Decision of the FIBAA Accreditation and Certification Committee

13th Meeting on 6 March 2024

CERTIFICATION

Project number:	**23/060**
Education Institution:	**Renewables Academy (RENAC) AG**
Course:	**Green Energy Finance Specialist (GEFS)**

The FIBAA Accreditation and Certification Committee has taken the following decision:

Certification:
According to § 7 (2) in conjunction with§ 10 (1) of the "Special Conditions for awarding the FIBAA Quality Seal for Continuing Education Courses", the continuing education course is certified.

Period of Certification: March 6, 2024 - March 5, 2029

The FIBAA Quality Seal is awarded.

Assessment Report

Institution:
Renewables Academy (RENAC) AG, Berlin, Germany

Continuing Education Course:
Green Energy Finance Specialist (GEFS)

Brief description of the continuing education course:

RENAC AG (Renewables Academy (RENAC) AG, Berlin, Germany) as a private company has been offering the Green Energy Finance Specialist (GEFS) programme since 2017. In general, the GEFS is a non-academic and non-consecutive programme belonging to tertiary education. Target groups hold a first academic degree in the area of business/economics, industrial engineering or alike and to have at least one year of professional experience in the area of finance and/or green energy.

The course is split into nine sections (modules), comprising a workload of approximately 15 to 50 hours each. The duration of the course is 21 weeks, the programme is recommended for ten ECTS credit points. The programme is offered on a bi-yearly basis, beginning in April and October.

A substantial part of the programme (the first eight modules) consists of self-paced asynchronous online content, supplemented by virtual classroom sessions. The final module (including the final examination at the end) can be conducted as a face-to-face seminar in Berlin or online as well. The programme is offered in English and in Spanish, depending on the composition and origin of the cohorts. Graduates are awarded a certificate “Green Energy Finance Specialist”.

As a cooperation with the Hochschule für Wirtschaft und Recht Berlin (HWR), the programme can also be recognised by the “Green Energy and Climate Finance” pathway of HWR’s study programme Master of Science in Business Management (MBM).

Date of opening of the procedure:
July 4, 2023

Date of filing the self-assessment report:
September 28, 2023

Date of assessment conference:
December 12, 2023

Type of certification:
Initial certification

Mode of study:
Part-time

Initial start of the Programme:
2017

Capacity load:
25

No. of ECTS credit points assigned to the GEFS programme degree:
10 ECTS credit points

Hours (workload) per Credit point:
30

Intended level according to European Qualification Framework (EQF):
Level 5

Date of the Meeting of FIBAA-Certification Commission:
March 6, 2024

Resolution:
Panel recommendation: The certification of the course is subject to no conditions and is valid for five years.

Duration of Certification:
March 6, 2024 until March 5, 2029

Project Manager:
Michael Stephan

Panel Members (in alphabetical order):

Alina Bülbül
Hochschule München, University of Applied Sciences, Germany
Student of Entrepreneurship and Digital Transformation (M.A.), graduated Technische Redaktion und Kommunikation (B.Eng.)

Prof. Dr. Volker Hasewinkel
VICTORIA | Internationale Hochschule
Professor für Allgemeine Betriebswirtschaftslehre (Entrepreneurship, Unternehmenssteuerung, Unternehmensgründung, Personalwesen, insbesondere Personalentwicklung, Unternehmensstrategie, Banking, Finance, Investition & Finanzierung, Kapitalmärkte, Rechnungswesen)

Prof. Ute Masur
Hochschule Macromedia (until October 2023)
Vizepräsidentin für Lehre und Professurenentwicklung & Projektleitung zur Entwicklung und Implementierung eines didaktischen Rahmenkonzeptes zur Einführung von Blended Learning in allen Studiengängen der Hochschule Macromedia (Blended Learning, Digitale Lehre, Didaktik in unterschiedlichen Formaten - Präsenz/Fernstudium/Dual)

Dipl.-Handelslehrer Gerd Rieger
RiegerTraining – Innovatives Wirtschaftstraining
Geschäftsinhaber/ Blended learning Trainer Steinbeis/ Lehrbeauftragter an der BHT, HWR, HTW (Wirtschaftsmediation, Betriebswirtschaftslehre, Volkswirtschaftslehre, Rechnungswesen, Controlling, Personalmanagement, Logistik)

Prof. Dr Rainer Stöttner[1]
Universität Kassel
Professor em. für Allgemeine Betriebswirtschaftslehre (Finanzanalyse, Theorie und Empirie der Kapitalmärkte, Portfolio-Management, Asset-Allocation, Fondsmanagement, Finanzmarktinstabilitäten, allgemeine Volkswirtschaftslehre, Bankbetriebswirtschaftslehre, Versicherungswirtschaft)

[1] participated in the written procedure.

List of Tables

Summary

The panel's assessment takes into account the self-assessment report (SAR), the annexes and the results of the assessment conference as well as the statement of Renewables Academy (RENAC) AG to the assessment report dated February 9, 2024.

The Green Energy Finance Specialist (GEFS) programme fulfils the FIBAA quality requirements for certified continuing education courses and can be certified by the Foundation for International Business Administration Accreditation (FIBAA) without conditions. The GEFS programme meets the demands of level 5 of the European Qualifications Framework for lifelong learning (EQF).

The quality requirement that has not been fulfilled: External evaluation by alumni, employers and others (chapter 6) is not an asterisk criterion. A condition is not necessary and the measures the institution takes to solve the identified problems are to be considered in the context of a re-certification.

The panel members identify development potential for the programme regarding the following:

- The panel therefore recommends carrying out a systematic determination of the teachers' and students' needs in terms of interaction and considering an increase of contact and interaction times and possibilities (see chapter 4.1), and
- introducing an alumni survey which also includes a survey on professional development after finishing the course (see chapter 6).

The measures the HEI eventually takes in order to implement the recommendations of the panel members are to be considered in the context of a re-certification.

Moreover, quality requirements are exceeded in:

- Positioning of the course within the institution's overall strategy (see chapter 1.3),
- Teaching Staff's Pedagogical/Didactical Qualifications (see chapter 4.1),
- Practical Business Experience of the Teaching Staff (see chapter 4.1), and
- Process Organisation and Administrative Support for Participants and Teaching Staff (see chapter 4.2).

Furthermore, there are two quality requirements which the panel team rates as "exceptional":

- International orientation of the course (see chapter 1.2), and
- International and intercultural contents (see chapter 3.2).

For the overall assessment please refer to the quality profile at the end of this report.

Details on the Institution

0 INFORMATION

0.1 Institutional Context

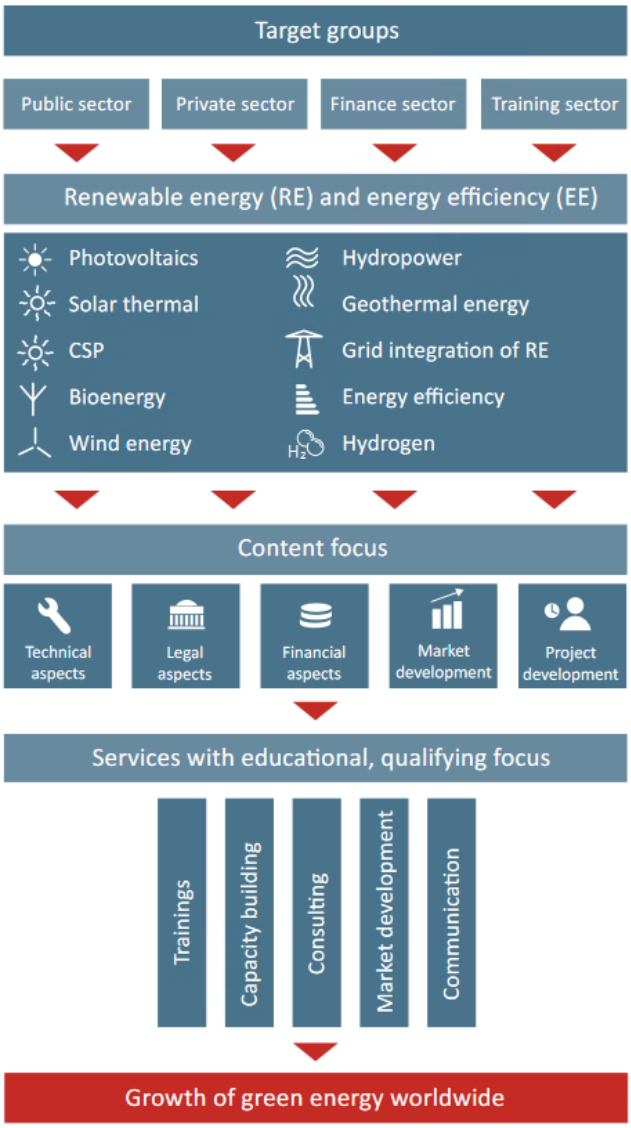
The rapid growth of renewable energies (RE) and energy efficiency (EE) markets worldwide, and the increasing necessity for greenhouse gas mitigation and climate protection, has led to an increased demand for the expertise and qualifications of individuals, industry and organisations. Public, private, finance and training sectors are all building up professional capacities to facilitate the market growth of green energy technologies and fully enhance their respective roles.

RENAC´s vision and mission are to support the market development of green energy technologies (RE and EE) worldwide through capacity building and trainings, consultancy in the training sector, expert exchange and networking.

RENAC offers trainings and services for most parts of the RE and EE value chains and involved stakeholders, comprising the public, private, finance and training sector. On an institutional level, RENAC targets

- Public sector: policy setting bodies (ministries, parliamentarians), local administration and regulators;
- Private sector: engineering consultants, project developers, installers, IPCs, operation and maintenance companies;
- Generation and distribution: utilities, transmission and distribution grid operators;
- Finance sector: private and public banks, development banks, funds, investors;
- Training sector: TVET (technical and vocational training), training institutions for professionals, universities;
- Market promoting institutions: energy agencies, development cooperation agencies, NGOs, think tanks.

Table 1: RENAC catalogue of services



Since its founding in 2008, RENAC has trained more than 30,000 participants from over 160 countries with online trainings, face-to-face trainings and train-the-trainer trainings.

Economic and financial aspects have always been a core part of RENAC´s offering on the topics of renewable energy (RE) and energy efficiency (EE) technology. RE and EE investments are seeing growth all over the world, opening up many new business opportunities in the financial sector. In this context, RENAC's Green Energy and Climate Finance department offers comprehensive training programmes and specific courses to help professionals stay up to date with the state of the art in RE and EE finance. This has led the Green Energy and Climate Finance Department to become one of the largest at RENAC.

RENAC's Green Energy and Climate Finance department has developed the Green Energy Finance Specialist (GEFS) Programme which delivers an in-depth understanding of green energy finance topics, concepts, and tools. It provides key insights into the financing of RE and EE projects, particularly from the bank's perspective. The programme is being offered in English as well as in Spanish.

0.2 Further development of the course and statistical data

		Cohort (2017GFS)	**Cohort (2018GFS)**	**Cohort (2020GEFS)**	**Cohort (2021GEFS)**	**Cohort (04.2021)**	**Cohort (10.2021)**	**Cohort (MBM 2021)**	**Cohort (04.2022)**	**Cohort (10.2022)**	**Cohort (MBM 2022)**	**Cohort (01.2023)**	**Cohort (04.2023)**
Cohort Name		GEFS South East Asia	GEFS South East Asia	GEFS Latin America	GEFS Latin America	GEFS	GEFS	GEFS MBM	GEFS	GEFS MBM	GEFS	GEFS IFC Philippines	GEFS
Location		SE Asia	SE Asia	LatAm	LatAm	Global	Global	Global	Global	Global	Global	Philippines	Global
Cohort Language		English	English	Spanish	Spanish	English and Spanish	English and Spanish	English	English and Spanish	English and Spanish	English	English	English and Spanish
Fee		Scholarship	Scholarship	Scholarship	Scholarship	Paid	Paid	Paid	Paid	Paid	Paid	Scholarship	Paid
# Target Course Places offered by course provider		75	75	60	60	25	25	20	25	25	20	15	25
# Applicants	∑	120	178	299	372	13	15	12	23	26	16	17	26
	f	41	67	113	155	4	3	2	3	11	9	11	8
	m	79	111	186	117	9	12	9	20	15	7	6	18
Application rate		160%	237%	498%	620%	52%	60%	60%	92%	104%	80%	113%	104%
# First-Year learners ***(accepted applicants)***	∑	87	85	101	90	13	14	12	22	25	16	17	26
	f	32	27	42	32	4	3	2	3	10	9	11	8
	m	55	58	59	58	9	11	9	19	15	7	6	18
Rate of female learners		0.37	0.32	0.42	0.36	0.31	0.21	0.17	0.14	0.40	0.56	0.65	0.31
# Foreign Students	∑	87	85	101	89	9	7	5	14	24	10	17	21
	f	32	27	42	32	2	1	2	2	9	7	11	7
	m	55	58	59	57	7	6	3	12	15	3	6	14

Rate of foreign students		1,00	1,00	1,00	0,99	0,69	0,50	0,42	0,64	0,96	0,63	1,00	0,81
Percentage of occupied course places		116%	113%	168%	150%	52%	56%	60%	88%	100%	80%	113%	104%
# Graduates	∑	83	82	92	88	10	13	9	18	16	TBD	14	TBD
	f	30	24	37	32	2	3	2	2	5	TBD	8	TBD
	m	53	58	55	56	8	10	7	16	11	TBD	6	TBD
Success rate *(percentage of learners who finished and passed the course)*		95%	96%	91%	98%	77%	93%	75%	82%	64%	TBD	82%	TBD
Dropout rate *(percentage of learners that did not finish the course)*		*5%*	*4%*	*9%*	*2%*	*23%*	*7%*	*25%*	*18%*	*36%*	TBD	*18%*	TBD
Average duration of learning time		5,5 months	5,5 months	5,5 months	5,5 months	5,5 months	5,5 months	*10 months*	*5,5 months*	*5,5 months*	*10 months*	*5,5 months*	*5,5 months*
Average grade of final degree		80%	80%	73%	75%	78%	86%	*77%*	*77%*	*78%*	TBD	*83%*	TBD

The GEFS programme commenced in 2017 and 2018 with two inaugural scholarship programmes in several Southeast Asian countries. Both cohorts received more applications than places offered, and in both instances, RENAC admitted more students than originally planned. Approximately one third of the students in these cohorts were female students, all participants were foreign nationals. Most students who began the programme successfully completed it, resulting in a 95 per cent success rate and an overall average grade of 80 per cent.

Following the Southeast Asian cohorts, the Green Energy Finance Programme expanded to Latin America in 2020 and 2021, once again offering scholarship opportunities. Application rates in these regions were exceptionally high, and again more students were accepted than initially anticipated. The proportion of female participants was 42 and 36 per cent, respectively, the success rate 91 and 98 per cent, respectively.

