, French as well as German speaking areas
- Supported by public authority, governments and industry partners

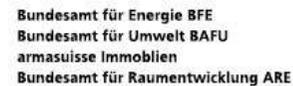
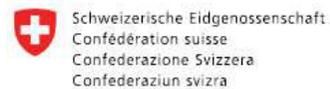
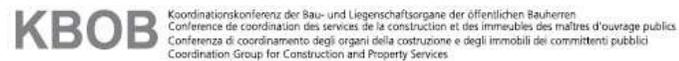


SCHWEIZERISCHER BUNDESRAT

**STRATEGIE
NACHHALTIGE ENTWICKLUNG
2012–2015**

Strategy of Sustainable Development 2012 - 2015

Founding Members of NNBS



Mission of the Network

We are convinced that more sustainable Buildings:

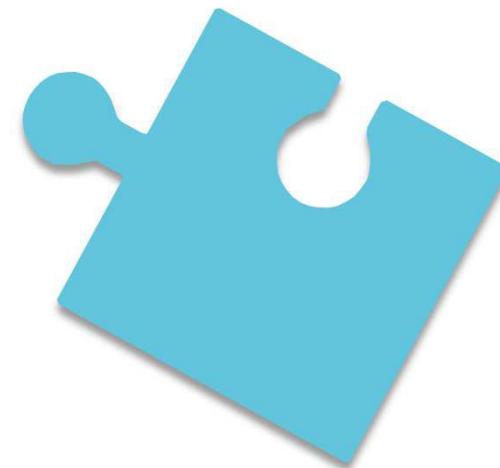
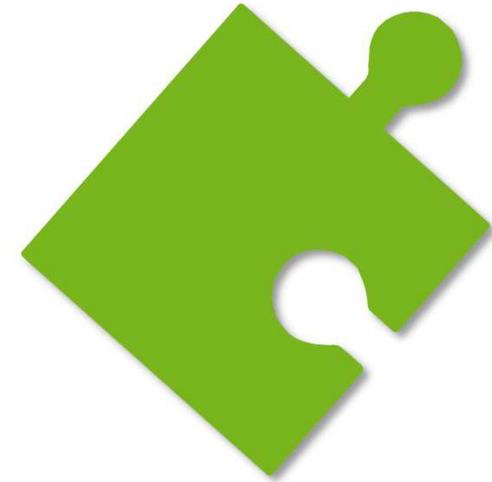
- result in higher and robust market values
- serve the society on the long term due to higher ecological and economical value.

We are aiming towards a leading role in the discussion on sustainable construction in Switzerland by

- networking, coordinating and cooperating in order to get positive synergy effects in the building and construction sector.
- serving all players in the field with the necessary tools, know-how, guidance and instruments.
- exchanging knowledge and findings internationally

Spirit of NNBS

- Defining basic and a common terminology
- Coordinating existing activities
- Developing missing and new parts



Sustainable Construction Standard Switzerland



Standard Nachhaltiges Bauen Schweiz
Standard Construction durable Suisse
Standard Costruzione Sostenibile Svizzera
Sustainable Construction Standard Switzerland



