

REMUNERATION POLICIES AND PRACTICES

VANGUARD INVESTMENTS UK, LIMITED, VANGUARD ASSET MANAGEMENT, LIMITED AND
VANGUARD GROUP (IRELAND) LIMITED

Introduction

The Vanguard Group's unique "mutual" structure is a key actor in the organisation's success and aligns the interests of Vanguard and its staff (referred to as "crew") with those of its clients. This structure, and the Vanguard Group's culture and values, set the stage for Vanguard's global total rewards philosophy, which is based on the principle that "crew win when clients win" and aligns the crew's remuneration with business strategy and the investment experience of fund shareholders.

This philosophy is supported by the Vanguard European Remuneration Policy (the "**Remuneration Policy**"), which is designed to ensure that remuneration policies and practices within Vanguard Europe are consistent with, and promote, sound and effective risk management, and are in line with the business strategy and objective of the group and the interests of Vanguard Europe and its stakeholders.

Vanguard Asset Management Limited is subject to the "IFPRU Remuneration Code" (Chapter 19A of the Senior Management Arrangement Systems and Controls ("SYSC") handbook), Vanguard Investments UK, Limited is subject to the "UCITS Remuneration Code" (Chapter 19E of the SYSC handbook) and Vanguard Group (Ireland) Limited is subject to the "Irish UCITS Regulations" (The European Communities (Undertakings for Collective Investment in Transferable Securities) Regulations 2011 (S.I. 352 of 2011) (as amended by the European Union (Undertakings for Collective Investment in Transferable Securities) (Amendment) Regulations 2016 (S.I. 143 of 2016) and the ESMA Guidelines on sound remuneration policies under the UCITS Directive (ESMA 2016/575)).

Oversight

The Remuneration Policy is overseen and implemented by Vanguard's European Leadership Team ("**ELT**") and (in respect of matters relating to Vanguard Asset Management Limited) the Vanguard Asset Management Limited Remuneration Committee (which is comprised solely of non-executive directors) ("**VRC**").

Additional levels of oversight are provided by Vanguard's Global Remuneration Committee, and the Compensation Committee of The Vanguard Group, Inc. (which is comprised solely of independent directors).

Implementation

The Remuneration Policy promotes sound and effective risk management, taking into account the risk profile of Vanguard Europe, the long-term interests and strategy of the business and the risks presented to it (including, for example, sustainability risks). As set out within the Remuneration Policy, Vanguard Europe's remuneration practices do not encourage risk-taking (including excessive risk-taking with respect to sustainability risks) that exceeds Vanguard Europe's levels of tolerated risk.

As part of the operation of the Remuneration Policy, crew that constitute "Code Staff" (being "IFPRU Code Staff" and / or "UCITS Code Staff") are identified and notified of their status. IFPRU Code Staff are identified in accordance with the criteria set out in the Regulation (EU) 604/2014 of 4 March 2014. UCITS Code Staff broadly comprise senior management, risk-takers, crew members engaged in control functions and any crew members receiving total remuneration that takes them into the same remuneration bracket as senior management and risk-takers, whose professional activities have a material impact on the firm's risk profile.

Compensation elements consist of an appropriate balance of salary; benefits, including pension, life assurance and health insurance; and participation in bonus arrangements, depending on role and seniority. These include bonus arrangements designed to reward crew by reinforcing Vanguard Europe's collective interest in the Vanguard Group's long-term growth and success by ensuring that a portion of individual compensation is linked to overall performance of the Vanguard Group, and Vanguard Europe, within a responsible level of risk. Bonus arrangements for certain crew are designed to reward individual, team, business unit and fund performance by reference to both quantitative and qualitative metrics and, for certain senior crew members, bonuses may be deferred over three to five years, with the vesting amounts linked to movements in the earnings of the Vanguard Group. Vanguard may, in exceptional circumstances, provide guaranteed bonus amounts for new hires who join part way through a bonus year and only for that bonus year; and may, if deemed appropriate, offer a buy-out award to a new joiner provided that the terms of such award will reflect those being bought out.

UCITS Remuneration Code Staff

Crew that are designated as UCITS Code Staff are subject to deferral bonus arrangements. Forty to sixty percent of variable compensation awarded to UCITS Code Staff is awarded in a form that is deferred over a period of time which takes into account any holding period recommended to investors in any UCITS concerned and is aligned to the nature of the risks of any such UCITS, which is not less than 3 years, and which does not vest faster than annually on a pro-rata basis. Deferred remuneration may be negatively adjusted, including by being reduced to nil, to ensure that such remuneration vests only if it is sustainable according to the financial situation of Vanguard Europe and is justified according to the performance of the individual, relevant business unit or team, or Vanguard Europe and the UCITS concerned. A minimum of fifty percent of the variable remuneration awarded to UCITS Code Staff will be awarded in the form of appropriate instruments or an equivalent cash-based form (taking into account the relevant regulatory requirements). This applies to both to the deferred remuneration described above and non-deferred remuneration.

Review

On an at least an annual basis, the Human Resources, Risk, and Compliance functions will liaise to review the implementation of the Remuneration Policy and will report to the ELT and VRC, as appropriate. As part of this review, the Risk function will consider the effectiveness of the methods applied to review and, where appropriate make remuneration recommendations to reflect risk. The ERC / VRC will report to Vanguard's Global Remuneration Committee in the event that any material compliance issues are identified or in the event that the ELT / VRC proposes any amendments to the Remuneration Policy. Further details on the Remuneration Policy can be provided upon request.