Upon the successful conclusion of the four scholarship programme cohorts, a decision was made to launch a global, tuition-based version of the GEFS programme. Initially, application rates were low, with fewer than half of the available seats being filled. However, this changed over time, and RENAC now has a balanced ratio of applicants to available seats. The percentage of female participants in the paid cohorts has also risen over time, thanks to increased participation by women in the fields of finance and renewable energy and energy efficiency project development. Success rates in the paid cohorts are not as high as those in the scholarship cohorts, and grades consistently hover around the 75 to 80 per cent range.

The one exception to the paid cohort in recent years was the Philippines cohort in January 2023. This particular cohort achieved a higher success rate and a slightly higher average grade. However, this can likely be attributed to the fact that it was commissioned by the International Finance Corporation (IFC) and received close oversight from the GEFS programme coordination staff.

Based on the evaluation data (see also chapter 6), the overall evaluation of the programme has been continuously positive across nearly all aspects, with slight improvements over time. Nevertheless, RENAC claims to be committed to continuous improvement by enhancing content, formats, style, and communication.

One area of weakness that has been identified is the ability to foster an "in-person" atmosphere within a virtual environment. This was particularly apparent during the COVID-19 pandemic years. To address this, RENAC claims to continuously invest effort (see SAR, p. 10) into updating tools and skills while expanding opportunities for participants to collaborate and network effectively (see also chapters 3.4 and 4.1).

Evaluation of the lecturers also provided mostly positive results (see also chapter 6). Although evaluation did not show scorings below 2.5, RENAC took average ratings of 2.0 and lower as an opportunity to take measures for improvement, e.g. by lecturers going through the Train-the-Trainer programme (see chapter 4.1) or by collaborating closely with the lecturer to incorporate more interactive elements into the sessions.

Description and appraisal in Detail

1 STRATEGY AND OBJECTIVES

1.1 Logic and transparency of course objectives (Asterisk Criterion)

The GEFS programme addresses professionals who

- want to specialise in renewable energy (RE) and energy efficiency (EE) project financing as a credit analyst, project finance specialist, or client relationship manager; or
- are tasked with evaluating renewable energy (RE) or energy efficiency (EE) projects and related credit requests; or
- seek to establish a green energy finance or climate finance unit within their organisation.

It is expected that after completing RENAC's "Green Energy Finance Specialist" programme students should be able to[2]:

- evaluate relevant renewable energy (RE) and energy efficiency (EE) projects;
- use financial models and develop term sheets for RE and EE projects;
- develop and evaluate portfolios of RE and EE projects;
- summarise the global and regional market development for renewable energy and energy efficiency investments;
- appraise an energy efficiency project in detail, including under the use of the ESCO model[3] and
- identify options for international climate finance and how to access such funds.

Presented below is a description of the German Qualification Framework (DQR) Level 5:

DQR Level 5	
Be in possession of competencies for the autonomous planning and processing of comprehensive technical tasks assigned within a complex and specialised field of study or field of occupational activity subject to change.	
Professional competence	
Knowledge	**Skills**
Be in possession of integrated professional knowledge within a field of study or integrated occupational knowledge within a field of activity. This also includes deeper theoretical professional knowledge. Be familiar with the	Be in possession of an extremely broad spectrum of cognitive and practical skills. Plan work processes and assess such processes with comprehensive consideration of alternative courses of action and reciprocal effects with

[2] See Appendix 2_2_RENAC_GEFS-handbook_forParticipants
[3] ESCO: energy service company, see chapter 3.2

scope and limitations of the field of study or field of occupational activity.	neighbouring areas. Provide comprehensive transfers of methods and solutions.

The learning objectives of the programme are intertwined with the statement of qualification which relates to the German Qualification Framework Level 5 as mentioned above:

First, the "evaluation of RE and EE technologies and projects" objective aligns with the demand for competence in appraising technical tasks, especially within the specialised domains of renewable energy (RE) and energy efficiency (EE) projects. This skill set underscores the capacity to scrutinise the intricate technical facets of RE and EE projects, which are continually evolving in response to changing environmental conditions.

Second, the objective pertaining to "financial modelling and term sheet development" directly correlates with the necessity for autonomous and individual handling of intricate financial tasks. The course equips participants with the proficiency required for navigating the complexities of financial planning and analysis within the RE and EE sectors, thereby facilitating their ability to autonomously process demanding financial tasks tailored to the field's unique needs.

Third, the learning objective associated with "portfolio development and evaluation" fosters expertise in managing and assessing portfolios of RE and EE projects. This capability is in harmony with the mandate to autonomously plan and process comprehensive technical tasks, showcasing the participant's adeptness in managing a collection of projects within their specialised field.

Fourth, the objective to "summarise the global and regional market development" encompasses an essential awareness of the constantly shifting market dynamics in renewable energy and energy efficiency investments. This heightened awareness is pivotal for adaptation within a specialised field that continually undergoes transformation.

Fifth, the "appraisal of energy efficiency projects" objective entails the ability to evaluate energy efficiency projects, notably utilising models like the ESCO (Energy Service Company) model. This objective aligns with the technical competencies seen as essential for meticulously assessing both the technical aspects and financial viability of EE projects.

Lastly, the goal of "identifying options for international climate finance" underscores the significance of comprehending the specialised funding mechanisms within the RE and EE sectors; on institutional (development and cooperation between organisations and institutions) as well as systemic level (enabling environments through economic and regulatory policies and accountability frameworks). This competence is seen as vital for effectively navigating the evolving landscape of funding opportunities in the field and ensuring access to international climate finance options.

In addition, this is a description of the broader European Qualification Framework (EQF) Level 5:

EQF Level 5	
Professional competence	
Knowledge	**Skills**
Comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.	A comprehensive range of cognitive and practical skills required to develop creative solutions to abstract problems.

The training programme is at "intermediate" level and aims at executive, senior executive and middle management staff of financial institutions[4]. The training programme aims to develop and improve the following competencies of participants:

- Business markets: Understand and assess the market environment for green energy and climate finance on a global, regional and national level. Describe the substantial global market potential for financial institutions related to the financing of Renewable Energy (RE) and Energy Efficiency (EE) projects.
- Business development: Identify the most relevant technologies and stakeholders for your home market, evaluate their roles and incentives and derive business strategies for your institution accordingly.
- Operational functions: Manage and develop comprehensive project finance appraisals/ assessment processes for renewable energy and energy efficiency projects. Set up financial models and draft project loan offers. Apply and adapt internal procedures to carry out due diligence assessments, long-term lending, and day-to-day administrative supervision for such project loans.
- Products and services: Develop cash flow-related lending/loan products suitable for the financing of renewable energy and energy efficiency projects on a standalone basis and implement their use in your organisation; organise procedures to access funding options from domestic or international climate finance sources.

The learning objectives are targeted to substantiate the participants' acquisition of competencies and skills essential for independently planning and executing comprehensive technical tasks within the specialised, dynamic realm of renewable energy and energy efficiency.

Rating:

The qualification objectives of the programme are explained and convincingly presented in relation to the target group. They embrace academic proficiency and comprehensive employability, as well

[4] See Appendix 2_2_RENAC_GEFS-handbook_forParticipants

as the development of the individual student's personality within the limited scope of the programme.

The course objectives are based on subject-specific learning outcomes which are in line with the academic principles and the level of the qualification to be awarded on completion. The course takes into account the requirements of the European Qualification Framework in terms of Dublin Descriptors. The panel supports RENAC`s internal considerations to rate the programme at the intended EQF level 6 and suggests that for re-certification, the institution formally applies for assessing the programme according to the intended EQF level 6.

The panel notes that the institution does not yet conduct alumni-tracking studies, which may contribute to defining and evaluating the learning objectives by taking into account findings about the further occupational development of the alumni (see criterion 6.2.3 and recommendation chapter 6).

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.	**Strategy and Objectives**					
1.1*	Logic and transparency of course objectives			X		

1.2 International orientation of the course

The GEFS programme was designed with an international perspective from its inception, with a focus on addressing financing challenges in renewable energy and energy efficiency on a global scale. In 2017, the programme was launched for participants from India, Indonesia, the Philippines, Thailand, and Vietnam as part of the "Green Banking - Capacity Building on Green Energy and Climate Finance" project. This initiative received funding from the German International Climate Initiative (IKI), supported by the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU).

Building on the success of its inaugural year, the GEFS programme was repeated in 2018 for the same set of countries. During the first year, a significant portion of participants attended the in-person seminar, which further enriched their learning experience.

Following the successful South East Asia Program, additional funding allowed for the expansion of the "Green Energy Finance Specialist" programme to South America. Course materials were translated into Spanish to reach a wider audience in Latin America, along with the development of new materials tailored to the Latin American context such as political frameworks for RE and EE projects or various case studies on climate finance options. In both 2020 and 2021, Latin American cohorts were introduced, drawing a growing number of participants and resulting in the awarding of GEFS certifications to many students from the region. Seminars held in Latin American countries featured lecturers with specialised knowledge of renewable energy and energy efficiency financing in those regions.

Recognising the popularity and positive reception of the GEFS training, RENAC decided in 2019 to offer the programme as a long-term, tuition-based programme within RENAC's Online Academy (initially managed by RENAC's E-learning team). This version included a final seminar week in Berlin. The tuition-based programmes are available in both English and Spanish, with an emphasis on selecting lecturers with global (English programme) or specifically Latin America (Spanish programme) experience. However, course materials developed over the programme's lifespan cater to a broad range of country contexts and are accessible to all participants.

In addition to its international origins, the GEFS programme places a strong emphasis on international contexts within its course materials. These materials are designed to be relevant to students worldwide, going beyond the borders of Germany or Europe and including examples from developing and developed countries. Consequently, the GEFS programme incorporates numerous case studies, frameworks, and examples set in international contexts, often contributed by practitioners and former participants eager to share their knowledge with future GEFS students (see also chapter 3.2).

During the semester, before each virtual classroom, the group size, countries of residence and professional backgrounds of each participant are communicated to the lecturers. This information guides RENAC and its lecturers in customising the seminar sessions to align with the diverse profiles of the participants in order for them to be best prepared in terms of interactivity and content (see also chapter 3.4).

Rating:

On the basis of the international orientation of the course (for the implementation see chapter 3.2) the programme intention is to sustainably promote the employability of graduates. The course design puts an emphasis on internationality (e.g., global focus of the programme also represented in language of instruction in English or Spanish). Participants clearly acquire knowledge and develop skills that enable them to competently handle international tasks (e.g., numerous case studies, frameworks, and examples set in international contexts). The panel especially highlights that the course design also takes into account country and industry specific aspects of the participants (e.g., course materials developed for a broad range of country contexts and available to all participants and customised virtual classrooms).

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
1.	**Strategy and Objectives**					
1.2	International orientation of the course		X			

1.3 Positioning of the course

According to RENAC (see SAR p. 17) RENAC's commitment to long-term funding and dedicated processes for maintaining course quality ensures that the programme consistently offers relevant and up-to-date content. Furthermore, the programme's coverage of critical topics, ranging from renewable energy technologies to project financing and financial modelling, positions it as a holistic solution for individuals seeking specialised knowledge in green energy finance.

On a regional level, the programme's in-person seminar in Berlin, Germany, serves as a focal point for participants looking to engage in immersive learning experiences. This physical presence in a renowned global city contributes to the programme's credibility and regional recognition.

Additionally, the availability of the programme in both English and Spanish enhances its accessibility and relevance to diverse audiences, thereby extending its reach within regional markets.

Nationally, the GEFS programme addresses an important gap in the educational landscape by offering a curriculum specifically tailored to the financing aspects of RE and EE projects. As the global shift towards sustainable energy practices gains momentum, professionals equipped with the skills offered by the programme are poised to play pivotal roles in driving national agendas for clean energy adoption and sustainability. Moreover, the programme's focus on application-oriented learning, direct contact with participants, and individual assignment grading fosters a sense of practicality and hands-on experience that resonates with national job market demands.

Internationally, the programme's early mover advantage in the expanding green energy finance education sector positions it as a leader. RENAC's established market presence and large portfolio of courses enable it to attract participants from around the world[5] who are eager to engage with industry professionals and gain insights into global renewable energy trends. The option for participants to attend the in-person seminar either physically or virtually makes the programme internationally accessible.

According to RENAC (see SAR p. 17 f.), within the occupational field, the GEFS programme aligns with the growing demand for professionals skilled in renewable energy project evaluation, financing, and financial modelling. The programme's emphasis on real-world application prepares participants for roles as industry professionals, project evaluators, and financial analysts in both public and private sectors. Leveraging the alliances with companies and institutions, along with the alumni network, participants have access to recommendations, testimonials, and potential job opportunities, enhancing their career prospects.

Many companies recognise the increasing importance of sustainable finance. They are motivated both intrinsically, driven by a commitment to addressing climate change and contributing to a more sustainable world, and externally, by the allure of better employment opportunities and the growing profitability of the green sector. This dual motivation is addressed by the GEFS programme which aims at meeting the evolving needs of professionals in the field of renewable energy and sustainability.

At the core of RENAC's overall strategy is its commitment to providing cutting-edge education and training in the field of renewable energy and sustainability. The GEFS programme aligns with this

[5] See statistical data at the beginning chapter 0.2

strategy by focusing on the crucial aspect of financing within the realm of green energy, bridging the gap between theoretical knowledge and practical application. The programme's coverage of renewable energy technologies, project evaluation, financial modelling, and international climate finance options underscores its strategic alignment with RENAC's mission of advancing sustainable energy practices globally.

The programme's application-oriented approach is tailored to meet the needs of industry professionals, project evaluators, and financial experts. This from RENAC defined strength resonates deeply with RENAC's strategy of producing professionals who can immediately contribute to the real-world challenges of the green energy sector. By equipping participants with the skills and insights necessary to navigate the complexities of project financing and evaluation, the GEFS programme serves as a cornerstone in realising RENAC's vision of a sustainable energy future.

In the context of RENAC's Green Banking department, RENAC’s efforts persist in enhancing the green energy finance pipeline. This pipeline facilitates a smooth progression through various levels of learning within the realm of green energy finance so that students can advance their education in green energy and climate finance. RENAC´s green energy finance pipeline starts with a 1-month course in Renewable Energy Project Finance, followed by a 3-month course in Applying Green Energy Finance (AGEF), the GEFS programme (one semester) and the Master in Business Management in Green Energy and Climate Finance (two years, four semesters, see chapter 4.4).

However, the GEFS programme faces challenges like limited marketing efforts, course quality variability and outdated or unedited course material (for the measures taken to counter this see chapter 6). Strategic actions and continuous improvement in course material and marketing will help maintain the programme's leading position in the green energy finance education market.

RENAC's strategic approach comes into play by addressing these weaknesses head-on. The institution can leverage its dedicated processes for maintaining course quality to mitigate any inconsistencies (see chapter 6). Moreover, recognising the need for intensified marketing efforts, RENAC can strategically allocate resources to amplify the programme's visibility and attract a broader audience.