energieschweiz

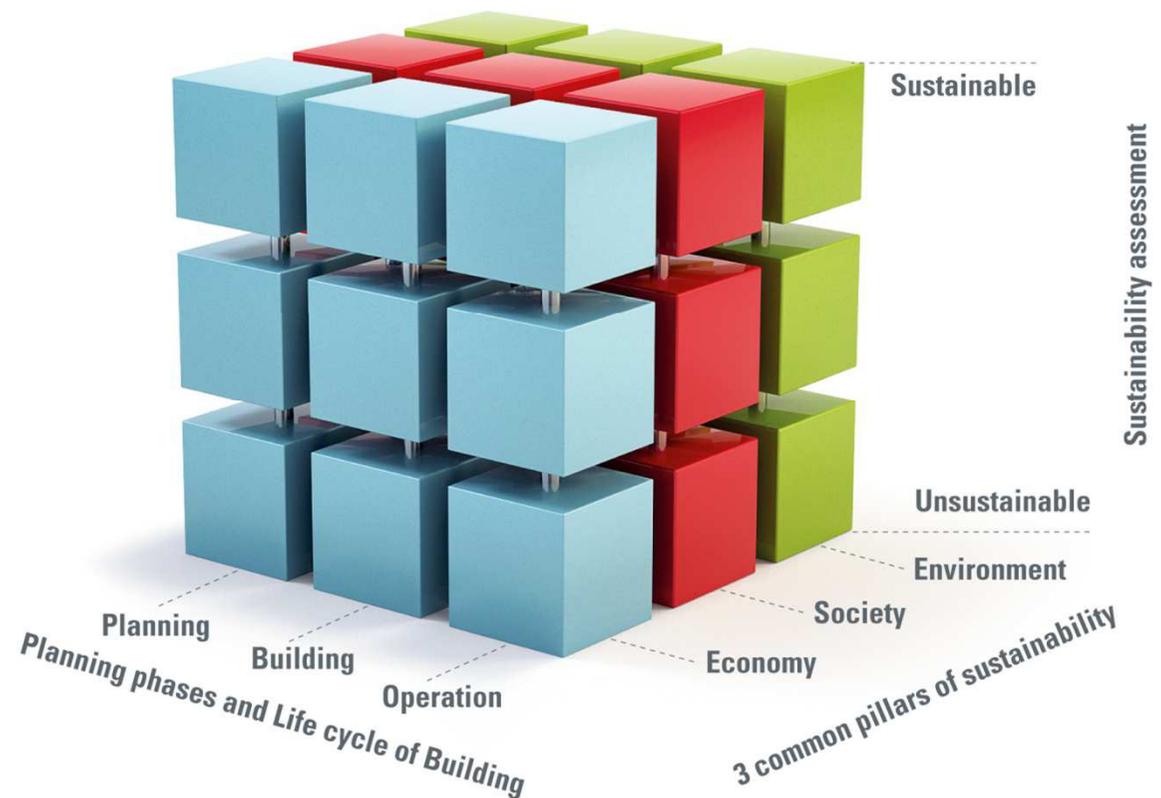
Initial Status

- A lot of ongoing activities in the area of sustainable construction (Switzerland and Europe)
- Existing Standards and Labels only cover parts of Sustainability aspects or are not focussed enough to the Swiss Situation
- Preliminary Study by CCRS and ETHZ: Certification Scheme for sustainable Real Estate Properties, from August to October 2010
- Project start for the new Standard for Sustainable Construction Switzerland (SNBS) in July 2011 as a joint initiative of public authority and private economy
- Pilot phase from mid of 2013 to mid of 2014

Dice as Concept

Approach

- Covering all planning and building phases
- Complete regarding sustainability
- Criteria which can be evaluated



The three dimensions as basis for the Standard

Objectives

- Establish a common understanding of sustainable construction in Switzerland
- Include well-known and accepted Swiss standards, tools, labels and instruments
- Comprehensive approach with focus on sustainability aspects
- User-friendly and therefor manageable
- Based on Swiss construction habits, behaviors and processes
- Voluntary commitment of the stakeholder on high quality objectives
- Foundation for a possible future Swiss Sustainable Construction Label Scheme