Opportunities identified in the analysis, such as broadening course material and forming alliances with companies and international institutions, directly contribute to RENAC's overarching strategy. These opportunities enable RENAC to expand its programme offerings, cater to diverse target groups, and establish collaborative partnerships that enhance its global presence. By seizing these opportunities, RENAC strategically positions itself as a dynamic and forward-thinking institution at the forefront of green energy education.

By leveraging opportunities such as alliances, targeting new audiences, and emphasising value for money, the programme can capitalise on its established position and address potential threats like competition and accreditation concerns.

To address threats like competition from similar programmes and lack of first-tier accreditation, RENAC's strategic response involves continuous programme enhancement and pursuing accreditation to further solidify the GEFS programme's credibility. This aligns with the institution's strategy of maintaining a competitive edge and upholding the highest standards of education.

Rating:

The described profile and the qualification objectives are such that the course can compete on the education and job market. Again, in this context the panel notes that the institution does not yet conduct alumni-tracking studies, which may analyse and confirm the desired position of the course's graduates (see criterion 6.2.3 and recommendation chapter 6).

The way in which the course is integrated into the institution's overall strategy and relates to the other offers of the institution (e.g. smaller units on Green energy finance, a cooperation with academic institutions[6]) is plausibly described. The qualification objectives constitute the core of the institution's strategy and are sustainably implemented. In this context the panel highlights the overall institution's alignment on renewable energy (RE) and energy efficiency (EE) projects, the possibility of knowledge acquisition and increase step-by-step ("green energy finance pipeline"). The panel also welcomes the institution´s intention to increase cooperations with universities (see also chapter 4.4), which was described and discussed during the assessment conference.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.	**Strategy and Objectives**					
1.3	Positioning of the course					
1.3.1	Positioning of the course in the education and job market, and the professional field ("Employability")			X		
1.3.2	Positioning of the course within the institution's overall strategy		X			

[6] See chapter 4.4

2 ADMISSION

The main target group of the Green Energy Finance Specialist (GEFS) programme are private and public institutions or independent consultants concerned with the direct or indirect financing of renewable energy (RE) and energy efficiency (EE) projects or those who plan to do so in the future. These institutions include:

- Development banks and commercial banks,
- Private equity, risk capital and infrastructure funds and
- Other institutional investors and subject-related intermediaries (e.g. consultants)

Therefore, the Green Energy Finance Specialist Programme welcomes participants with the following professional backgrounds[7]:

- Banking (e.g. project finance, clean energy, asset management, investment banking)
- Institutional investing (e.g. private equity, clean energy fund management, life insurance)
- Private investing (e.g. wealth management, family offices)
- Project development and project sponsoring firms
- Green technology suppliers (e.g. manufacturing, wholesale)
- Consulting (e.g. law firms, transaction and tax advisory firms)

For the participants to be able to expand their practical and theoretical knowledge in green finance, the admission requirements serve to ensure that students have the requisite knowledge to successfully complete the GEFS programme. The admission requirements for the Green Energy Finance Specialist are as follows:

- Candidates need to have an academic degree, at least a bachelor's degree, in the area of business/economics, industrial engineering or alike.
- Candidates need to have at least one year of professional experience in the area of finance and/or green energy.
- Candidates should be highly motivated to specialise in the field of green energy and climate finance.

These admission requirements are listed on the GEFS website as well as in the GEFS brochure and the handbook for participants[8].

During the assessment conference, the panel elaborated on the diverse academic backgrounds of the admission requirements, discussing whether a concise programme like the GEFS can turn an engineer into a finance specialist. The institution outlined that the programme – apart from formal admission requirements - aims at executive, senior executive and middle management staff of financial institutions (see chapter 1.1). The institution further explained that – especially in the

[7] In cases where individuals do not align with these specified target groups but exhibit an interest in enrolling in the GEFS programme, it is advisable for them to consider enrolling in a preliminary course that resides at a lower proficiency level (see chapter 1.3 for a description of the Green Energy and Climate Finance course pipeline). This preparatory step ensures a more comprehensive grasp of the requisite knowledge before embarking on the GEFS programme itself.

[8] https://www.renac.de/trainings-services/trainings/ready-made-trainings/product/green-energy-finance-specialist-gefs (last call January 12, 2024), Appendices: 2_2_RENAC_GEFS-handbook_forParticipants and 5_Brochure_GEFS

scholarship programmes – most students have a considerable experience in banking of finance, and their aim is to learn about the particularities in renewable energy projects. Other students have a background in finance, banking and business and would like to start their career in or change their career to the renewable energy field. For students with an engineering or legal background, the institution explained that project financing is their objective to conduct the programme, and legal, engineering and commercial aspects are important part of project financing and therefore content of the programme (see chapter 3.2). For those lacking financial knowledge at all, RENAC offers introductory courses in the field of finance[7].

Legal relationship

Transparency and legal certainty of the contractual relationships within RENAC, involving both participants and teaching staff, are ensured through the comprehensive framework outlined in the "Terms and Conditions for RENAC Trainings" as well as sample contracts for authors and lecturers[9].

For participants, the “Terms and Conditions” document defines the scope of registration, conditions for participation, agreement terms, start of training, learning materials, certification procedures, support services, pricing, payment methods, withdrawal rights, and privacy policies. Students are required to agree to these terms and conditions upon enrolment in the GEFS programme. These legal documents are available during the registration process for participants to download.

RENAC develops the training material either from internal resources or engages with external authors or lecturers to develop training material. At all times, RENAC has a strong focus to avoid any copyright infringements.

All training material which is developed by RENAC staff, e.g. training concepts, presentations, texts, figures and exercises, belongs to RENAC in any case. Internal authors make sure not to illegally copy any text or figures, but to quote correctly. Figures are redrawn and adapted by RENAC in most cases. Original figures from third parties are only used if written permission from the owner has been received.

For all training material developed by external authors, e.g. presentations, videos, texts, figures and exercises, compliance with rights of use is ensured through respective contracts with the authors and reviewers. These contracts contain the following aspects:

1. The author has to grant permission to RENAC for all rights of use of the delivered material independent of time, location and content.
2. RENAC holds the rights to change the material.
3. The author/lecturer did not breach any property rights of third parties while developing the training material and did not use any sources illegally or without permission.

All incoming training material is checked against the correct way of quoting and referencing. References are e.g. websites, databases, studies (online and printed), books, papers, marketing

[9] See Appendices Template_Confidentiality_Agreement_RENAC; Template_Trainer_Contract_v12_en; vertrag_contentprovider_vorlage_new (3); vertrag_editor_vorlage

material or similar. No quoting or referencing is needed when authors use material owned and developed by themselves, e.g. project data, field experience.

RENAC provides its training materials to participants under the restriction of personal use. Participants of trainings are not allowed to use, copy, publish or change the material in any form unless agreed in written form with RENAC. This is ensured through Terms of Reference which every participant has to agree upon before the start of the training programme.

The lecturer guarantees that he or she has the right to use all teaching material (including all contents, images, tables) developed for the course. The lecturer indemnifies RENAC from any violation of rights of use of any third-party material (photos, diagrams, tables etc) and will reimburse RENAC for all legal fees in the case of any claims. Lecturers also grant RENAC the exclusive, irrevocable, and transferable rights of use for all instructional and teaching materials (texts, exercises, graphs, images, documents or any other work including computer programmes) that have been newly developed and/or substantially revised during the course of project implementation.

The author agrees to grant RENAC the non-exclusive right of use of all learning materials, corrections and comments with regard to all types of use including editing, altering, adapting, publishing and translating. The granting of rights of use is part of the principal contractual obligation of the author to RENAC. By granting of non-exclusive right of use, the author irrevocably concedes the spatially, temporally and contextually unrestricted and free right to use the materials as listed above.

The author agrees to grant RENAC the exclusive right of use of audio and video files with regard to all types of use including editing, altering, adapting, publishing and translating. By granting of exclusive right of use, the author irrevocably concedes the spatially, temporally and contextually unrestricted and free right to use the materials as listed above.

Contracting between RENAC and lecturers include details about services provided, qualification, scope of teaching duties including response times, teaching material deadlines, evaluation, and documentation, renumeration and payment agreement.

Rating:

The course aims at specific target groups, which are defined on the basis of previous knowledge, experience and educational level. The choice of the specific target groups is based on the strategic objectives of the certificate course.

The admission conditions and requirements have been defined and are coherent. They take into account the specific characteristics of the target groups. They support the achievement of the course objectives.

The contracts between the course provider and the participants as well as between the course provider and the teaching staff are set down and documented. Rights and obligations of both parties have been established and are known to all relevant parties. Transparency and legal certainty exist.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
2.	**Admission**					
2.1*	Focus on the target group			X		
2.2*	Admission conditions			X		
2.3*	Legal relationship			X		

3 IMPLEMENTATION

3.1 Structure

The 'Green Energy Finance Specialist' (GEFS), offered in English and Spanish, is a certificate programme with the aim to deliver in-depth knowledge on green energy finance topics. The programme takes place as a combination of a 21-weeks online training and a live interactive seminar (either as in-person seminar in Berlin for three full days or as virtual online training for five half days depending on the Covid-19 situation and the participant´s choice). The programme's main topics include:

- Fundamentals of renewable energy (RE) and energy efficiency (EE) technologies
- Political and legal market frameworks
- Project financing and project appraisal of RE and EE projects including credit application, financial modelling and project evaluation
- International green finance
- RE projects in the portfolio context

Participants have to work through eight online modules and actively participate in a live interactive seminar (final module). The online modules are available one-by-one according to the training schedule. Participants can only access the next module once they have successfully completed the assessment of the previous module[10].

The GEFS programme is a one-semester course and is intended to have a credit recommendation of ten ECTS credit points. The determination of credits for each module is based on a workload analysis, which allocates 30 hours workload to one ECTS credit point. In total, the programme comprises approximately 280 hours of self-study time and 25 in-class hours over a 22-week period[11], translating to an average workload of around 14 hours per week when taken over the entire study period. Workloads are higher in the initial stages of the programme, assuming that the courses are more introductory. However, RENAC has intentionally structured the programme to allow for a decrease in workload as participants progress. This adjustment gives students more time to focus on the more demanding mandatory assignments in modules 4 and 5. Participants' feedback on the workload is being collected in the "Online Training Feedback" questionnaire.

Credit recommendation can be earned only upon successful completion of the entire programme. Students must successfully complete the online portion, seminar, and final exam, and meet the examination requirements (see below). Partial credit recommendation is not granted to students who do not complete the entire programme as the GEFS programme as awarding credit recommendation for partial completion would not align with the programme's intended learning outcomes.

In the GEFS programme, ECTS credit points are calculated on a per-module basis. The entire module is assigned a specific number of ECTS credit points based on the workload of the individual courses contained within the module. Workload calculations include a combination of lecture hours, self-

[10] See also Appendix: 2_2_RENAC_GEFS-handbook_forParticipants

[11] 21 weeks online training including virtual classroom sessions and one live interactive seminar for three days (face-to-face in Berlin) or five half days (virtual online training)

study, and assignment efforts for each module. RENAC has submitted a detailed calculation within the curriculum overview[12].

RENAC, as a training provider, does not accept transfer credit because it is not an academic institution that confers higher education degrees. However, RENAC provides all necessary documentation, such as transcripts, course syllabi, certificates, and certificate supplements, for participants to request at academic institutions the transfer of their ECTS credits accumulated through the GEFS programme.

Modules must be taken in a predetermined order based on the logic described in chapter 3.2, with access granted to students on a timed basis to ensure a manageable workload. The duration for which each module remains open depends on the calculated workload for that specific module.

The design of the modules aligns with the programme's overall learning outcomes, with each module typically corresponding to a holistic programme outcome. Subsequently, each module has its own set of specific module outcomes to ensure that the programme's broader objectives are met. Furthermore, each course within a module has its own learning objectives. Assessment methods are selected based on the content of each module, with some modules (Modules 1, 2, and 7) offering participants the opportunity to apply their knowledge to specific country contexts, while others are more suited to smaller quizzes that assess specific course material. Modules 4 and 5 have mandatory assessments to ensure that participants are able to develop a term sheet and financial model assessment of a specific and applied case study.

The European Credit Transfer and Accumulation System (ECTS) has been implemented in the GEFS programme to ensure that participants can complete the course within the projected overall study time. RENAC acknowledges that the GEFS programme can be demanding in terms of the course load, as evidenced by a 20-30% dropout rate among the paid cohorts. Nonetheless, RENAC'S experience has shown that most learners drop out early in the semester primarily due to intensified work commitments. Additionally, RENAC observed that illness related to Covid during the pandemic was a common reason for withdrawal, although this has decreased in recent years. Before the FIBAA Assessment conference RENAC did not collect data systematically for reasons why participants dropped out of the GEFS program. Students provided RENAC with email responses asking to delay or withdraw from the programme, often stating illness (theirs or a close family member's) or work-related reasons for withdrawal or delay. After the assessment conference, RENAC instituted a field in the database for future extension or withdrawal requests.

As outlined in the GEFS handbook for participants[13], there is an assessment for each online module as well as a final exam during the live interactive seminar. The assessments for all modules will make up one third of the final mark. The assessment can be a short assignment, an online test or a practical exercise (development of a term sheet and financial modelling).

The total points which students can earn during the online phase will make up one third of the final mark. The final exam will make up two thirds of the final mark:

[12] See Appendix 3_Implementation\3_1_RENAC_GEFS_Curriculum_overview_Workload_Final.xls
[13] See Appendix 2_2_RENAC_GEFS-handbook_forParticipants

Table 2: Collection of points for the Green Energy Finance Specialist[14]

Element[15]	Programme Points	Share of total grade	Minimum passing mark on assignment
Module 1 – Assignment	0 or 1 (Pass/Fail)	2.78%	Submission under academic conditions (Plagiarism check)
Module 2 – Assignment	0 or 1 (Pass/Fail)	2.78%	Submission under academic conditions (Plagiarism check)
Module 3 – End of-Module Exam	0 or 1 (Pass/Fail)	2.78%	70%
Module 4 – Term sheet	0 to 2 Score Points	5.56%	1
Module 5 – Financial modelling	0 to 4 Score Points	11.11%	1
Module 6 – End of-Module Exam	0 or 1 (Pass/Fail)	2.78%	70%
Module 7 – Assignment	0 or 1 (Pass/Fail)	2.78%	Submission under academic conditions (Plagiarism check)
Module 8 – End of-Module Exam	0 or 1 (Pass/Fail)	2.78%	70%
Total for Modules 1 - 8	12 Score Points	33%	
Final Exam (during seminar)	24 Score Points	66%	70%

[14] Taken from: Appendix 2_2_RENAC_GEFS-handbook_forParticipants
[15] For definition of assessment element, see chapter 3.2

Total	**36 Score Points**	**100%**	

Upon successful completion of the required assessments, participants will receive a certificate including a grade for this training programme. The title of the certificate awarded is “Green Energy Finance Specialist”.