Scope and System Boundary

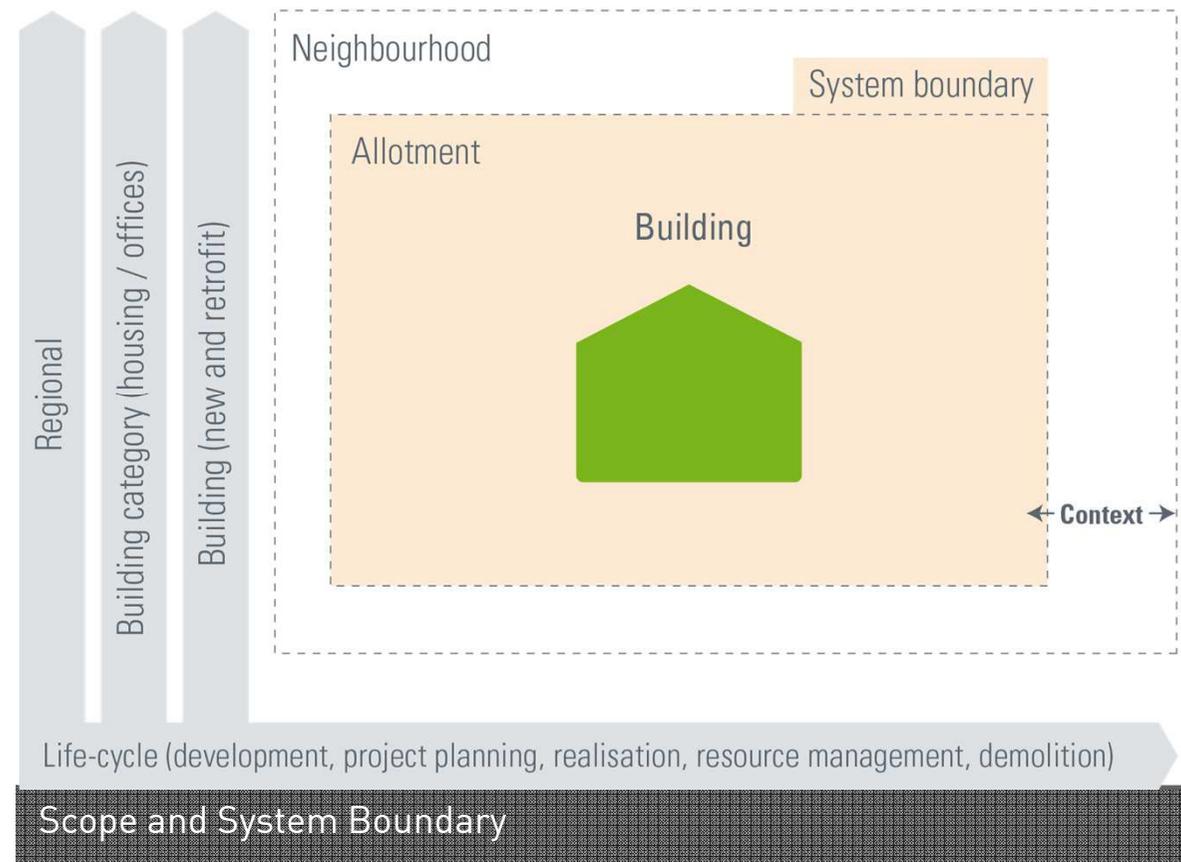
System Boundary

- Only the building
- The location in relation to its neighbourhood

Scope

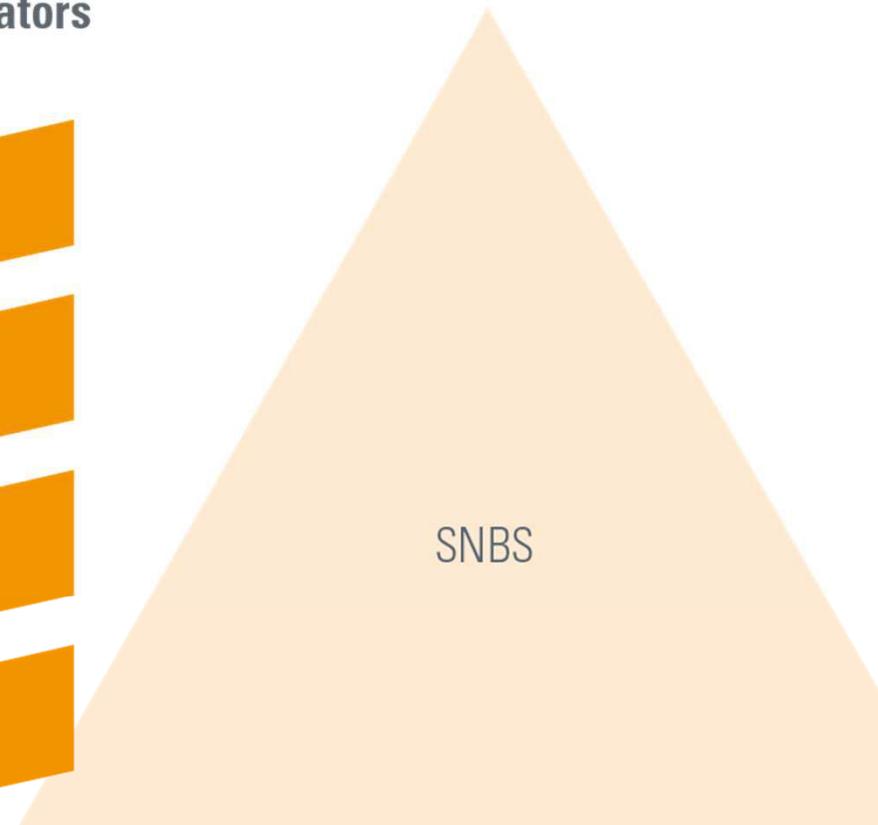
- New and existing buildings
- Office Buildings and Dwellings