Rating:

The course's structural elements are convincingly described and motivated. The course structure serves to promote the objectives and the participants acquisition of knowledge and competences in line with the given objectives.

The following ECTS elements: credit points and workload specifications, have been implemented. The guidelines for workload calculation are clearly and understandably deduced. The course descriptions provide detailed descriptions of intended learning outcomes and the information defined in the ECTS Users’ Guide.

A Certificate Supplement documents the course and the associated qualifications in a transparent and coherent manner. When reviewing the workload, the institution also takes into account evaluation findings, including participant feedback.

There are legally binding study and exam regulations which are orientated towards the principles of study regulations in higher education. The course’s characteristic structural features have been implemented.

The feasibility of the course’s workload is ensured by a suitable curriculum design, by a plausible calculation of workload, by an adequate number and frequency of examinations, by appropriate support services as well as academic and general participant counselling.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
3.	**Implementation**					
3.1	Structure					
3.1.1	Structure of the course			X		
3.1.2*	Application of the „European Credit Transfer and Accumulation System (ECTS)“ and modularisation			X		
3.1.3*	Study and examination regulations			X		
3.1.4*	Feasibility of study workload			X		

3.2 Content

The logic of the curriculum's content is intended to mirror the project life cycle of realising and financing green energy projects. It starts with laying the fundamental knowledge of technology in modules 1 and 3, explores market potentials and framework conditions in module 2, and proceeds to assess risks from project planning to construction, followed by a deeper dive into feasibility calculations. This sequence closely aligns with the typical project development process, from inception to closure and rehabilitation. Practical examples are incorporated into the materials, enabling participants to relate to real cases and apply their learning to their professional work. Modules 6, 7 and 8 continue to discuss specific cases in green energy finances as well as important parts of accessing climate finance sources for projects and overall portfolio management.

Furthermore, the programme has been adapted to cater to different job profiles and specific conditions relevant to the target group. It offers a range of work scopes and contents, encompassing technical aspects, economics and financing, project development, sizing and simulation, legal and regulatory considerations, and international market development, topics RENAC regards to be relevant to the target group (see chapter 2).

The programme's focus on building in-house expertise in financial institutions is a testament to its commitment to achieving its qualification goals. It equips participants with essential skills, including cash flow-related lending principles, project contract structures, the assessment of project-related due diligence documents, and financial modelling skills. These qualifications are directly aligned with the requirements for financing renewable energy and energy efficiency projects.

Additionally, the curriculum remains adaptable to changes in the job market. For instance, the inclusion of a course on hydrogen reflects the programme's responsiveness to dynamic market shifts, ensuring that participants are well-prepared for evolving industry needs.

The programme consists of nine modules with the following contents and learning outcomes:

Table 3: Content of the GEFS programme

Module 1 – Introduction to Green Energy Finance (1.5 ECTS credit points[16]):

In this introductory module, participants are immersed in the world of green energy finance. They start by gaining a fundamental understanding of renewable energy projects and energy efficiency projects. The courses cover key concepts such as the different types of renewable energy technologies and their applications, the principles behind energy-efficient practices, and the potential environmental and economic benefits of adopting green energy solutions. Moreover, participants explore the global market for renewable energy and energy efficiency financing. They analyse the current trends and investment opportunities in the renewable energy sector worldwide, considering the varying economic, political, and environmental contexts.

As part of the module, participants have the opportunity to choose specialised courses that delve deeper into specific renewable energy technologies (electives). The available options include PV (photovoltaic) applications, wind power, biogas applications, small hydro power, geothermal power generation, and hydrogen applications. Each elective provides in-depth insights into the technology, its practical applications, and its potential for contributing to sustainable energy solutions.

By the end of this module, participants will be able to demonstrate a comprehensive understanding of various renewable energy technologies, their applications, and their potential impact on sustainable energy practices. They will also gain valuable insights into the energy efficiency sector and its significance in achieving environmental goals.

Module 2 – Political and Legal Market Framework (1.1 ECTS credit points):

In this module, participants explore the policy frameworks for renewable energy power generation and the support mechanisms for energy efficiency projects. They delve into the different policy measures employed by governments and organisations to promote green energy adoption. Moreover, participants critically evaluate the pros and cons of different policy measures and identify suitable policy measures that align with the energy needs and environmental concerns of their countries. They develop the skills to assess the political and market framework regarding renewable energy and energy efficiency deployment in their respective countries, considering the influence of regulations, incentives, and public-private partnerships.

Upon completing this module, participants will be able to categorise and analyse different policy measures for renewable energy and energy efficiency projects. They will understand how policy frameworks can impact the development of green energy projects and will be equipped to propose appropriate measures for fostering sustainable energy practices in their countries.

Module 3 – Energy Efficiency Projects (1.1 ECTS credit points):

Energy efficiency plays a crucial role in optimising energy consumption and reducing greenhouse gas emissions. In this module, participants explore two different approaches for companies to achieve energy savings: systematic energy-saving approaches and the role of Energy Service Companies (ESCOs). Participants delve into the fundamentals of energy-efficient technologies and learn how to conduct feasibility studies on energy efficiency projects. They also understand the performance analysis of energy efficiency projects, enabling them to evaluate the effectiveness of

[16] ECTS are mentioned here for calculation purpose only, partial credit recommendation is not granted (see chapter 3.1)

various energy-saving measures. Furthermore, participants gain insights into the concept of Energy Service Companies (ESCOs) and the financing models associated with energy efficiency projects. They explore the unique features of ESCO contracts and the financial arrangements that facilitate energy efficiency improvements.

Additionally, participants have the option to explore the technology behind energy-efficient buildings. The optional course “Energy Efficient Buildings – Technology” offers a deeper understanding of energy-efficient building design, construction, and operation, further enhancing participants' knowledge of sustainable building practices.

By the end of this module, participants will be able to demonstrate a comprehensive understanding of energy efficiency projects, the financial models associated with ESCOs, and the strategies to assess and appraise energy efficiency projects. They will be equipped to identify energy-saving opportunities and design sustainable solutions for energy-efficient practices.

Module 4 – RE Project Financing (1.6 ECTS credit points):

Financing is seen as a critical aspect of renewable energy projects. In this module, participants develop the skills to perform risk assessments for renewable energy projects, considering factors such as technology risks, market risks, and regulatory risks. They learn how to identify and evaluate potential risks associated with various renewable energy technologies. Participants also gain hands-on experience in developing term sheets for renewable energy projects. As part of a simulated scenario, they play the role of credit officers from a bank, evaluating a term sheet submitted by a project sponsor seeking financing. This exercise allows participants to practise structuring viable financial arrangements for renewable energy projects.

Additionally, participants have the option to explore “SME finance” (SME: Small and Medium Enterprise) and “Islamic finance” in optional courses that provide insights into alternative financing options suitable for specific contexts.

By the end of this module, participants will be able to conduct comprehensive risk assessments for renewable energy projects, develop term sheets for financing projects, and adapt bank-internal procedures to accommodate renewable energy financing. They will be proficient in proposing financial arrangements that support sustainable energy projects.

Module 5 – Project Contracts & Financial Modelling (1.2 ECTS credit points):

Effective project contracts and financial modelling are seen as crucial for ensuring the success and bankability of renewable energy projects. In this module, participants explore the importance of different types of contracts required in renewable energy project finance. They learn to utilise the RE Project Evaluator financial model, a tool designed specifically for renewable energy projects. Participants gain hands-on experience in assessing the financial attractiveness, viability, and pricing of renewable energy projects using the provided financial model.

Additionally, participants have the option to improve their negotiation skills with an optional course “Negotiation Skills”, which is seen as a valuable asset when dealing with complex contracts and financial arrangements in the renewable energy sector.

By the end of this module, participants will be able to analyse, interpret, and negotiate contracts required for renewable energy projects. They will be proficient in using financial models to assess the financial viability of renewable energy projects and make informed decisions regarding project financing.

Module 6 – Special Issues in Project Evaluation (0.8 ECTS credit points):

This module addresses special issues related to risk mitigation and compliance with environmental and social standards in renewable energy projects. Participants explore the significance of bankable insurance cover for international renewable energy projects. They learn to assess the impact of insurance programmes on the risks encountered in renewable energy projects and how to utilise insurance programmes to reduce risks for all stakeholders involved. Moreover, participants gain an understanding of internationally recognized standards that larger renewable energy and energy efficiency projects must comply with. They compile a checklist of these standards, ensuring adherence to ethical and sustainable practices in project evaluation.

Additionally, participants have the option to choose the optional course "Operation and Maintenance Strategies for RE Systems". This course is intended to provide insights into ensuring the long-term sustainability and efficiency of renewable energy projects.

By the end of this module, participants will be able to develop risk mitigation strategies for renewable energy projects, identify the implications of insurance programmes, and comply with international environmental and social standards in project evaluation.

Module 7 – International Green Finance (1.1 ECTS credit points):

As renewable energy and energy efficiency initiatives extend beyond national borders, understanding international climate finance becomes essential. In this module, participants assess the current climate finance landscape, including the various institutions, sources of finance, and mechanisms involved in supporting sustainable energy projects. Participants explore procedures for receiving funding from domestic or international climate finance sources, and they learn to identify the most suitable climate finance options for their organisations. Participants become adept at organising procedures to access climate finance, thereby enhancing their ability to contribute to international green energy initiatives.

Additionally, participants have the option to explore specialised courses on "Accessing the Green Climate Fund (GCF)" and "Carbon Pricing Mechanisms". These optional courses provide additional insights into specific climate finance options and mechanisms.

By the end of this module, participants will be able to navigate the landscape of international climate finance, access funding from various climate finance sources, and make informed decisions regarding the most suitable climate finance options for their organisations.

Module 8 – RE Projects in Portfolio Context (0.5 ECTS credit points):

This module focuses on the management of renewable energy projects within the context of a portfolio. Participants learn to assess the performance of a renewable energy project portfolio, considering factors such as risk diversification, financial returns, and long-term sustainability.

Additionally, participants can choose a course on "Investment Vehicles for RE Projects". This course is aimed to provide insights into different financial instruments and structures for financing renewable energy initiatives.

By the end of this module, participants will be able to evaluate and structure a renewable energy project portfolio, ensuring efficient management and optimization of multiple projects. They will gain an understanding of various investment vehicles and their applicability to different renewable energy projects.

Green Energy Finance Seminar Week (1.3 ECTS credit points)

The face-to-face seminar or live virtual seminar is the culminating event of the Green Energy Finance programme. It provides participants with an opportunity to apply their acquired knowledge and skills in interactive and practical sessions. The seminar spans three full days (or five half-days if in a virtual format) and covers key topics relevant to green energy finance. The seminars are held in English with direct Spanish translation if needed. Below is the detailed schedule of the in-person seminar[17].

Table 4: Schedule of Green Energy Finance seminar week (face-to-face)

Time	Day 1	Day 2	Day 3
09.00 - 10.30	**Welcome and Introduction** • Introduction of Green Banking and Green Finance Specialist • Getting to know each other • Expectations of participants Individual work	**RE Market Design, Institutional Framework & Financing** • Global market for RE investments • RE market design • Institutional framework • Financial conditions Presentation, Discussion	**RE Project Evaluator I** • Discussion of results of the financial modelling exercise from the online course • Sample solution to homework Discussion, Participant´s presentation
10.30 - 10.45	*coffee break*	*coffee break*	*coffee break*
10.45 - 12.15	**Energy Efficiency I** • Fundamentals of EE technology • Feasibility study on EE projects • Performance analysis of EE projects Presentation, discussion, partner work	**Due Diligence & Risks** • Main risks of RE technologies • Prioritising of such risks • Discussion about differences in the focus of the DD Group work and presentation of results	**RE Project Evaluator II** • Sensitivity and scenario analysis with the financial model Practical computer-based exercise (individual work)
12.15 - 13.45	*lunch break*	*lunch break*	*lunch break*
13.45 - 15.15	**Energy Efficiency II** • Energy Management • ESCOs • Financing EE Presentation, discussion, partner work	**Applied Due Diligence I** • Screening of sample RE project contracts • Identification of important information for financial models • Critical clauses and wordings Group work and presentation of results	**Exam** • Exam under examination conditions (**13.45 - 15.45)**

[17] For schedule of virtual seminar see appendix 3_Implementation\3_1_RENAC_GEFS_Mod_Desc\Module 9 Seminar.

15.15 - 15.30	*coffee break*	*coffee break*	*coffee break*
15.30 - 17.00	**Climate Finance** • International Climate Funds • Availability and accessibility of funds • Climate Finance schemes Brainstorming, group work	**Applied Due Diligence II** • Screening of sample RE project contracts • Identification of important information for fin. models • Critical clauses and wordings Group work and presentation of results	**Final Session** • Evaluation of GEFS programme (online and attendance)
starting 18:00	**Welcome Dinner** (optional)		

Session 1 (“Welcome and Introduction “) serves as an icebreaker and introduction. Participants get to know each other and engage in an open discussion. The facilitators introduce themselves, and participants share their expectations for the seminar. The main objective is to develop a common understanding of the seminar's goals and create a positive learning environment for all attendees.

Sessions 2 and 3 (“Energy Efficiency I and II”) focus on energy efficiency finance. Participants investigate the feasibility and performance of energy efficiency projects. The facilitators conduct presentations on the fundamentals of energy-efficient technology, the process of conducting feasibility studies, and performance analysis of energy efficiency projects. Participants engage in discussions and partner work to explore the advantages of systematic approaches to energy efficiency for providers of finance, as well as the role of ESCOs in financing energy efficiency projects.

During session 4 (“Climate Finance”), participants delve into the realm of climate finance. They evaluate and prioritise different climate finance options based on mutual exchange of experiences. The facilitators conduct brainstorming activities and group work to develop new ideas for accessing climate finance options. Participants explore international climate funds, the availability and accessibility of funds in partner countries, and the climate finance schemes prevalent in these countries.

In session 5 (“RE Market Design, Institutional Framework & Financing”), participants gain insights into the global market for renewable energy investments. The facilitators outline the most important aspects of the market and discuss suitable market designs. Participants engage in discussions on the institutional framework and financial conditions for renewable energy development.

Session 6 (“Due Diligence and Risks”) focuses on identifying various risks involved in renewable energy project finance. Participants develop risk mitigation measures for these risks and prioritise them based on their significance in the financial due diligence process. The facilitators lead group work sessions and discussions on the differences in the focus of due diligence for different renewable energy technologies, such as wind, PV, and bioenergy.

The sessions 7 and 8 (“Applied Due Diligence I and II “) revolve around the significance of contracts in renewable energy project finance. Participants identify pitfalls and traps in contracts for renewable energy projects and work together to improve contracts, ensuring they are bankable. The facilitators facilitate group work and discussions, and participants screen sample renewable energy project contracts. They identify important information required for financial models and consider critical clauses and wordings relevant to bankability assessments.

In sessions 9 and 10 (“RE Project Evaluator I and II”), participants enhance their financial modelling skills using the RE Project Evaluator tool. The facilitators discuss the results of the financial modelling exercise from the online course and lead practical computer-based exercises where participants perform sensitivity and scenario analysis with the financial model.

The final two sessions of the seminar comprise the exam and evaluation process. Participants take the final exam on their computers or laptops (see also chapter 3.2). Subsequently, they have time for personal evaluation of the seminar and the online training. The group provides direct feedback about the training programme to the facilitators, enabling continuous improvement.

“Optional courses” in many of the modules do not contribute to the assessment within the GEFS programme but provide students with the opportunity to explore additional topics related to the module's main theme or delve into real-life case studies and examples relevant to the module's subject matter.

The courses within each module are regularly updated (see chapter 6). Additionally, the decision to include specific courses in each module is periodically reviewed. This is particularly applicable to optional courses, which provide the GEFS management team with the flexibility to adjust the programme content based on emerging trends in renewable energy and energy efficiency. Recent examples of optional courses added to modules include Sustainable Finance (Warm-up), Hydrogen (Module 1), Climate Policy Frameworks (Module 2), and Islamic Finance and SME Finance (Module 4). This flexibility allows the programme to stay aligned with evolving industry dynamics and students' preferences, as well as leverage new course offerings within RENAC's portfolio.

The GEFS programme aims to achieve practical applicability, underscoring the importance of tangible examples and real-world applications. This principle is also evident in the learning objectives of each module, which consistently prompt students to analyse assimilated materials and subsequently employ them to their advantage. Assignments are serving as conduits for this connection.

For instance, assignments of the modules 1, 2, and 7[18] serve as links between theoretical concepts and practical scenarios. They necessitate students to leverage the module's resources — comprising readings, videos, and self-assessment tests — to apply their acquired knowledge within a specific context, often centred around a chosen country and student´s professional experiences. Assignments of the modules 4 and 5 compel students to harness their project finance competencies gained from the theoretical groundwork in module 4. These assignments involve dissecting a case study and crafting a comprehensive term sheet. The latter task urges students to develop a sophisticated financial model, compelling them to adopt the perspectives of investors or project developers. This practical exercise is intended to link theoretical underpinnings with real-world decision-making scenarios.

[18] See chapter 3.1

Integral to the programme's structure are the various case studies peppered throughout the course material. These real-world illustrations, spanning topics like practical renewable energy projects and the financing of energy efficiency initiatives, illuminate the practical applications of theoretical content drawn from readings and videos within the course.

During interactive live sessions, whether virtual or in-person, the teaching staff uses approaches like sharing case studies from their careers, interactive Q&A sessions about real challenges, and hands-on exercises using tools applicable in professional settings. Additionally, before each live session, the teaching staff receive information about participating students' locations and roles. This enables instructors to customise their lessons with insights tailored to the students' contexts.

In Module 9, the seminar week, in live training sessions participants engage in group activities that concretize abstract concepts into pragmatic applications. Examples encompass analysing contracts in-depth, executing due diligence procedures, refining the RE project evaluator (introduced in Assignment 5), and probing participants with questions to challenge their grasp of theoretical knowledge when tackling authentic challenges. Moreover, the seminar delves into case study exercises related to energy efficiency financing, grounded in potential savings projections, and facilitates discussions regarding global trends and markets in renewable energy and energy efficiency investments, drawing insights from participants' shared experiences.

The integration of international content and intercultural perspectives is demonstrated through a series of strategic inclusions across various modules, offering students a global perspective, for instance:

- Module 1: "Market overview of global RE and EE financing" acquaints students with international trends and practices in renewable energy and energy efficiency financing.
- Module 2: In "Support mechanisms for energy efficiency projects" and "Climate and energy policy in Europe," students delve into international case studies and policies, fostering cross-border comprehension.
- Module 3: "Financing EE projects and ESCOs" introduces students to diverse international project examples, enriching their awareness of varied financing strategies.
- Module 4: Through "Renewable energy project finance," three international case studies are explored, underpinning the global nuances of renewable energy financing.
- Module 5: "Project contracts" sheds light on international contractual banking requirements, providing insights into the intricacies of cross-border agreements.
- Module 6: "Bankable insurance cover for international renewable energy projects" addresses the global dynamics of insurance within renewable energy projects.
- Module 7: "Climate Finance" equips students with the knowledge of steps to access climate finance on an international scale.

The assignments are pivotal in fostering a broader global perspective. Assignments of modules 1, 2, and 7 specifically encourage students to explore green energy financing within the context of a country of their choosing. This approach not only enhances individual understanding but also nurtures global dialogue as students are encouraged to engage with peers' responses, contributing to a rich exchange of international viewpoints. After submitting their own assignment, each

participant will have access to the answers of their peers, opening other perspectives on the topics from different regions and cultures of the world.

Live virtual classrooms throughout the online training phase offer the chance to meet GEFS colleagues and exchange experiences. During the welcome forum in the first couple of weeks and the introductory virtual classroom session students are led through several ice breaker experiences in which they get to share their international background with their peers.

The capstone of this international outlook is embodied in Module 9, the seminar week. This segment serves as an international networking hub, as cohort participants usually come from three to four continents. The collaborative environment of the sessions and group work encourages the exchange of ideas, sharing of perspectives, and cross-cultural collaboration, thus reinforcing diverse norms and experiences.

The GEFS programme management views the development of critical skills in research, analysis, and decision-making as fundamental. Students are tasked with evaluating various green energy technologies and finance projects, a task that demands a deep understanding of research methodologies and analytical tools described in the written material. Detailed appraisal of green energy projects is integral to the programme. Students become proficient in evaluating the technical and financial aspects of projects, aligning with industry best practices. Additionally, the programme places a strong emphasis on financial modelling and the creation of term sheets for green energy finance projects. This entails applying financial methodologies, analysing risk assessments, and identifying correctly structured financial agreements and contracts.

Moreover, portfolio management and evaluation are key components of the GEFS programme. Students learn how they could design and implement effective methodologies for selecting projects, managing risks, and measuring performance. These skills are seen as vital for making sound investment decisions in the realm of green energy finance.

To thrive in the field, students must also comprehend global and regional market dynamics in green energy finance. This involves understanding in-depth market research, utilising appropriate data literacy techniques, and providing concise summaries of market trends and opportunities.

Lastly, the programme is targeted to equip students with the ability to identify viable options for accessing international climate finance. Students learn to conduct research using appropriate methodologies and navigate the intricate processes of fund application and compliance.

Participants in the programme are provided with multiple avenues to engage in academic work and develop their ability to understand and assimilate specialist literature. Key indicators are used to assess if teaching methods take into account the current state of scientific and technical knowledge.

One fundamental indicator is the admission requirements. To join the programme, students must possess an undergraduate degree. This prerequisite establishes a baseline for their capacity to engage in academic work effectively.

In modules 1, 2, and 7, students are required to produce small texts on various topics related to the module's theme, applying them to a country of their choice. These assessments demand the use of up-to-date information and proper citation of sources. RENAC checks these texts for plagiarism using the Unicheck tool, ensuring the originality and integrity of their work.

To keep courses current, RENAC mandates that the teaching staff use the most recent and reputable sources when developing or updating course content, e.g. reports from organisations like the

International Renewable Energy Agency (IRENA), Bloomberg New Energy Forum, and the International Energy Agency (IEA), which provide annual summary reports with fact-checked, up-to-date information. This practice is intended to ensure that courses can be regularly updated with the latest information. Moreover, exposure to these industry-standard reports helps students become adept at interpreting data, statistics, and summaries commonly found in such publications.

To ensure academic honesty during the final examination, participants are required to take the exam under controlled conditions. If participants take the exam during the in-person seminar in Berlin, GEFS programme coordination staff will be available to ensure that no academic dishonesty occurs. For students taking the exam online, the online proctoring tool SMOWL is used to verify that participants are taking the exam themselves (photos will be taken at regular intervals via the webcam and discarded after the exam is reviewed by GEFS programme coordination staff) and to ensure that no other windows or tabs are open in the participant's browser or on their computer.

The different types of assessment methods are defined as follows[19].

Short Assignments: Participants write a short essay of approximately 200 to 600 words. They have to answer between one to three specific questions in which they are supposed to show their analytical skills. For example, participants have to connect the content that they have learned with the current situation in their job or country or suggest solutions for a given problem. The text has to be submitted in a special forum within the online course. Participants can see the answers of other participants only after they have posted their answer. Participants should work on the assignment for approximately one to two hours.

If participants do not submit anything, if their answer is too short or if the content of the answer is inappropriate, no programme credit points will be granted. An expert is on hand to give individual feedback to each participant's response, however, there is no guarantee that detailed feedback is given to each answer submitted.

End-of-module exams: The end-of-module exam is a self-evaluating test on the online platform. This test contains a selection of exercises that are also included in the self-tests of the courses that belong to that module. The selected exercises cover questions that relate to the main learning objectives of the module. Participants should finish the end-of-module exam within 30 minutes and should prepare for around 30 minutes.

One end-of-module exam comprises of 15 exercises. The types of questions can be multiple choice, multiple select, sorting, gap text, drag & drop into image or matching exercises. Participants can take the exam during the last five days of the respective module. The passing score is 70 % to achieve one programme credit point. If a participant scores less than 70 %, the participant can tale one more attempt which may contain at least partially of different questions compared to the original exam. Feedback will not be given to the exam questions.

Term sheet development: Participants have to develop a term sheet based on a specific case that is provided to all participants. Participants can work alone or in groups which are formed by voting on the online platform forum. Besides information on the case, participants receive the structure of a sample term sheet which has to be completed with the individual results. The final term sheet has to be submitted as a pdf-file until the deadline of the assignment.

[19] See also Appendix 2_2_RENAC_GEFS-handbook_forParticipants

Each participant has to submit himself/herself his/her own work or the work of his/her group. The submission of the term sheet is a requirement to continue the training programme and be eligible for the interactive live seminar that takes place after the end of the online training.

Financial modelling: Participants have to use a financial model based on MS Excel they have to insert data from an elaborated case study into the model and submit the results of the modelling process as a pdf-file. RENAC provides the model free of charge for the duration of the training programme. Each participant has to submit his or her own results; however, group discussions are allowed in the forum of the course. Results have to be submitted as a pdf file which can be easily created from the Excel-model. The submission of the financial model is a requirement to continue the training programme and be eligible for the interactive live seminar that takes place after the end of the online training.

Final Exam: The final exam takes place at the end of the seminar (see also chapter 3.1). Participants Take the exam online on a laptop while sitting in the seminar room (or if participating virtually, in their own spaces). Similar to the end-of-module exams, the final exam is a self-evaluating exam with different types of exercises (multiple choice, multiple select, sorting, gap text, drag & drop into image or matching exercises).

The final exam consists of 80 exercises, and participants have 120 minutes to answer them. There are exercises for each of the modules. The exercises are partly taken from the self-tests from the mandatory courses and designed specifically for the final exam in which participants have to show an overall understanding of the content and context.

Table 5: Share of 80 questions across Modules in Final Exam

Module 1	13
Module 2	10
Module 3	10
Module 4	12
Module 5	5
Module 6	10
Module 7	10
Module 8	10

In case of failing the exam, participants may take one additional attempt at a defined date and place which has to be announced by RENAC at the beginning of the online training. This date will be typically one or two weeks after the seminar.

Rating:

The curriculum adequately reflects the qualification objectives of the course. The contents of the courses are well-balanced, logically connected and oriented towards the intended learning

outcomes. The lectures and seminars on offer cover the contents necessary for achieving the qualification objectives and are outcome-oriented.

In the course, theory and practice are systematically linked. Career-integrated methods (case studies) are part of the course. Knowledge delivery and practical contributions complement each other to develop the students' competences.

The international orientation of the programme can be seen in the international composition of the teaching staff and the international contents. The panel highlights that the programme is offered in English as well as in Spanish language. The practical training of intercultural aspects contributes to the students' capacity to act in an intercultural environment. Furthermore, the internationality of the course is clearly a key aim and is consistently promoted. The course ensures the acquisition of outstanding intercultural qualifications and skills and enhances the participants' ability to act in an international environment.

The acquisition of methodological competences on the defined level of the European qualification framework (Dublin Descriptors) is assured. It is set down as a learning objective in the module descriptions.

The ability for academic work is proven through the admission conditions. The ability for academic work is set down as a learning objective in the course descriptions. Proof of science-based teaching within the course has been provided.

All exams, as they are defined for the modules, are suited in format and content to ascertain the intended learning outcomes. The requirements are in accordance with the desired qualification level. However, for the final exam, the panel suggests replacing Multiple Choice questions by a case study or a practice project to ensure a competence-oriented review of the programme content.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
3.	Implementation					
3.2	Content					
3.2.1*	Logic and conceptual coherence			X		
3.2.2	Integration of theory and practice			X		
3.2.3	International and intercultural contents	X				
3.2.4	Methodological competence			X		
3.2.5	Academic work and science-based teaching			X		
3.2.6*	Examinations			X		

3.3 Multidisciplinary qualifications and skills

The seminar week serves as a platform for students to refine their communication and public speaking competencies. Within this module, students are entrusted with the task of delivering presentations in three of the sessions:

1. International Climate Finance: Engaging in collaborative group work, students present strategies on accessing climate finance for a hypothetical project. This exercise not only amplifies their capacity to communicate effectively but also nurtures cooperative skills as they navigate through diverse perspectives and contributions.
2. Due Diligence and Risks: Another group-focused endeavour, this session necessitates students to present intricate risk assessments pertaining to various renewable energy technology projects. Here, effective communication intertwines with the capacity to cooperate, as participants harmonise diverse viewpoints to present comprehensive risk evaluations.
3. Applied Due Diligence II: In this session, the emphasis lies on collaborating to present due diligence outcomes derived from assorted renewable energy project contracts. The complexity of this task hones communication skills by necessitating the conveyance of intricate findings while navigating the intricacies of collaboration.

Cooperation and conflict handling skills can also be harnessed during the optional course offered within Module 5, "Negotiation Skills," which systematically guides students in mastering the art of value creation, value assertion, and fostering enduring relationships across diverse stakeholders, be it business partners, colleagues, or external counterparts.