Whole Life Cycle



Structure

From pillars to indicators



Example



Overview of the structure from the pillars to the indicators



**Context and
Architecture**



Costs



Energy



**Planning and
Target Groups**



Tradeability



Climate



**Utilisation
and Land-
use Planning**



**Earnings
Potential**



**Resource and
Environmental
Protection**



**Comfort
and Health**



**Regional
Economy**



**Nature and
Landscape**

Example of Primary Energy Non-Renewable

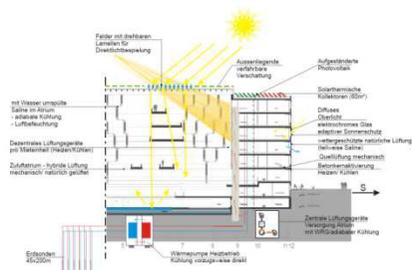
Indicator / Criteria	Subject	Pillar of Sustainability	Overall Result
<p>For Example: Primary Energy Non-Renewable for:</p> <ul style="list-style-type: none"> – Construction – Operation – Mobility 	<ul style="list-style-type: none"> – Energy – Climate – Resource and Environment – Nature and Urban Sprawl 	<p>Ecology</p> <p>Society</p> <p>Economy</p>	<p>Rating between</p> <p>1 (worst) and 6 (best)</p>