Rating:

The panel acknowledges the information given by the institution and the references to the optional course and different teaching methods. However, due to the limited scope of the programme, the density of the schedule of the seminar week, and the admission criteria requiring a first academic degree and one year of practical experience, the panel rates a specific evaluation of the acquisition of communication and public-speaking skills as well as cooperation and conflict handling skills as not applicable.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.	Implementation					
3.3	Multidisciplinary qualifications and skills					X

3.4 Didactics and Methodology

The Green Energy Finance Specialist is a comprehensive programme to offer a specialisation to industry professionals in the field of green energy finance. The course is designed in a blended learning format, combining eight online modules for self-study to be suitable to full-time employees around the world and a ninth module including a hybrid live seminar to apply and deepen the gained knowledge (online or in-person attendance possible).

During the online training, participants are provided with texts, graphical elements, figures, diagrams to study and self-assessment exercises exams to repeat and practise. Teaching videos as well as live virtual classrooms offer the possibility to combine theory and praxis and directly learn from and exchange with experts from the respective topics. Live virtual classrooms are held during weekday evenings and on weekends.

The online modules follow a chronological order, starting with an overview of technologies and market framework conditions (modules 1-3) and go deeper into financing topics in modules 4-5 ending with specific aspects of green energy and climate finance in modules 6-8. Each module comprises a form of assignment designed to reflect the learned material and increase the learning outcome while achieving the best learning effect. The mix of methods allows participants to study with all their senses: Reading, listening, watching, as well as applying the knowledge directly. Case studies in several courses give a practical orientation.

Module 9, the final seminar, is offered either as an in-person or virtual live seminar. In the first semesters the final seminar always took place in Berlin and the attendance in person was mandatory. During and after the pandemic RENAC wanted to offer all participants the chance to participate regardless of their location, available travel budget and travel restrictions. Hence, RENAC has designed the seminar in a hybrid format, offering online sessions for participants joining from their home countries and in-person sessions for participants travelling to Berlin.

Independently of online or in-person participation, RENAC offers a combination of methods during the final seminar to make it as interactive as possible while assuring opportunities for Q&As, discussions, group work, repetition of learning, brainstorming, revision of assignments during the online training as well as case study calculations. With the help of interactive software, like smartboards, Miro, Mentimeter, Jotform and Zoom RENAC claims to allow online attendance the similar experience as in-person.

Throughout the whole GEFS programme RENAC aims to follow the constructivist learning theory. Hence, participants are asked within assignments and during the final seminar to relate their gained knowledge to their own individual and professional experiences, to involve them actively in the learning process and bring meaning and knowledge construction instead of passively receiving information.

During the semester, before each virtual classroom, the group size and professional backgrounds of each participant are communicated to the lecturers in order for them to be best prepared in terms of interactivity and content. During the assessment conference, the institution specified this preparation as the lecturers use this information to make themselves familiar with respective environments of the students (country, industry), tune their presentation for the virtual sessions, ensure dialogue with the students to make sure that terminology is familiar to all of them and use live pollings to check the knowledge of the students.

The teaching staff plays a significant role in creating and improving course materials (see also chapter 6), infusing practical business experience into the theoretical coursework. This process begins with collaborative content curation, where instructors work closely with the GEFS course director and other GEFS team members. Together, they select relevant information based on their own experiences to ensure the course materials reflect authentic scenarios. When teachers prepare for each semester, they update their teaching materials with the latest data and information.

Due to the nature of the GEFS programme being predominantly digital and blended learning-oriented, the demand for printed course material documentation is minimal among students. Instead, all information and resources are presented in a digital format via QR codes and links in emails and other communications.

Rating:

The didactic concept of the course is systematically oriented towards the course objectives. It is flexibly orientated towards the goals of each module and towards the target group. A mix of different teaching and learning methods, depending on the contents and curricular requirements, is applied in the modules.

The accompanying course materials (such as texts, diagrams, self-assessment exercises, teaching videos, virtual classrooms) are oriented towards the intended learning outcomes and correspond to the required qualification level. They are up to date and electronically accessible for the participants.

During the assessment conference, the panel and the institution discussed the extent of the blended learning concept. In the panel´s opinion, a sophisticated blended learning concept also includes the integration of online and face-to-face teaching and learning within single modules, courses or teaching events. During the assessment conference, the institution specified their interpretation of blended learning following the definition that “blended learning combines asynchronous and synchronous learning”. In this narrow interpretation of “blended learning”, the panel followed the institution’s blended learning denomination.

Regarding the learning videos, participants and alumni of the programme noted during the assessment conference that learning videos could be improved by more visualizations and options for varying the playback speed and could be more regularly updated with current topics (e.g. Hydroenergy). The panel supports this idea and suggests, the institution considers updates with technical tools and current content topics.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
3.	Implementation					
3.4	Didactics and methodology					
3.4.1*	Logic and transparency of teaching and learning methodology			X		
3.4.2*	Course materials			X		

3.5 Skills for employment / Employability (Asterisk Criterion)

The goal of the GEFS programme is to allow working professionals in the areas or financing and project development expand their career options in the future. The goal of the programme is not to ensure that students with no prior knowledge in financing and project development are able to gain employment in one of these areas.

The GEFS programme expands students' employability potential through a couple of ways. As the GEFS programme focuses on professionals who already have a year of experience in the fields relevant to finance and project development, the idea of "ensuring employability" tends toward ensuring that participants are able to broaden their skills in relation to sustainable finance assessment or the commencement of green energy projects. As some of the participants come from "traditional" banking or project development sectors, this broadening of skills related to RE and EE financing ensures a shift in framework and mindset to allow them to transition toward projects or areas which deal with the financing of green energy.

Additionally, as the GEFS course is internationally focused (see chapters 1.2 and 3.2) the programme allows students to eventually deal with international projects.

Furthermore, practicing the financial modelling of a specific case (module 5), the construction of a term sheet (module 4), the specific risks and how to mitigate them (modules 6) ultimately helps students understand the requirements of financial provisions in a project appraisal.

Rating:

The course contents focus on achieving the qualification objectives and have a clear profile. Employability in accordance with the qualification objectives (see chapter 1.1) and the defined learning outcomes is promoted, adding a benefit for graduates in the respective occupational field. The panel notes that the institution does not yet conduct an evaluation by alumni carried out on a regular basis (see criterion 6.2.3 and recommendation chapter 6) which could also contribute to evaluate and continuously develop employability.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
3.	Implementation					
3.5*	Skills for employment / Employability			X		

4 RESOURCES AND SERVICES

4.1 Teaching Staff

With a comprehensive curriculum comprising eight content modules, the GEFS programme contracts nine external experts as lecturers and for grading. To ensure equal opportunity for Spanish speaking participants, Spanish speaking lecturers are contracted for the advanced modules of the GEFS programme (Modules 4, 5, 6 and 7). Lecturers and graders for modules 1 to 3 use simultaneous translations during lectures and online translators to grade participants assignment. A selection of these nine experts makes a reappearance during the seminar week to continue working with participants.

External lecturers are contracted on a part-time or freelance basis, allowing them to balance their commitments within the industry while contributing as dedicated lecturer, also ensuring a continuous flow of real-world knowledge and practical insights into the programme. Having industry professionals as part of the teaching staff is regarded as a significant advantage for the GEFS programme. It enables the lecturers to provide the most up-to-date information on emerging trends and experiences, directly from their current work environments. By having lecturers who actively work in the industry, the programme stays closely connected to the evolving landscape of green banking and finance.

The Green Banking Finance Specialist programme also employs seven internal lecturers, mainly for introductory lessons in module 1 and 9 and the final examination, but also for expert teaching in modules 6 and 8. A RENAC in-house expert is in charge of the logical coherence of the curriculum (see chapter 3.2) during the establishment of the GEFS programme and helps coordinate the flow of the virtual classrooms and assess the external module experts.

The teaching staff originates from diverse academic backgrounds, with a primary emphasis on economics, business administration, and political science, often with specialisations in finance-related areas. According to RENAC (see SAR p. 48) the teaching staff's expertise is tailored to provide insights that resonate with participants seeking to gain proficiency in various aspects of green energy and climate finance.

The teaching staff's qualifications are also documented through an extensive collection of published papers within their respective domains. Many lecturers have significantly contributed to reports for renowned agencies, enriching the discourse on renewable energy and energy efficiency. Many of the lecturers also serve as professors at other universities and play the vital role of thesis supervisors for Master Programmes such as HWR's MBM Green Energy and Climate Finance, MBA Renewables programme at Berliner Hochschule für Technik (BHT) among others. A publication has been dedicated to capacity building in RE and EE finance written by two internal instructors.[20]

The alignment between the teaching staff's pedagogical qualifications and the course objectives in the GEFS programme is maintained through a comprehensive approach. All lecturers and experts engaged in student interactions undergo RENAC's Train-the-Trainer (TtT) programme, a pivotal step in equipping them with the necessary skills to effectively realise the course's educational goals.

[20] published in "Green Banking - realising renewable energy projects" (De Gruyter Oldenburg, 2020, Berlin/ Boston)

The TtT programme, facilitated either virtually or face-to-face, comprises live sessions designed to empower lecturers to apply and interactive and participatory approach to teaching. The TtT programme is offered on an annual basis for new internal and external lecturers. Its primary objectives encompass:

- Enhanced Training Design and Delivery: The programme readies instructors to adeptly design, plan, and execute training sessions, employing diverse teaching methods to engage students effectively.
- Comprehensive Understanding of the Learning Process: Lecturers are equipped to comprehend the learning journey of students, enabling them to facilitate this process seamlessly.
- Interactive Teaching Concept: The programme imparts an interactive teaching framework, aligning with RENAC's quality standards for face-to-face seminars.

A distinctive feature of the programme is its commitment to continuous improvement. Each semester, students are actively engaged in providing feedback on every teacher and expert involved in the GEFS programme. The feedback form is designed to assess various dimensions of instruction, including the balance between theory and practice, incorporation of interactive elements, responsiveness to inquiries, and time management while at the same time being comparable to each new intake. These feedback scores serve as a valuable resource. At the close of each semester, the feedback scores are reviewed and discussed with the respective expert or teacher. This dialogue facilitates ongoing growth and refinement in teaching methodologies and upholding a consistent standard of instruction (see also chapter 6).

The external teaching staff consists of industry experts who contribute on a freelance or part-time basis due to their ongoing roles in the business world. With their practical industry insights, the teaching staff can share firsthand knowledge with students who want to better understand real-world challenges, industry trends, and practical demands.

All coordination between teaching staff is conducted by the GEFS coordination team[21] as all of the experts are not only external to RENAC but are mostly experts in their specific field with little overlap in terms of area of expertise. All programme managers have an academic background and are familiar with scientific research thus ensuring that not only academic rigour within the GEFS programme is maintained but also redundancies (if they occur) can be detected and discussed. Participants in the GEFS programme get comprehensive support and coaching by the teaching staff. Throughout the semester, a range of avenues are available to facilitate students' learning journey. A primary component of this support is personalised feedback offered by lecturers and experts. Specifically, assignments for modules 1, 2, 4, 5, and 7 are evaluated and graded by experts who specialise in their respective domains. Personalised feedback ensures that participants receive comprehensive and nuanced feedback, promptly communicated to individual students. Following the feedback process, experts remain accessible to address any queries or concerns that participants might have, thus fostering a responsive and supportive learning environment.

In conjunction with this, the online platform Moodle serves as an integral tool for participant engagement. It provides a direct conduit for participants to interact with experts through a dedicated discussion forum. Within this forum, students can initiate threads where experts best suited to address their specific questions engage in detailed discussions. This platform not only

[21] GEFS coordination team: GEFS Administrative Course Director and GEFS programme managers, see chapter 4.2

facilitates one-to-one interaction but also leverages the collective learning potential of the participant community. As discussions are open for all to view and participate in, students can benefit from shared insights and varied perspectives. Responding to the urgency of questions, the programme endeavours to maintain a turnaround time of a maximum of 48 hours for responses posted on the discussion forum.

Furthermore, during the assessment conference, lecturers explained that further communication (if students have more questions) is mediated by RENAC, clustered if students have similar questions and then forwarded to the lecturers. The contracts for the lecturers do not only govern preparation and delivery of the sessions and learning material but also assisting and standby duties.

Rating:

Based on the CVs and interviews with the course coordination team, the panel is convinced of the qualifications and experience of the course management and that they correspond with the requirements of the course. The institution's course management is responsible for the academic quality of the course as a whole.

The structure and number of teaching staff correspond with the requirements of the course. The academic qualifications of the teaching staff correspond to the requirements and objectives of the course. Special characteristics of the target group, like their professional and cultural backgrounds, are incorporated in the virtual classroom (see chapter 3.4).

The pedagogical and didactic qualifications of the teaching staff correspond with the requirements of the course. Special characteristics of the target group are taken into account. The institution verifies the pedagogical qualifications and competence of the teaching staff by means of an established procedure (Train-the-trainer, regular evaluation). Regular measures for further qualifying the teaching staff pedagogically/didactically are offered by the institution.

The teaching staff has above-average business experience and uses it in a clearly visible and valuable way in their teaching activities by (some examples?)

It is systematically ensured by an established procedure coordinated by the institution that the teaching staff cooperates internally for the purpose of tuning the courses towards the overall qualification objectives.

Support of the participants is an integral part of the services provided by the teaching staff. It is offered on a regular basis and serves to help participants study successfully. During the assessment conference, teachers and participants expressed their wish to have more time for content-related interaction. The panel therefore recommends carrying out a systematic determination of the teachers' and students' needs in terms of interaction and considering an increase of contact and interaction times and possibilities.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
4.	**Resources and Services**					
4.1	Teaching Staff					
4.1.1*	Course management			X		
4.1.2*	Structure and number of teaching staff in relation to curricular requirements			X		
4.1.3*	Teaching staff's academic qualifications			X		
4.1.4*	Teaching staff's educational/didactic qualifications		X			
4.1.5	Practical business experience of the teaching staff		X			
4.1.6	Internal cooperation			X		
4.1.7*	Student support and coaching			X		

4.2 Course Management

Tasked with overseeing the Green Energy Finance Specialist Program, the GEFS Coordination team is made up of a GEFS Administrative Course Director and the GEFS programme managers who deal with the semester operation of a specific GEFS programme[22]. The role of the GEFS Administrative Course Director is to ensure the smooth planning and execution of the GEFS semester by the GEFS programme managers. The GEFS Administrative Course Director is responsible for overseeing all three GEFS programmes and helping GEFS programme managers when needed for coordination of the GEFS semester and GEFS course update, creation and development. Additionally, the GEFS Administrative Course Director oversees the quality control of all of the GEFS programmes, helping communicate with the quality management team. The GEFS Administrative Course Director serves as the contact point between students, lecturers and the larger RENAC administration and makes overarching decisions regarding semester planning, lecturer management, student questions, and feedback.

Day to day operations of the programme, including facilitation of the virtual classroom, planning and coordination of the seminar, dealing with participant queries and technical difficulties are dealt with by the GEFS programme managers. Programme managers are experienced in providing capacity development in different contexts and formats and each member is acquainted with the online course structure, didactical guidelines and methodology of RENAC and the Green Energy and Finance Department.

Additionally, the GEFS coordination team is very international, ensuring a multitude of intercultural sensitivity. Always at the disposal of the GEFS programme coordination team is the wider staff of the Green Energy and Climate Finance team (altogether eleven team members) which bring their expertise in the green finance sector to the programme.

[22] GEFS English, GEFS Spanish, GEFS MBM (Master of Business Management, as part of the co-operation with HWR, see chapter 4.4)

The GEFS coordination team is also responsible for planning and executing the update, creation and translation of GEFS courses. During these processes, the GEFS programme coordination team collaborates closely with external experts. Additionally, regular course updates are a key aspect of RENAC's commitment to staying at the cutting edge of industry developments. The course management team monitors changes in the green finance landscape, and swiftly incorporates relevant updates into the curriculum. This ensures that the programme remains current and reflects the evolving demands of the industry.

The GEFS coordination team overlaps with two other departments at RENAC, the E-learning Administration team and the quality management team (for the latter, see chapter 6).

The E-Learning Administration team plays a pivotal role in the course management process. With a specialised focus on utilising cutting-edge technology and interactive learning methods, this team ensures that the GEFS programme is following modern educational practices. Their proficiency in developing engaging digital content and utilising multimedia tools enhances the overall learning experience.

To achieve continuous improvement and maintain academic excellence, the E-Learning Administration team has helped establish a comprehensive set of didactical processes that govern course creation, updates, and delivery (see chapter 6). These processes ensure that quality standards are upheld at every step of the educational journey.

To efficiently plan and operate the GEFS semester, the GEFS Administrative Course Director works with each GEFS programme manager. This process involves a comprehensive list of tasks for planning and execution to ensure that all portions of the training are completed on time. The planning process includes:

- The “Semester Preparation” phase, which begins approximately 65 days before the semester's start, encompasses preliminary seminar planning, coordination of dates, and other preparations to ensure a smooth launch.
- The “Non-Moodle Participant Management” phase runs concurrently and involves creating project folders and managing participants to streamline course administration.
- The “Online Training Setup” phase starts about 30 days before the semester commencement. The focus is on updating and uploading course materials to the Moodle platform to ensure that the course content is current and accessible to participants.
- As the semester kicks off during the “Semester Operation phase”, spanning 168 days, the core activities involve conducting virtual classrooms, overseeing assignments, and coordinating with lecturers to deliver the curriculum effectively.
- The “Seminar Preparation” phase, occurring approximately 98 days before the seminar week, involves determining schedules, contacting lecturers, and liaising with IT support to prepare for the seminar's logistical aspects.
- The “GEFS seminar” itself, spanning five days, is the conclusion of the semester, where students attend sessions, engage in activities, and immerse themselves in the learning experience.
- After the seminar, during the “Semester Follow-up” phase, which extends for about 13 days, finalising grades, conducting evaluations, generating certificates, and sending follow-up emails are the key tasks. This phase marks the culmination of the training semester.

Throughout these phases, participant management, content preparation, communication with stakeholders, and coordination efforts are essential to ensure the semester's successful planning, operation, and conclusion. Additionally, the GEFS Administrative Course Director is responsible for planning and marketing initiatives, discussing direct to business marketing strategies, communicating with prospective students, and advocating for the GEFS programme at an institutional level.

Apart from the GEFS programme support team, RENAC offers several dimensions of organisational and administrative support. The GEFS programme support team works directly with RENAC's E-learning department whose sole function is to organise and facilitate the students, staff and teachers use of the online platform, Moodle, and digital course content. Several functions are performed by the E-learning department which include the creation of new programme home pages, support regarding Moodle related questions, and the maintenance of Moodle in general.

Additionally, the E-learning team functions as course constructing hub, ensuring that standards for the online translation of course content from PDF material to Moodle is completed seamlessly. The E-learning department ensures that standards and protocols are followed to ensure hassle free deployment of new and updated course material. RENAC uses blueprint planning processes via the project management tool Wrike, which ensure that no step is left out and that there are several checks done to ensure accuracy and efficiency when updating, constructing or translating courses[23].

To ensure people development, project leaders engage in yearly discussions with their project managers to determine their desired progression in the upcoming year of employment. This may include considerations such as transitioning to new projects, requesting advanced training, or taking on increased responsibilities. Together with their statement to the report, RENAC has provided guidelines and templates for these yearly discussions.

Over the previous three years, RENAC staff have actively engaged in Train-the-Trainer (TtT) programmes (see chapter 4.1) to ensure that all staff have completed a TtT programme at least once during their tenure at RENAC. Additionally, all RENAC online courses are accessible to internal RENAC staff. Furthermore, RENAC organises weekly Pre-lunch talks covering a range of topics, including new programmes, tools, technical and didactical subjects, and summaries of recent business travels or conferences. Lastly, staff are encouraged to attend conferences or events relevant to their work area, provided it is feasible.

Over the past three years, RENAC/GEFS staff have taken part in the following people development:

- Yearly performance reviews
- 3 internal Train-the-Trainer programmes
- Conferences and seminars (Moodlemoot 2x, Online Educa Berlin, Various webinars on current topics related to RE and EE)
- Pre-lunch talks on ChatGPT, Hybrid Seminar Methods, Co-benefits, Hydrogen projects, etc.

Right from the registration process, RENAC starts tailoring the educational journey to each student's profile. By collecting crucial demographic information, such as country of residence and current company/institution, RENAC is able to better understand students' backgrounds and needs.

[23] See Appendix 6_1_RENAC_GEFS_Course_Process_Planning&Diagrams

This information guides RENAC and its lecturers in customising the seminar sessions to align with the diverse profiles of the participants.

RENAC ensures that every student receives a comprehensive introduction into the online learning platform. Through a live session and a follow-up recording, students are guided through the intricacies of the platform, ensuring that everyone, regardless of their familiarity, is equipped to navigate effectively. This proactive approach aims to set all participants on an equal footing and to eliminate any potential learning curve barriers.

During this initiation, students gain insights into how information will be communicated throughout the semester. With Moodle and email as primary channels, students are informed of the specific schedule for information release and where to locate this information on the online learning platform.

Recognising that questions may arise at any point, RENAC has appointed a dedicated GEFS programme manager for each cohort. The GEFS programme manager is available during regular working hours to address queries ranging from course materials to Moodle intricacies. RENAC's commitment to responsiveness includes a guaranteed response time of within 48 hours for student queries.

Rating:

The administrative course management coordinates the activities of everyone involved in the course and ensures that the course runs smoothly.

Teaching staff and participants are supported by the administration in the organisation of the course. In terms of both quality and quantity sufficient staff is available, even if their involvement in other courses is taken into account, so that the processes described can be implemented appropriately. Decision-making and the main processes, authority, and responsibilities are clearly defined and described. Teachers and participants are included in the decision-making processes where their areas of work are involved. The administrative staff operates as service provider for both participants and teaching staff. The institution offers continuous professional development for the administrative staff. The opportunities of electronic service- support are used and supplement personal one-to-one counselling.

A main contact person for the participants has been appointed. The participants are informed on all relevant matters in advance and in a comprehensive way. The information is distributed in an understandable and user-friendly manner. A user-friendly access to facilities and materials is ensured. The reachability of service staff is clearly determined. Requests are dealt with promptly. In the periods requiring personal attendance, there is catering for the participants.

	Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
4. Resources and Services					
4.2 Course Management					

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
4.2.1*	Programme Coordinator			X		
4.2.2	Process organisation and administrative support for students and teaching staff		X			
4.2.3	Service for participants			X		

4.3 Networking

The support provided for participants in creating and maintaining networks is structured around specific measures that are an integral part of the GEFS programme. These measures are designed to foster meaningful connections among participants and are consistently integrated into the course experience.

One of the primary avenues through which participants build networks is through virtual classrooms, where not only a lecture is given by the expert, but students are encouraged to ask questions and interact and share more about themselves and the topic of the virtual classroom. These virtual classroom sessions are strategically incorporated into the course calendar, providing participants with regular meeting opportunities to engage in thoughtful conversations with their peers and experts. This deliberate integration of discussion elements into the virtual classroom setting ensures that networking is not an isolated event but a continuous process throughout the course. Especially during the introductional session, participants introduce themselves with name, institution, background and motivation to participate in the course, to each other with activated videos, which lays the ground for an exchange throughout the semester via the forum.

On the online platform Moodle, virtual discussion forums also play a crucial role in facilitating networking. Participants are encouraged to actively participate in these forums, introducing themselves and sharing their thoughts on relevant topics. This virtual platform serves as a space for ongoing interactions, allowing participants to connect beyond the confines of a physical classroom. Not only does this contribute to network creation, but it also promotes the sustained maintenance of relationships beyond the course duration.

Furthermore, the GEFS seminar week, a focal point of the programme, presents a prime opportunity for networking. During this week, participants come together in a live or virtual format, engaging in various collaborative activities and group work. This concentrated interaction fosters connections, and at the end of the seminar week, participants are given the option to share their contact information, enhancing the potential for ongoing networking beyond the course.

Beyond the core programme, the Green Energy and Climate Finance team offers an annual Finance webinar. This event brings together alumni from various RENAC finance trainings, creating a space for current and former participants to network. Additionally, participants are encouraged to join the RENAC Alumni group on LinkedIn, providing them with a platform to connect with a wider community of professionals who have undergone RENAC training. During the assessment conference, the institution announced that an additional course-specific alumni network is in preparation.

Rating:

Measures to create and maintain networks have been provided.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
4.	Resources and Services					
4.3	Networking			X		

4.4 Cooperation with academic institutions or enterprises (Asterisk Criterion for cooperation courses)

In 2017, the Berlin School of Economics and Law (Hochschule für Wirtschaft und Recht Berlin, HWR) expressed their interest to develop a Master of Science in Business Management (MBM) together with RENAC. RENAC and HWR signed a cooperation agreement in March 2019 to form the "Green Energy and Climate Finance" pathway, one of two specialisations within HWR's Master in Business Management[24]. The major in "Green Energy and Climate Finance" was based on the logic of the "Green Energy Finance Specialist" programme and was developed and implemented in collaboration with RENAC. The "Green Energy Finance Specialist" serves as the first semester of this Master programme. Learners who have successfully completed the "Green Energy Finance Specialist" prior to their application to the MBM Green Energy and Climate Finance programme can choose to continue with the Master programme in only three semesters. In addition, a prior "Green Energy Finance Specialist" certification counts toward 28 ECTS credit points and a tuition reduction (a discount of 3,500 Euro) for those students who continue on to complete their Master of Business Management in Green Energy and Climate Finance. To receive up to 28 ECTS credit points at HWR in the context of the master, students must engage into additional source/self-studies as well as exam preparation and must pass several GEFS-module-related examinations at HWR based on the contents taught in the certificate throughout the two-years master study period. The GEFS programme is not calculated as 28 ECTS credit points on a standalone basis.

The first intake of the master's programme for the winter semester 2020/21 consisted of 21 students, all former GEFS students from scholarship cohorts from 2017-2020. All these students received a scholarship for the master's programme funded through the continued Green Banking project funded by the German International Climate Initiative (IKI)[25]. Since then, there have been regular intakes for the respective winter semesters[26].

Additionally, the GEFS programme is currently one of the cornerstones that supports RENAC's work with the "30 by 30 zero" project[27] for selected financial institutions in Egypt, Mexico, Philippines and South Africa. The project is mandated by the German Federal Ministry of Economic Affairs and

[24] the other being a Digital Business Management specialisation
[25] Internationale Klimaschutz-Initiative, https://www.international-climate-initiative.com/en/
[26] See also https://www.hwr-berlin.de/en/study/degree-programmes/detail/157-business-management-green-energy-and-climate-finance/ (last call January 11, 2024)
[27] See https://pressroom.ifc.org/all/pages/PressDetail.aspx?ID=27169, (last call January 18, 2024)

Climate Action (BMWK) through its International Climate Initiative (IKI) and is being executed by the IFC (International Finance Corporation) and World Bank. Under the overarching approach to "scale up climate finance through the financial sector", it aims to enable an increase in climate lending by supporting the creation of domestic markets for climate financing in the partner countries. Following a holistic approach, it works at the political, market and financial institutions levels, including the alignment of financial sector strategies to support NDC implementation as well as fostering climate investment through the development of domestic green bond markets. Through its training and participation in the programme, RENAC helps to build the needed skill-set and bridge the knowledge gaps present in the teams of the participating financial institutions. In this context, the GEFS programme will be delivered to high level executives through three intakes.

In the future, as a marketing strategy, the RENAC marketing team and GEFS course administration intend to begin B2B collaboration with several companies and institutions to ensure continual collaboration between RENAC as an educational institution and industry.

Rating:

The scope and nature of cooperation with academic institutions and networks relevant for the course are plausibly presented. Cooperations are actively pursued and have a clear impact on the conception and implementation of the course.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
4.	Resources and Services					
4.4(*)	Cooperation with academic institutions or enterprises (asterisk criterion for cooperation courses)			X		

4.5 Facilities

A central aspect of RENAC´s technological approach is the e-learning platform, Moodle. Moodle serves as the primary hub for information transfer and course materials. All relevant resources, including recordings of live virtual sessions, presentation slides, additional reading materials, and written course content, are hosted on Moodle. This platform ensures that participants can access and review course materials conveniently and efficiently.

Additionally, for Module 9, a physical seminar space is utilised. This Seminar Room serves as a focal point for sessions during the seminar week. It is equipped with advanced technology, including a smartboard, multiple cameras, and microphones. This setup facilitates hybrid sessions, allowing both in-person and virtual participants to engage seamlessly. The integration of these tools ensures that virtual participants have an equivalent experience, enabling them to actively participate in the seminar sessions. The seminar room offers a learning environment for both online and in-person seminars, including natural lighting, air conditioning, coffee/tea provisions,

smartboard, flipchart, moderation case, pinboard. The seminar room can also be accessed barrier free.

In terms of necessary literature, offers a collection of in-house made literature that aligns with the needs of the programme. Each course within the programme comprises a multitude of resources that contribute to a comprehensive understanding of the subject matter. These in-house resources encompass written content, self-test exercises, videos, case studies, examples, graphics, and other informative elements. By incorporating a wide array of materials, RENAC strives to accommodate various learning styles and preferences, ensuring that participants have necessary resources at their disposal. Courses and literature are authored by external experts (see chapter 4.1 and 6). The materials curated within these courses undergo evaluation to ensure accuracy, reliability, and alignment with the learning objectives of the programme.

To meet the significance of further readings and references, participants in each course are provided with a comprehensive bibliography of references used within the course and a section of suggested further reading. This not only allows participants to explore the sources that underpin the course content but also encourages a deeper engagement with the subject matter. All further reading materials are sourced from open-access or widely available content. This approach ensures that participants can delve into the supplementary materials without any barriers. RENAC does not provide students access to any online journal or market assessment tools.