Example of Primary Energy Non-Renewable in the overall assessment System

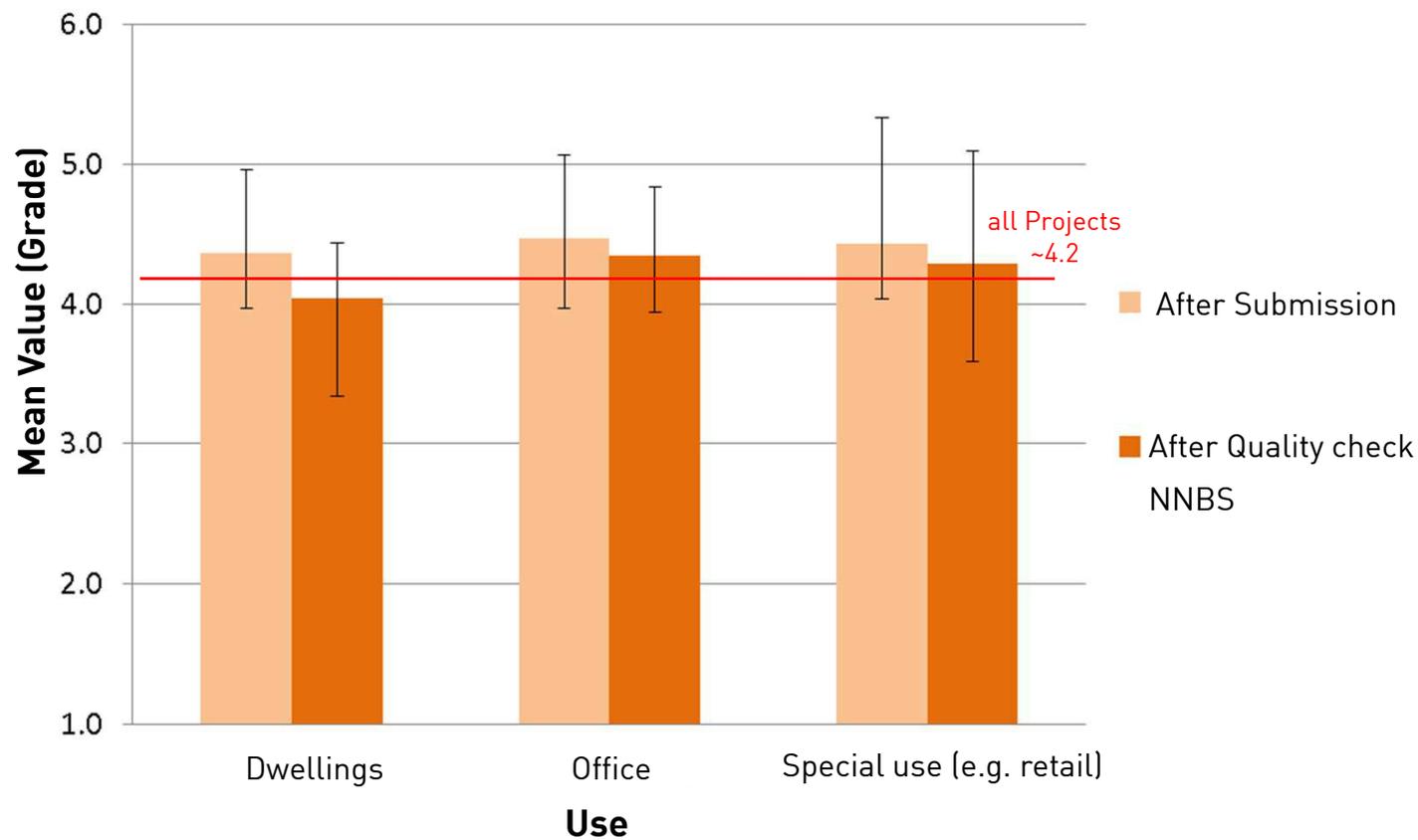
Experiences and Perspectives



Pilot Phase with Panel Projects



Panel Projects - Learnings

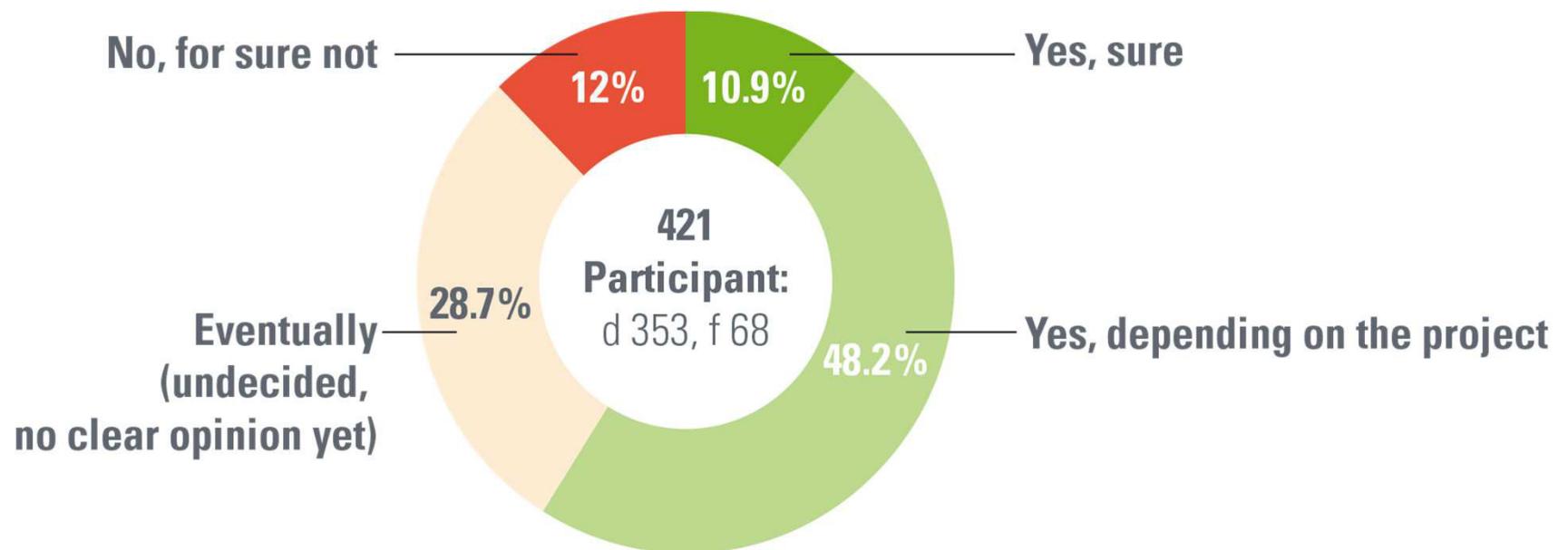


Average results for all Panel Projects after submission and after Quality check

General Findings

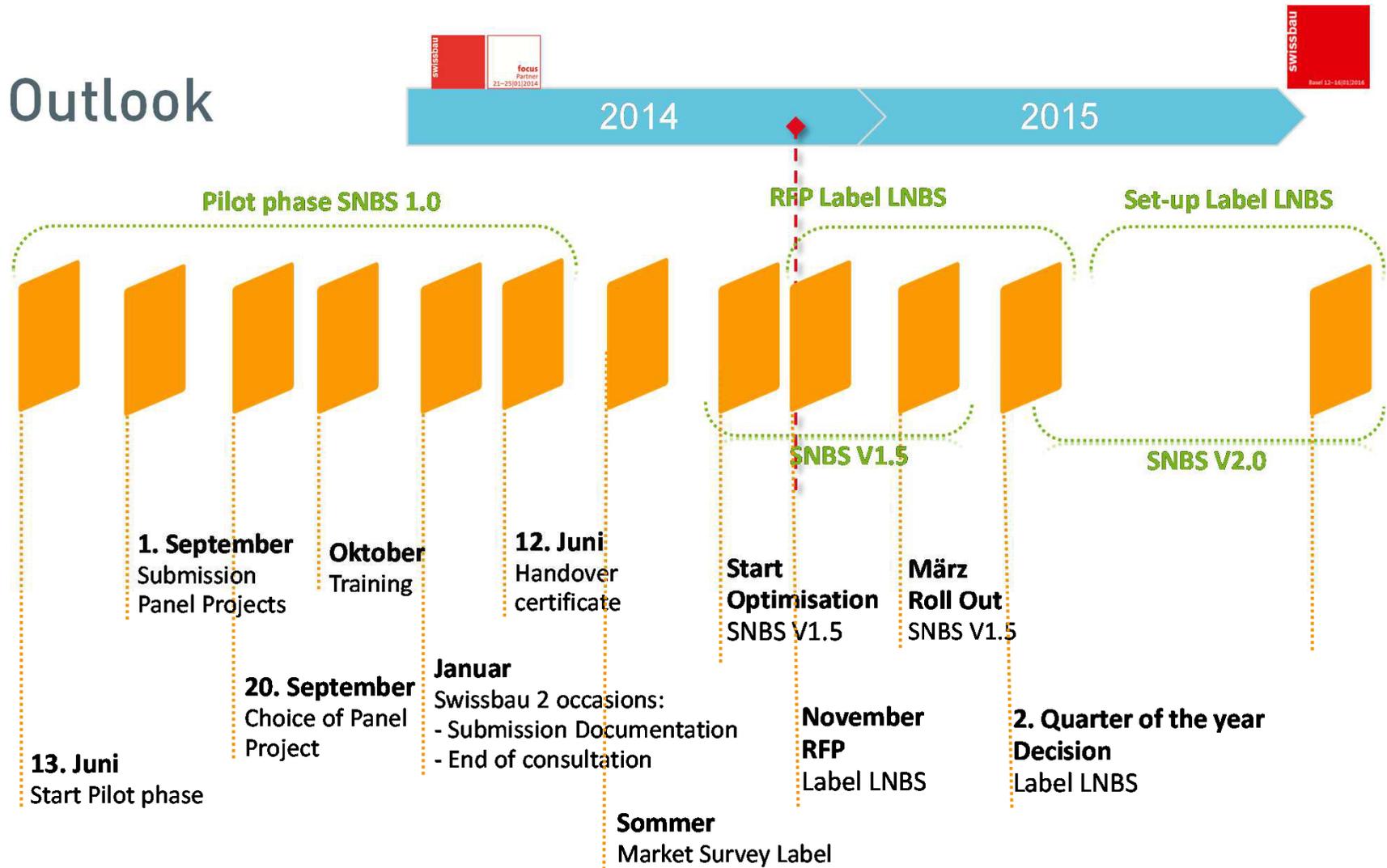
- **Application:** works well for offices and dwellings, for special uses like retail there is still need for action
- **Criteria and Indicators:** have been mostly confirmed, some review and simplifications are still needed
- **Assessment:** Rating scale provides feasible results, scale of grade (1 to 6) is comprehensible but often questioned
- **Effort:** strongly depending on the team and the project, but clearly smaller than with LEED or DGNB
- «Basically **positive Echo**» on the part of the panel members

Market Survey



Is there a need for a Swiss label; yes or no

Outlook



Timeline from the start of the pilot phase to the release of the new Label LNBS

Thank you for your attention



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Any Questions?

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