Rating:

The quantity, quality, as well as media and IT facilities of the teaching rooms meet the required standard. The rooms are properly equipped for disabled participants and give them barrier-free access.

Access to necessary literature and digital media (e.g. electronic media, databases) is guaranteed. The materials are aligned with the course content and are up to date. A concept for the course's continuing development is available. During the assessment conference, lecturers expressed the wish to have access to suitable specialist journals. The panel supports this idea and suggests the institution to check the idea of subscribing to relevant journals that cover current issues of the course topics. The panel also suggests the institution arranging access to literature for students and lecturers via the library of their co-operation partner HWR.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
4.	Resources and Services					
4.5	Facilities					
4.5.1*	Quantity, quality, media and IT equipment of teaching rooms			X		
4.5.2*	Access to required literature			X		

5 Documentation

The GEFS programme's documentation is accessible through RENAC's dedicated GEFS website[28]. The website encompasses a comprehensive overview of the programme, including its scope, content, learning objectives, and target group. For a more comprehensive insight, the GEFS brochure[29] can be accessed and downloaded on the same website. The GEFS brochure offers an in-depth exploration of the programme, delving into specific details such as module content, curriculum structure, learning objectives, and assessment methods. Information such as pricing, learning format, and other pertinent particulars are also encapsulated in the brochure.

To ensure up-to-date and accurate information, both the website and brochure are regularly updated by the GEFS programme staff. Periodic reviews are typically conducted on an annual basis, or more frequently if there are any modifications to the programme prior to the scheduled review.

For direct inquiries or further clarification, students are provided with the contact details of the GEFS programme director (GEFS administrative course director) on the GEFS website.

Rating:

The course's content, curriculum and examination regulation scheme have been suitably documented and published.

For the planned documentation on the GEFS website and brochure and all further information material and documentation the panel team emphasises the following issues to observe:

1. Documentation of ECTS crediting recommendation has to be included on the respective programme descriptions and include: number of credits recommended, requirements for awarding credits and workload assigned to the programme (see chapter 3.2).
2. Documentation of ECTS crediting has also to be included on the respective certificate issued by RENAC. Documentation has to include number of credits recommended and workload assigned to the programme (see chapter 3.2).
3. When course graduates apply for recognition of ECTS credit points at a HEI, the HEI is obliged to examine recognition and to justify if ECTS credit points are not or only partially accepted. However, the HEI is not obliged to the recognition of ECTS credit points. Documentation on the website and brochure and further documentation and information therefore must not evoke the impression that HEIs are obliged to give (full) recognition.

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
5.*	Documentation			X		

[28] https://www.renac.de/trainings-services/trainings/ready-made-trainings/product/green-energy-finance-specialist-gefs (last call January 12, 2024). A relaunch of the website is planned; therefore the link will change in the future.
[29] See appendix 5_Brochure_GEFS

6 Quality Assurance

RENAC's Quality Management System (QMS) complies with DIN EN ISO 9001:2015-11 standards and is certified for high-quality learning services. Quality management at RENAC encompasses processes related to customers, teaching, and market development without geographical restrictions.

Since the implementation of its quality management system, RENAC has upheld a set of paramount quality objectives. These objectives pertain to the company, teaching initiatives, and overall organisational performance.

In regard to the company, RENAC's foremost goals are centred on ensuring high levels of student satisfaction and the continual expansion of the customer base. RENAC claims to be equally committed to maintaining a high level of employee satisfaction, recognising the pivotal role a dedicated workforce plays in RENAC's success (see SAR, p. 60).

The development of RENAC online courses follows RENAC's principles for quality assurance. Whenever a course is developed, RENAC provides the author with resources like guidelines, didactical recommendations and a style guide[30]. The material includes guidelines on:

- how to create and write learning objectives and about the amount and depth of learning objectives per section,
- RENAC's standards for online courses,
- how to set up self-exercises and to make sure that they are linked to the learning objectives including templates for exercises,
- the storyboard text that instructors have to provide to RENAC,
- RENAC style guide, and
- preparation of video production (conducted at the RENAC studio).

After a course has been written or updated by the author, RENAC checks it from a technical and didactical point of view and runs a language and syntax edit before it is built into the e-learning platform.

RENAC uses the four-eye principle to check the final courses before publishing them. Only after the internal review and approval of important documents from the author and again after being built into the online platform they are shared with others (i.e. students).

In the realm of teaching, RENAC's focus remains forward-looking, sustainable, and innovative. The institution maintains a neutral stance regarding products, placing a strong emphasis on delivering content with the utmost country-specific practical relevance. Methodologies and didactic offerings are tailored to meet the specific needs of the diverse clientele. Furthermore, RENAC prioritises target group-specific didactics and concept development, fostering a conducive training atmosphere (see also chapter 3.4).

Regarding organisational performance, RENAC claims an approach characterised by being customer oriented, flexible, and supportive. RENAC provides organisational services both domestically and abroad, with an emphasis on multilingualism, intercultural sensitivity, and regional specificity. The overarching aim is to continually enhance the quality of the products and services.

[30] see Appendix 6_2_RENAC_GEFS_Standards_for_Authors

In practical terms, this means that evaluations are performed and published for all activities which involve content created by RENAC. Online trainings, webinars, virtual classrooms, in-person seminars and online seminars, are all evaluated by the participants. These evaluations are communicated to the quality management officer who records them and publishes yearly quality management reports[31]. Internally, RENAC has set several standards for evaluation scores, and should evaluation scores by students drop below a certain level, internal investigation processes are triggered to ensure that feedback is incorporated appropriately and effectively.

Participant evaluation[32] of the course is integrated at various intervals throughout the semester, allowing for a comprehensive understanding of the participants' experiences and insights.

To ensure a targeted perspective, the first instance of specific feedback occurs after the completion of live virtual sessions during the online phase of the programme. After each session, students are invited to share their thoughts on both the lecture content and their interaction with the teaching staff. This feedback is gathered through Jotform, an online survey tool. These insights are then shared with the respective instructors, along with feedback from the seminar sessions at the end of the semester (see below).

A more comprehensive and substantial feedback mechanism is employed at the conclusion of Module 9, during the seminar week. Participants are encouraged to provide their feedback on both the quality of instruction and the effectiveness of seminar coordination and operations. This feedback is gathered via Mentimeter, a digital polling tool. Pertinent feedback concerning teaching staff is conveyed to the teaching staff, along with insights collected from the virtual session evaluations conducted during the online segment of the training.

In addition to the specific evaluations, participants are invited to share their holistic perspective of the entire GEFS programme upon its completion. A post-semester evaluation form is hosted on Moodle and is powered by Jotform. Participants are prompted to offer their insights on various aspects such as the programme's relevance, communication, coordination, material quality, and the functionality of the online platform.

These collected insights are integrated through a review process, which occurs during the gap between consecutive semesters. While overarching quality standards are outlined by RENAC's quality assurance and e-learning teams, the ongoing semester-to-semester quality management lies with the GEFS programme staff. A series of collaborative meetings are scheduled during the "semester break" allowing for the GEFS programme staff to review, discuss, and incorporate the feedback garnered from the previous semester into the upcoming one. This iterative approach is targeted to ensure that the programme continues to evolve and cater to the evolving needs and expectations of the participants.

The gathered feedback pertaining to teaching staff is individually addressed through dedicated internal meetings with course managers and internal financial experts. These meetings are convened at the conclusion of each semester or prior to the next session conducted by the respective staff member. With two semesters in a year, this biannual cycle aims to ensure that feedback is effectively conveyed to lecturers. During these meetings, a collaborative effort is undertaken to review and discuss the accumulated feedback. The GEFS programme staff, who are

[31] See appendices Managementbericht QM 2019 bis 2022
[32] See appendices GEFS_Lecturer_Feedback_Sample; GEFS_Online_Training_Feedback_Sample; GEFS_Seminar_Feedback_Sample

actively involved in all live sessions, both virtually and in-person, collaborates with the teaching staff to pinpoint areas of commendation as well as potential areas of enhancement. Furthermore, this platform revisits and reevaluates feedback comments that were addressed in previous meetings, gauging their evolution and determining the scope for further enhancement.

By fostering this continuous feedback loop, the GEFS programme ensures that the insights provided by the teaching staff are not only acknowledged but also strategically integrated. This collaborative and iterative approach empowers the teaching staff to refine their methods and the course to be a more effective and engaging learning experience for the participants. All feedback is in line with RENAC's overall quality management guidelines[33] which have been standardised across all training programmes.

Should any member of the GEFS teaching staff identify a decline in the quality of teaching materials, a course update process is initiated. This update process usually involves seeking assistance from an external expert, in common cases the respective teaching staff member (see also chapter 3.4). The selected expert revises and enhances the teaching material, ensuring it aligns with RENAC's quality benchmarks. Prior to publication for student use, the teaching staff member and RENAC's internal GEFS coordination team (see chapter 4.2) responsible for the update conduct a final review to guarantee its readiness.

Moreover, RENAC fosters an environment of open communication (see SAR p.62). Teaching staff members regularly provide feedback on course content, procedures, and organisation. This feedback is not only shared during bi-yearly meetings but also during virtual classrooms and seminars. The coordination team uses this input as a cornerstone for continuous improvement.

Currently the GEFS programme is not explicitly evaluated by employers, alumni or third parties via a formal evaluation process. However, initially, upon the foundation of the programme in 2017 and 2018, as a condition for the first accreditation process via the Finance Accreditation Agency (dissolved Spring 2023) several institutions, such as ADFIAP, IFC Green Banking Academy, and several GIZ projects in Africa were asked to provide statements of usefulness of the GEFS programme for increasing the skills of their employees which had been participants of the GEFS programme. Moreover, the GEFS programme won the Innovation Award on Climate and Environment (Innovationspreis Klima und Umwelt, IKU) from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU)[34].

In recent years, the GEFS course administration has gathered statements from recent graduates in the form of testimonials. Additionally, GEFS course staff has reached out to alumni of the programme who continue to be employed by the institution they were employed at when they took the GEFS programme to ask them for their permission to use their logo on the GEFS website with the statement, "trusted by professionals at"[35]. Again, despite this not being a formal evaluation, RENAC states that companies and alumni are comfortable with continuing to associate their name with the Green Energy Finance Specialist programme (see SAR p. 63).

[33] See appendix 2022_qm-handbuch_v6 (Handbuch zum Qualitätsmanagementsystem)
[34] See appendix 6_2_Recognition_by_industry_Original_REPORT
[35] https://www.renac.de/trainings-services/trainings/ready-made-trainings/product/green-energy-finance-specialist-gefs

Rating:

There is a quality assurance and development procedure, which systematically and continuously monitors and develops the quality of the programme with respect to its contents, processes, and outcomes. Sufficient staff recourses are available and the responsibilities are clearly defined. Teaching staff and participants take part in the respective committees to plan and assess the quality assurance and development procedures.

RENAC has provided evaluation results and described examples of continuous development (see also chapter 0.2). The panel has observed that RENAC continuously monitors the GEFS programme and regularly takes steps for continuous development.

Evaluation by the participants is carried out on a regular basis and in accordance with a prescribed procedure; the outcomes are communicated and provide input for the quality development process.

Quality control by the teaching staff is carried out on a regular basis and in accordance with a prescribed procedure; the outcomes are communicated to the participant body and provide input for the quality development process.

The panel notes that so far there is no evaluation by alumni carried out on a regular basis and no formal evaluation by employers or other third parties (e.g., the HWR as cooperation partner). The panel **recommends** introducing an relevant third party surveys including questions regarding participant's professional development after finishing the course, also with respect to evaluating learning objectives (see chapter 1.1) as well as career paths (see chapter 1.3) and employability (see chapter 3.5).

		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
6.	**Quality Assurance**					
6.1*	Quality assurance and development of course content, processes and outcomes			X		
6.2	Instruments of quality assurance					
6.2.1	Evaluation by students			X		
6.2.2	Quality assurance by teaching staff			X		
6.2.3	External evaluation by alumni, employers and others				X	

Quality Profile

Institution:
Renewables Academy (RENAC) AG

Continuing Education Course:
Green Energy Finance Specialist (GEFS)

Quality Ratings		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality requirements	n.r.
1.	**Strategy and Objectives**					
1.1*	Logic and transparency of course objectives			X		
1.2	International orientation of the course	X				
1.3	Positioning of the course					
1.3.1	Positioning of the course in the education and job market, and the professional field ("Employability")			X		
1.3.2	Position of the course within the institution's overall strategy		X			
2.	**Admission**					
2.1*	Focus on the target group			X		
2.2*	Admission conditions			X		
2.3*	Legal relationship			X		
3.	**Implementation**					
3.1	Structure					
3.1.1	Structure of the course			X		
3.1.2*	Application of the „European Credit Transfer and Accumulation System (ECTS)" and modularisation			X		
3.1.3*	Study and examination regulations			X		
3.1.4*	Feasibility of study workload			X		
3.2	Content					
3.2.1*	Logic and conceptual coherence			X		
3.2.2	Integration of theory and practice			X		
3.2.3	International and intercultural contents	X				
3.2.4	Methodological competence			X		
3.2.5	Academic work and science-based teaching			X		
3.2.6*	Examinations			X		
3.3	Multidisciplinary qualifications and skills					X
3.4	Didactics and methodology					

Quality Ratings		Exceptional	Exceeds quality requirements	Meets quality requirements	Does not meet quality re-quirements	n.r.
3.4.1*	Logic and transparency of teaching and learning methodology			X		
3.4.2	Course materials			X		
3.5*	Skills for employment/Employability			X		
4.	**Resources and Services**					
4.1	Teaching staff of the course					
4.1.1*	Course management			X		
4.1.2*	Structure and number of teaching staff in relation to curricular requirements			X		
4.1.3*	Teaching staff's academic qualifications			X		
4.1.4*	Teaching staff's educational/didactic qualifications		X			
4.1.5	Practical business experience of the teaching staff		X			
4.1.6	Internal cooperation			X		
4.1.7*	Student support and coaching			X		
4.2	Course management					
4.2.1	Administrative course director			X		
4.2.2*	Process organisation and administrative support for students and teaching staff		X			
4.2.3	Service for participants			X		
4.3	Networking			X		
4.4(*)	Cooperation with academic institutions or enterprises (asterisk criterion for cooperation courses)			X		
4.5	Facilities					
4.5.1*	Quantity and quality of media and IT Resources of teaching rooms			X		
4.5.2*	Access to required literature			X		
5.*	**Documentation**			X		
6.	**Quality Assurance**					
6.1*	Quality assurance and development of course content, processes and outcomes			X		
6.2	Instruments of quality assurance					
6.2.1	Evaluation by students			X		
6.2.2	Quality assurance by teaching staff			X		
6.2.3	External evaluation by alumni, employers and others				X	